Comments

"ROLLING THE DICE" ON FINANCIAL REGULATORY REFORM: GAMBLING LAW AS A FRAMEWORK FOR REGULATING STRUCTURED INVESTMENTS

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"As calamitous as the sub-prime blowup seems, it is only the beginning. . . . The credit bubble spawned abuses throughout the system. Sub-prime lending just happened to be the most egregious of the lot, and thus the first to have the cockroaches scurrying out in plain view."[1]

I. INTRODUCTION

The United States ("U.S.") economy has been shaken by the worst financial crisis since the Great Depression.[2] In the span of a few months, Wall Street regressed from its most profitable era to the brink of financial collapse.[3] The five largest investment banks failed, were acquired, or were converted into holding companies, the world's largest insurance company and two mortgage-lending conglomerates were placed under government control, and the Dow Jones Industrial Average, which reached all-time highs in October 2007, lost over half of its aggregate value.[4] The markets, gripped with panic and confusion, were beyond the control of even

1. Eric Sprott & Sasha Solunac, *The Popping of the Credit Bubble Has Only Just Begun*, SPROTT ASSET MGMT. (March 2007), http://www.sprott.com/Docs/MarketsataGlance/03-2007.pdf.

2. *See Credit Crisis – The Essentials*, N.Y. TIMES, http://topics.nytimes.com/top/reference/timestopics/subjects/c/credit_crisis/index.html?offset=0&s=newest (last visited Mar. 1, 2011) (outlining causes and effects of financial crisis); *see* MAUREEN BURTON ET AL., AN INTRODUCTION TO FINANCIAL MARKETS AND INSTITUTIONS 210-11 (2d ed. 2010) (discussing mortgage market collapse and resulting financial crisis). Burton details the on-going financial crisis by stating that:

> This latest downturn was related to a severe crisis in the financial system that began with a crisis in the mortgage market stemming from the sub-prime loan debacle and the collapse of housing prices. By September 2008, what started in the mortgage markets had spread to global financial markets as credit markets froze up and the economy seemed on the verge of possibly the worst crisis since the great depression. Policy makers worked frantically to prop up the flailing economy. In the largest bailout in history, policy makers got a reluctant Congress to pass a $700 billion package while the [Federal Reserve] was taking historic actions to mitigate the crisis.

Id.

3. *See* Ellen Harnick, *The Crisis in Housing and Housing Finance: What Caused It? What Didn't, What's Next?*, 31 W. NEW. ENG. L. REV. 625, 625-27 (2009) (explaining rapid economic collapse).

4. *See* Thomas J. Schoenbaum, *Saving The Global Financial System: International Financial Reforms and United States Financial Reform, Will They Do The Job?*, 43 UCC L.

the most powerful world institutions.[5] The U.S. Government struggled to restore order out of chaos as Wall Street fought feverously just to keep its head above water.[6]

The financial crisis continues to plague the U.S. economy, and the prospect of an expedient recovery does not seem promising.[7]

J. ART. 3, 3-4 (2010) (discussing failings of major financial companies). Schoenbaum stated:

> In the summer of 2007 Bear Sterns, at the time the fifth largest investment bank in the US with over 14,000 employees experienced heavy losses due to the collapse in value of its two principal hedge funds. Bear Stearns never recovered, and in March, 2008, US regulatory officials, Ben Bernanke, the chairman of the US Federal Reserve and Hank Paulson, the Secretary of the Treasury, quietly arranged a shotgun sale of Bear Sterns to J.P. Morgan Chase at the bargain-basement price of $10 per share . . . . In September, 2008 the worst fears came to pass: in quick succession (1) Fannie Mae and Freddie Mac were placed into US government "conservatorship"; (2) Lehman Brothers, a venerable investment bank with over 25,000 employees, declared bankruptcy and this time the US government did not intervene; and (3) American International Group (AIG), the world's largest insurer, became insolvent only to be rescued by the US Federal Reserve, which pumped billions in "bailout" money in return for preferred (non-voting) stock.

Id. See also Carrick Mollenkamp et. al., *Crisis on Wall Street as Lehman Totters, Merrill is Sold, AIG Seeks to Raise Cash: Fed Will Expand Its Lending Arsenal in a Bid to Calm Markets; Moves Cap a Momentous Weekend for American Finance,* WALL ST. J., Sept. 15, 2008, at A1 (discussing failings of large financial conglomerates).

5. *See* Eamonn K. Moran, *Wall Street Meets Main Street: Understanding the Financial Crisis*, 13 N.C. BANKING INST. 5, 7-8 (2009) (outlining proximate causes of financial crisis); s*ee* also Kurt Eggert, *The Great Collapse: How Securitization Caused the Subprime Meltdown*, 41 CONN. L. REV. 1257, 1259 (2009) (citing investment banks' practices of creating structured products, which entails purchasing, pooling, packaging, and selling loans as securities). As a result of these practices, the housing market expanded wildly and eventually collapsed. *See id.* at 1262 (finding that financial institutions' unwillingness to lend caused problems throughout U.S. economy). This collapse caused investment banks to incur large financial losses and rendered the banks unable and unwilling to extend credit to the remainder of the economy. *See id.* (same).

6. *See* Arthur E. Wilmarth, Jr., *The Dark Side of Universal Banking: Financial Conglomerates and the Origins of the Subprime Financial Crisis*, 41 CONN L. REV. 963, 1015-35 (2009) (recounting series of events leading up to mortgage market collapse and financial crisis).

7. *See, e.g.,* Randall Smith, *Bank Stocks are Facing Headwinds*, WALL ST. J., Jan. 3, 2011, at C1 (explaining that recovery of investment banks will be difficult in 2011); Mitra Kalita & Sudeep Reddy, *Housing Recovery Stalls: Fresh Fall in Home Prices is Headwind for Economy; Other Signs Still Strong,* WALL ST. J., Dec. 29, 2010, at A1 (speculating that "[a] new bout of declining home prices is threatening to hamper U.S. recovery . . . "); Robbie Whelan, *Faces of the Home-Foreclosure Crisis: In the Wave of Delinquencies That Began Four Years Ago, Mortgage Holders Followed Many Different Routes to Default*, WALL ST. J., Dec. 29, 2010, at A4 ("The foreclosure crisis that erupted four years ago has claimed more than five million American homes – about 10% of all homes with a mortgage."); Nick Timiraos et. al., *Mortgage Damage Spreads: Big Bank Stocks Hit Again as Modern Finance Collides With the Legal System,* WALL ST. J., Oct. 17, 2010, at A1 (considering long-term effects of mortgage-market collapse). *But see* Ruth Simon, *Banks Open Loan Spigot: Uptick in Lending to Business Is Expected to Accelerate Next Year*, WALL ST. J., Dec. 30, 2010 ("Some U.S. banks

Major flaws in the securities laws and the lack of regulation of the securitization process permitted the financial crisis to unfold. The primary flaws included the broad exemptions for privately-placed securities and the faulty assumptions underlying the securities laws.[8] The private-placement exemptions effectively eliminated oversight of the securitization process and allowed investment banks to abuse structured product creation causing systemic risk to build-up within the economy.[9] Furthermore, the securities laws fail to consider investors' inabilities to determine the merits of structured product investments.[10]

Although hopes of the resurgence of a stable and steady economy remain grim in the short-term, an important opportunity exists to adopt regulatory measures that will prevent or at least mitigate the possibility of calamities such as the financial crisis in the fu-

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are starting to increase their lending to businesses as demand for loans rises and healthier banks seek to grab customers from weaker rivals."); James E. Hagerty & Dana Mattioli, *Big Firms Poised to Spend Again*, WALL ST. J., Jan. 3, 2011, at B1 ("Big U.S. companies have cleaned up their balance sheets and flush with cash, appear open to using it in 2011 . . .").

8. *See* Daniel J. Morrissey, *The Road Not Taken: Rethinking Securities Regulation and the Case For Federal Merit Review*, 44 U. RICH. L. REV. 647, 647-50 (2010) (asserting that flaws of federal securities laws "jeopardize the soundness of our entire capital markets"). Securitization and the abuse of structured investments such as Mortgage Backed Securities ("MBSs"), Collateralized Mortgage Obligations ("CMOs"), Collateralized Debt Obligations ("CDOs"), Squared CDOs, and synthetic CDOs played an integral role in causing the mortgage market collapse and resulting financial crisis. *See* Brian J.M. Quinn, *The Failure of Private Ordering and the Financial Crisis of 2008*, 5 N.Y.U. J. L. & BUS. 549, 567-69 (2009) (considering securitization's role in financial crisis); *see also* Morrissey, *supra* at 649 (providing main flaws of federal securities laws). Morrissey stated that:

> By adopting disclosure as the underlying philosophy of the federal securities laws, the framers of that legislation put too much faith in the prudence of investors and the self-policing mechanisms of the capital markets. . . . The weaknesses in such a half-measured approach were compounded when even that flawed system of financial regulation was undermined by an expansion of the exemptions to its central requirement, i.e., that securities first be registered before they are sold.

Id.

9. *See* Quinn, *supra* note 8, at 653-56 (citing exemptions that allowed investment banks to package and sell structured investments without oversight).

10. *See generally* Charles R. P. Pouncy, *The Rational Rogue: Neoclassical Economic Ideology in the Regulation of the Financial Profession*, 26 VT. L. REV. 263, 291-05 (2002) (describing disclosure philosophy and its failures); Thomas Lee Hazen, *Disparate Regulatory Schemes for Parallel Activities: Securities Regulation, Derivatives Regulation, Gambling and Insurance*, 24 ANN. REV. BANKING & FIN. L. 375, 401 (2005) [hereinafter Hazen I] (urging consistent regulatory regimes for securities, derivatives, gambling, and insurance); Morrissey, *supra* note 8, at 683-85 (asserting that federal merit review, involving government having authority to prohibit sale of meritless securities, could have mitigated effects that securitization and structured products had on economy).

ture.[11] A positive development was the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act") that President Obama signed into law on July 21, 2010.[12] Obama vied that the Dodd-Frank Act "will put a stop to a lot of the bad loans that fueled a debt-based bubble."[13] The Act authorizes major changes to U.S. securities laws and has extended regulatory jurisdiction over areas of finance that were not previously regulated, including securitization.[14] The Act, however, is merely a general mandate and will only assume its true identity through the implementation by administrative agencies such as the Securities and Exchange Commission ("SEC"), the Commodity Futures Trading Commission ("CFTC"), and the Department of Treasury.[15]

To successfully implement the Dodd-Frank Act, regulators should look to gambling law for guidance. Gambling law can serve as a useful framework for implementing the Dodd-Frank Act and can aid administrators in their pursuit of reforming the securities laws and the regulation of securitization.[16] Gambling law provides proper oversight of regulated activities, addresses the possibility of systemic risk build-up resulting from gambling enterprises, and contemplates gambler irrationalities.[17] State gaming agencies address these issues by promulgating rules and regulations considering perspectives of economics, psychology, and sociology.[18] These

11. *See* Richard E. Mendales, *Collateralized Explosive Devices, Why Securities Regulation Failed to Prevent the CDO Meltdown, and How to Fix It*, 2009 U. ILL. L. REV. 1359, 1360-61 (2009) (acknowledging imperative need "to analyze the causes of a breakdown in the intended function of protective law after its occurrence, and to propose changes in the law to prevent it from recurring"); *see also* David Leonhardt, *The Big Fix*, N.Y. TIMES, Feb. 1, 2009, at MM22 (quoting President Obama's Chief of Staff Rahm Emanuel, stating "you never want a serious crisis to go to waste").

12. *See* The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Pub. L. No. 111-203 (July 21, 2010) (reforming securities laws).

13. BARACK OBAMA, *Remarks by the President at Signing of Dodd-Frank Wall Street Reform and Consumer Protection Act*, White House (July 21, 2010), http://www.whitehouse.gov/the-press-office/remarks-president-signing-dodd-frank-wall-street-reform-and-consumer-protection-act.

14. *See* Schoenbaum, *supra* note 4, at 25 (illustrating increased jurisdiction of securities and commodities laws). "Dodd-Frank extends government regulation to markets for derivatives and [credit-default swaps] for the first time." *Id.*

15. *See* Commissioner Luis A. Aguilar, *An Insider's View of the SEC: Principles to Guide Reform*, 27 CORP. COUNS. Q. ART. 1, 1-6 (2011) (outlining SEC's goals for reform).

16. For an analysis of how gambling law can serve as a framework to alter the securities laws, see *infra* notes 328-408 and accompanying text.

17. *See* DAVID MIERS, REGULATING COMMERCIAL GAMBLING: PAST, PRESENT, AND FUTURE 2 (2004) (discussing factors that influence how gambling regulation is promulgated and established).

18. *See id.* at 3 (analyzing gambling regulation and its contemplation of economic, social and psychological policy considerations).

public policy perspectives influence state gaming agencies to regulate in a manner that protects gambling participants, maintains the welfare of the surrounding community, and ensures the stability of the economy.[19] Had a regulatory structure similar to gambling law been governing debt securitization, the severity of the financial crisis would have been largely diminished.[20]

This comment suggests that (1) the investment banking industry's creation and sale of structured products requires additional oversight, (2) utilizing aspects of gambling law could provide the necessary oversight to circumvent, or at least decrease, the negative externalities created by the abuse of securitization, and (3) employing gambling regulation as a framework to alter the securities laws is justifiable given (a) the similarities between gambling and structured investment speculation, and (b) gambling regulation's ability to decrease externalities caused by securitization.

Part II of this comment describes securitization, the structured products created through securitization, their role in incentivizing sub-prime lending, and their creation of systemic risk.[21] Part III analyzes the applicability of a gambling law framework to structured product transactions by demonstrating the similarity between the regulated activities and the behavior of each activity's participants.[22] Part IV contrasts gambling law with securities regulation and analyzes each regime's effectiveness in addressing behavioral

19. *See id.* at 4-5 (claiming that legal control can circumvent many externalities associated with gambling).

20. *See generally* Hazen I, *supra* note 10, at 375-401 (discussing gambling, insurance, securities and derivatives, similarities between these activities, and contrasting regulatory regimes); *see also* Thomas Lee Hazen, *Rational Investments, Speculation, or Gambling?: Derivative Securities and Financial Futures and Their Effect on the Underlying Capital Markets*, 86 NW. U. L. REV. 987, 987-1037 (1992) [hereinafter Hazen II] (detailing premises underlying derivatives and gambling regulation and activities' effect on capital markets); Christine Hurt, *Regulating Public Morals and Private Markets: Online Securities Trading, Internet Gambling, and the Speculation Paradox*, 86 B.U. L. REV. 371, 371-441 (2006) (analyzing gambling, investing and law's harsh treatment of gambling); Christopher T. Pickens, *Of Bookies and Brokers: Are Sports Futures Gambling or Investing, and Does It Even Matter?*, 14 GEO. MASON L. REV. 227, 227-70 (2006) (arguing that sports futures should be regulated under securities laws); Michael C. Macchiarola, *Securities Linked to the Performance of Tiger Woods? Not Such a Long Shot*, 42 CREIGHTON L. REV. 29, 29-82 (2008) (proposing that sports wagers can be regulated under structured product framework); Theresa A. Gabaldon, *John Law, With a Tulip, in the South Seas: Gambling and the Regulation of Euphoric Market Transactions*, 26 J. CORP. L. 225, 225-84 (2001) (explaining models of regulation are not capable of addressing behavior of gamblers and investors).

21. For an overview of the financial crisis and the role of structured products assumed, see *infra* notes 26-144 and accompanying text.

22. For an analysis of the similarities between speculating on the value of structured investments and gambling, see *infra* notes 145-237 and accompanying text.

and cognitive irrationalities and systemic risk creation.[23] Part V invokes typical provisions of gambling law to propose a method of increased and effective oversight of securitization.[24] Part VI briefly concludes and discusses the possible results of utilizing gambling law as a framework to provide structured products with an increased level of oversight.[25]

II. THE FINANCIAL CRISIS AND THE ROLE OF STRUCTURED PRODUCTS

A. Overview of the Financial Crisis

The current recession and credit-freeze is part of the "most severe financial crisis since the Great Depression."[26] This on-going financial crisis is the result of investment banks' inability or unwillingness to extend credit to individuals and businesses.[27] The largest investment banks have been left without the capital or confidence to provide financing at reasonable levels to keep the United States economy afloat.[28] Accordingly, every business and in-

23. For an examination of gambling and securities regulation and each of the regimes' ability to address behavioral and cognitive irrationalities and systemic risk creation, see *infra* notes 238-329 and accompanying text.

24. For an analysis of ways securities law could be improved in order to address behavioral and cognitive irrationalities and systemic risk, see *infra* notes 330-408 and accompanying text.

25. For concluding remarks and possible benefits of reworked securities regulatory framework, see *infra* notes 409-417 and accompanying text.

26. John Hilsenrath et al., *Worst Crisis Since '30s, With No End Yet in Sight*, WALL ST. J., Sept. 18, 2008, at A1. *See* Bob Willis, *U.S. Recession Worst Since Great Depression, Revised Data Show*, BLOOMBERG L.P. (Aug. 1, 2009, 12:00 EDT), http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aNivTjr852TI (explaining why this recession is worst since great depression); Walden Siew, *Great Recession, seen lasting three years experts say*, THOMSON REUTERS (Feb. 12 2009, 9:53 AM) http://www.reuters.com/article/idUSTRE51B45820090212 (describing current recession and predicting its length).

27. *See* Peter S. Goodman, *Credit Enters a Lockdown*, N.Y. TIMES, Sept. 25, 2008, at A1 (describing credit freeze and its cause of financial crisis); David Cho & Binyamin Appelbaum, *Tipping Point? Unfolding Worldwide Turmoil Could Reverse Years of Prosperity*, WASH. POST (Oct. 7, 2008), http://www.washingtonpost.com/wp-dyn/content/article/2008/10/06/AR2008100603249.html?sid=ST2008100603283 (discussing need for government to provide banks with liquidity in order to ensure economic recovery). The *on-going* financial crisis refers to the persistent credit freeze. *See id.* (acknowledging Americans' inability to access credit). At first, when investment banks incurred extreme losses as a result of their securitization practices, the bank's inability to extend credit was understandable given the banks' lack of liquidity. *See id.* (noting investment banks' large losses). Perplexing, however, is the persistent failure of the investment banks to extend credit after the United States government infused the investment banks with approximately 700 billion dollars of liquidity. *See id.* (explaining government bailout).

28. *See* William Collins, *Developments in Banking and Financial Law: 2007-2008: IV. Valuing Opaque Assets in an Illiquid Market*, 27 REV. BANKING & FIN. L. 285, 285-90

dividual that relies on credit has been adversely affected.[29] The adverse effects of the current credit freeze are numerous. They include, *inter alia*, the following: American businesses filing for bankruptcy at increased rates; consumer spending plummeting; unemployment rates skyrocketing; and, the disappearance of employee retirement and pension funds due to the evaporation of the stock market's value.[30] To effectively reform structured product regulation to prevent another severe recession, the causes of the financial crisis and the reasons why Americans are now unable to gain credit must first be explained.[31]

(2008) (discussing how lack of liquidity in banking system adversely affects remainder of economy because of inability to gain credit). When the housing market collapsed, banks were unable to extend credit because of their obligations to creditors; however, even when the government provided the banking system with 700 billion dollars in liquidity the banking system remained frozen, failing to release funds. *See* Michael R. Crittenden & Meena Thiruvengadam, *Treasury Finds No Rise in Bank Lending*, WALL ST. J., Feb. 18, 2009 (noting banks' refusal to lend despite infusion of capital from government bail-out plan); Michael Lewis & David Einhorn, *The End of the Financial World As We Know It*, N.Y. TIMES, Jan. 4, 2009, at WK9 (noting banks' failure to lend).

29. *See* Brian Perry, *Credit Crisis, Market Effects*, INVESTOPEDIA ULC., http://www.investopedia.com/university/credit-crisis/credit-crisis7.asp (last visited Mar. 1, 2011) (discussing effects of credit crisis on businesses and individuals); Jeannine Aversa, *Fed: Credit Crunch Effects Limited*, WASH. POST (Sept. 5, 2007, 6:42 PM), http://www.washingtonpost.com/wp-dyn/content/article/2007/09/05/AR2007090501698.html (explaining adverse effects individuals and business are experiencing due to credit crunch).

30. *See Americans' Wealth Drops to $1.3 trillion: Fed Report Shows a Decline of Home Values and the Stock Market Cut the Nation's Wealth to $50.4 trillion*, CABLE NEWS NETWORK (CNN) (June 11, 2009), http://money.cnn.com/2009/06/11/news/economy/Americans_wealth_drops/?postversion=2009061113 (describing Americans loss of 1.3 trillion dollars in net worth due to mortgage market crisis); Realty Trac Inc., *U.S. Foreclosure Activity Increase 75 Percent in 2007* (Jan. 29. 2008), http://www.realtytrac.com/content/press-releases/us-foreclosure-activity-increases-75-percent-in-2007-3604 (noting 75% increase in foreclosure filings from 2006 to 2007 and 150% increase in foreclosure filings from 2005-2007); Justin Lahart, *Egg Cracks Differ in Housing, Finance Shells*, WALL ST. J., Dec. 24, 2007, at C1 (demonstrating large decrease in home building by stating "[t]he Dow Jones Wilshire index of home-building shares had fallen 41% from its July 2005 peak"); Burton Frierson, *Consumers Cut Spending*, THOMSON REUTERS (Nov. 26, 2008), http://www.reuters.com/article/idUSN2633812620081126?loomia_ow=t0:s0:a49:g43:r1:c1.000000:b30373636:z0 (describing consumer spending decrease); Louis Uchitelle, *Jobless Rate Hits 7.2%, a 16-Year High*, N.Y. TIMES, Jan. 10, 2009 at A1 (noting increasing unemployment rates caused by credit freeze); *see also* Moira Herbst, *Even the Employed Lose With Hours and Wage Cuts,* BLOOMBERG L.P. (July 10, 2009, 7:54 PM), http://www.businessweek.com/bwdaily/dnflash/content/jul2009/db20090710_255918.htm (explaining increase in wage cuts); Alexandra Twin, *Stocks Crushed*, CABLE NEWS NETWORK (CNN) (Sept. 29, 2008), http://money.cnn.com/2008/09/29/markets/markets_newyork/ (explaining stock market crash caused by mortgage market crisis).

31. *See, e.g.,* Moran, *supra* note 5, at 5-54 (explaining how interest rate reductions, predatory lending, and securitization contributed to cause credit freeze); *see also* Morrissey, *supra* note 8, at 647-50 (2010) (describing securitized products role

B. Causes of the Financial Crisis and the On-Going Credit Freeze

From the early 1990's through 2008, many individuals and businesses became overleveraged and saturated with debt.[32] Deregulation of financial markets, decreased interest rates, irresponsible lending standards, and investment bank securitization were all proximate causes of the enormous volume of credit that was extended to sub-prime borrowers.[33] One of the most notable effects of the lenient credit standards during this period was a rapid in-

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in credit crisis); Mendales, *supra* note 11, at 1359-00 (2009) (explaining structured products role in financial crisis); Olufunmilayo B. Arewa, *Risky Business: The Credit Crisis and Failure (Part I)*, 104 NW. U. L. REV. COLLOQUY 398, 400-18 (2010) (demonstrating structured products involvement in financial crisis); Olufunmilayo B. Arewa, *Risky Business: The Credit Crisis and Failure (Part II)*, 104 NW. U. L. REV. COLLOQUY 421, 422-38 (2010) (discussing role of deregulation in financial crisis); Olufunmilayo B. Arewa, *Risky Business: The Credit Crisis and Failure (Part III)*, 104 NW. U. L. REV. COLLOQUY 441, 441-50 (2010) (suggesting framework for securities regulation); Michael Simkovic, *Secret Liens and the Financial* Crisis, 83 AM. BANKR. L.J. 253, 253-87 (2009) (discussing priority structured products received in bankruptcy claims); Andrew J. Ceresney et al., *Regulatory Investigations and the Credit Crisis: The Search for Villains*, 46 AM. CRIM. L. REV. 225, 225-70 (2009) (describing origins of financial crisis); Lisa Sutton, *The Roots of the Credit Crunch*, 28 REV. BANKING & FIN. L. 3, 3-10 (2009) (outlining financial crisis); Joseph Karl Grant, *What the Financial Services Industry Puts Together Let No Person Put Asunder: How the Gramm-Leach Bliley Act Contributed to the 2008-2009 American Market Crisis*, 73 ALB. L. REV. 371, 373-16 (2010) (explaining how mixing commercial and investment banking functions enabled credit freeze to unfold); Markus K. Brunnermeier, *Deciphering the Liquidity and Credit Crunch 2007–2008*, 23 J. ECON. PERSP. 77, 78-87 (2009) (explaining multiple variables that led to credit crisis). For a discussion of the credit crisis and its origins, see *infra* notes 51-144 and accompanying text.

32. *See* Moran, *supra* note 5, at 16-22 (discussing extreme levels of debt individuals were assuming); Wilmarth Jr., *supra* note 6, at 969 (detailing credit boom that occurred in America from 1992-2007). Wilmarth explains that from 1992-2007, domestic household debt grew from 3.8 trillion to 13.8 trillion, nonfinancial business debt grew from 3.7 trillion to 10.1 trillion, and financial sector debt increased from 2.8 trillion to 15.8 trillion. *See id.* at 969 (noting volume of sub-prime mortgages being extended and high default rate).

33. *See* Moran, *supra* note 5, at 13-35 (citing causes of credit boom). Moran explains that the root of the financial crisis began in mid 1990's during the dot.com bubble. *See id.* at 13 (explaining how dot.com bubble influenced federal reserve to cut interest rates). The large interest rate cuts made mortgage payments cheaper, causing a huge demand increase for real estate, and accordingly the rise in housing prices, and the creation of a speculative housing bubble. *See id.* (describing burst of housing bubble when federal reserve raised interest rates back to normal levels). Moran also described predatory lending and its influence of the credit boom by stating that 'home buyers betting on continued house price appreciation took out sizeable loans with little or no documentation, no down payment, or without the income to qualify for a conventional loan of the size they wanted." *Id.* at 17 (noting that predatory lending coupled with interest rate cuts caused strong increase in sub-prime lending). For a discussion of the role of securitization in incentivizing credit boom and sub-prime lending, see *infra* notes 51-144 and accompanying text.

crease in the demand for housing.[34] The supply of housing during this period, however, remained relatively constant.[35] The resulting imbalance in supply and demand caused housing prices to rise accordingly, creating a housing bubble.[36] Investment banks magnified the risks associated with subprime loans and the housing bubble by creating investment opportunities derived from the value of the underlying mortgages.[37] These structured products combined with the interconnectedness of the United States' investment banking system exposed the economy to an extreme amount of systemic risk.[38]

Prior to the financial crisis, structured products were perceived as extremely low-risk investments because the packaged mortgages were secured by underlying real estate values.[39] Moreover, seeming to be acting as intermediaries between commercial lenders and institutional investors, investment banks merely packaged and sold pools of loans, leaving large amounts of debt remaining on investment banks' balance sheets.[40] In 2007, the number of individuals

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34. *See* Wilmarth Jr., *supra* note 6, at 1002 (describing large increase in consumer debt, demand for housing, and inevitable increase in housing prices)

35. *See id.* (noting constant supply of housing).

36. *See* Henry Blodget, *The Housing Chart That's Worth 1000 Words*, BUS. INSIDER (Feb. 21, 2009), http://www.businessinsider.com/the-housing-chart-thats-worth-1000-words-2009-2 (demonstrating rise and subsequent fall of housing prices destroying creditors' security interests in borrowers' debt).

37. *See* Wilmarth Jr., *supra* note 6, at 1030 (noting that "total volume of financial instruments with exposures to nonprime mortgages was at least twice as large as the $2 trillion of outstanding nonprime mortgages").

38. *See id.* at 994-95 (explaining large banks' originate to distribute model and their creation of extensive amount of leverage exposed to subprime mortgages). Large banks originated loans, packaged the loans into mortgage-backed securities, packaged mortgage-backed securities into tranches of collateralized debt obligations, packaged certain tranches of collateralized debt obligations into squared collateralized debt obligations, and facilitated bets on all of these financial products through the use of synthetic collateralized debt obligations. *See id.* (noting that amount of leverage created was immense and was all based on the subprime mortgages that would eventually default).

39. *See* Moran, *supra* note 5, at 17 ("One unfortunate consequence of the inflation of the housing market was that mortgage brokers came to view their loans as well-secured by the rising values of their real estate collateral and, therefore, failed to focus sufficiently on borrowers' ability to repay.").

40. *See* Wilmarth Jr. *supra* note 6, at 1032-33 (explaining large banks exposure to risks based upon amount of subprime loans banks maintained on their books). Accordingly, when the mortgage market burst, the loans and financial instruments that large banks had not sold became the bank's liabilities causing the banks to incur large losses and leading to the credit freeze. *See* Moran, *supra* note 5, at 71 ("Uncertainty over the quantity and valuation of banks' 'toxic assets' has meant that many institutions could not count on loans from each other to meet daily needs, and this illiquidity in the markets has impaired their ability and willingness to lend.").

who defaulted on their loans began increasing significantly.[41] In turn, institutional investors and investments banks were not afforded the interest and principal payments that were due to them.[42] The common conception, however, was that investment banks and investors could simply foreclose on the homes serving as collateral, sell them for their market value, and suffer no legitimate loss.[43]

That conception holds true only to the extent that housing prices continue to increase.[44] When more and more borrowers defaulted, however, and a larger proportion of real estate became foreclosed upon, the demand for housing evaporated while the supply for housing remained abundant.[45] This supply and demand shift resulted in a steep downturn in housing prices and caused the value of institutional investors' and investments banks' security interests to essentially disappear.[46]

As a result, investment banks were unable to collect payments from debtors and recuperate their investments through foreclosure due to the decreased value of the real estate collateral.[47] Accordingly, investment banks lost an extraordinary amount of capital and are currently unwilling to extend credit to individuals and businesses.[48] Thus, the investment banks, which played a primary role

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41. *See* James MacGee, *Why Didn't Canada's Housing Market Go Bust?*, FED. RES. BANK CLEVELAND (Dec. 12, 2009), http://www.clevelandfed.org/research/commentary/2009/0909.cfm (supplying chart showing spike in United States delinquency rate on loans from under 0.5% in 2007 to over 2.2% in 2009).

42. *See* Wilmarth Jr., *supra* note 6, at 1032-33 (noting banks losses as cause of credit freeze).

43. *See* Moran, *supra* note 5, at 17 ("One unfortunate consequence of the inflation of the housing market was that mortgage brokers came to view their loans as well-secured by the rising values of their real estate collateral and, therefore failed to focus sufficiently on borrowers' ability to repay.").

44. *See id.* (explaining that security interests were only valuable to extent that housing maintained value).

45. *See id.* at 54 ("When the speculative fever finally broke in America's housing industry and housing prices began falling in search of equilibrium levels, banks and financial institutions everywhere suffered defaults and subsequent losses on a range of assets.").

46. *See* Tim Iacono, *Existing Home Sales Continue to Improve*, SEEKING ALPHA (July 23, 2009), http://seekingalpha.com/article/150923-existing-home-sales-continue-to-improve (providing chart showing demand and supply shift for housing and explaining price consequences).

47. *See* Eggert, *supra* note 5, at 1261 ("Increasing subprime defaults and plummeting housing prices have caused enormous losses for many financial institutions and shaken the confidence of many investors in the credit markets generally.").

48. *See* Moran, *supra* note 5, at 55 (stating that "[t]he losses on these widely held mortgage-related investments have created an enormous capital hole on the balance sheet of many financial institutions" and that losses left banks without sufficient capital to lend). *See also* Neel Kashkari, *Interim Assistance Secretary for Finan-*

in causing the mortgage market meltdown, were the entities most affected by the collapse.[49] Investment banks were the architects of their own destruction, leaving the U.S. economy and American citizens to toil in the rubble.[50]

C. Securitization, the Resulting Products, and Their Dual-Role in Influencing the Financial Crisis

Securitization influenced the credit freeze and the financial crisis in two main ways.[51] First, large investment banks pursued an originate-to-distribute ("OTD") model of securitization that incentivized mortgagors to lend at increased levels and to less qualified

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cial Stability Neel Kashkari Review of the Financial Market Crisis and the Troubled Asset Relief Program (Jan. 13, 2009), http://www.treasury.gov/press-center/press-releases/Pages/hp1349.aspx (stating that "[c]apital is essential for a healthy financial system"). Kashkari explained why capital is important to the banking system by stating that:

> [Capital] permits banks to take risks and absorb losses while honoring their obligations to depositors and other creditors. During an economic downturn, many businesses and consumers want to see their extra capital in their bank in order to have confidence the bank is sound and their money safe. Similarly, in such times, many banks want to see increased capital in other banks in order to have confidence to do business with them.

Id.

49. *See* Moran *supra* note 5, at 54 ("When the speculative fever finally broke in America's housing industry and housing prices began falling in search of equilibrium levels, banks and financial institutions everywhere suffered defaults and subsequent losses on a range of assets."). Investment banks incentivized the boom of subprime lending that was at the core of the mortgage market collapse. *See id.* (explaining investment banks' role in financial crisis). Investment banks took a large hit because of their creation of structured products and the risk they maintained on their books. *See id.* at 71 ("Uncertainty over the quantity and valuation of banks' 'toxic assets' has meant that many institutions could not count on loans from each other to meet daily needs, and this illiquidity in the markets has impaired their ability and willingness to lend."). The banks lack capital and are accordingly cautious concerning the state of the economy because of the large financial hit they took when the mortgage market collapsed. *See* Wilmarth Jr., *supra* note 6, at 1032-33 (explaining large financial loss banks sustained).

50. *See* Alan C. Harrell, The *Great Credit Contraction: Who, What, When, Where, and Why?*, 26 GA. ST. U.L. REV. 1209, 1239-49 (2010) (explaining credit freeze and its implications).

51. *See generally,* Adam B. Ashcraft & Til Schuermann, *Understanding the Securitization of Subprime Mortgage Credit*, Fed. Res. Bank N.Y. Staff Rep. No. 318, at 1-76 (2008), *available at*, http://www.ny.frb.org/research/staff_reports/sr318.pdf (discussing seven frictions of securitization and their influence of financial crisis); *see also* Antje Berndt & Anurag Gupta, *Moral Hazard and Adverse Selection in the Originate-to-Distribute Model of Bank Credit*, 1-39 (Working Paper, Nov. 2008), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1290312 (explaining originate to distribute model and its influence of subprime mortgage market collapse). For a discussion of how securitization influenced subprime lending and the financial crisis, see *infra* notes 52-144 and accompanying text.

applicants.[52] Through securitization, commercial banks were afforded more liquidity and assumed less default risk; as a result, commercial banks extended more credit and screened loan applicants less thoroughly.[53] Second, investment banks created structured products that exposed themselves, as well as many institutional investors, to the serious risks associated with the over-extension of subprime mortgages.[54] By packaging mortgages, packaging packages of mortgages, and packaging packages of packages of mortgages, investment banks increased the economy's exposure to the risks associated with subprime mortgages exponentially.[55] An analysis of the OTD model and the products created through

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52. *See* Wilmarth, *supra* note 6, at 971.

> In both markets, as with home mortgages, securitization created perverse incentives for lenders and [asset-backed security] underwriters. Lenders and [asset-backed-security] underwriters believed that they could (i) originate risky loans without properly screening borrowers and (ii) avoid costly post-loan monitoring of the borrowers' behavior because . . . the loans were transferred to investors.

Id. The OTD model was sustained by investment banks' securitization activities. *See id.* at 969.

> The [originate-to-distribute] model included (i) originating and servicing consumer and corporate loans, (ii) packaging those loans into [asset-backed securities] and [collateralized debt obligations], (iii) creating additional financial instruments, including synthetic [collateralized debt obligations] and credit default swaps . . . and (iv) distributing the foregoing securities and financial instruments to investors.

Id. This process involved originating loans from individuals and businesses, packaging loans into structured products, selling them to investors and creating other over-the counter-derivatives that served as financial bets on the value of these underlying loans and structured products. *See* Arnold Kling, *An Economy In Crisis: Law, Policy, and Morality During the Recession: Essay: The Financial Crisis: Moral Failure or Cognitive Failure?*, 33 HARV. J.L. & PUB. POL'Y 507, 507-08 (2010) (noting originate-to-distribute model's ability to incentivize sub-prime lending and create systemic risk). Mr. Kling notes that:

> Those who emphasize moral failure have highlighted a number of distortions between private and social benefits, including: that executive pay at financial institutions is not tied to long term viability, the "originate to distribute" model of mortgage financing gives the originator an incentive to make bad loans that are passed down the line in the system of structured financing of mortgage securities, and rating agencies are overly generous in granting AAA and AA ratings because they were paid by the issuers of mortgage-related securities.

Id.

53. *See id.* at 508-09 ("[T]he financial crisis was like a fire started by delinquent teenagers, with the adults in charge not sufficiently inclined or positioned to exercise adequate supervision.").

54. *See* Moran, *supra* note 5, at 51 (explaining that "the financial turmoil is the aftermath of a credit boom characterized by the underpricing of risk, excessive leverage, and an increasing reliance on complex and opaque financial instruments that have proved to be extremely fragile under stress").

55. *See* Wilmarth, *supra* note 6, at 1027-28 (explaining how investment banks creation of structured products created large amounts of systemic risk).

securitization is imperative to understand how these products incentivized subprime lending and exposed the economy to large amounts of systemic risk.[56]

1. *Securitization and the Structured Products Created Through Securitization*

Securitization involves pooling and packaging mortgaged loans into securities that investors purchase in order to receive the principal and interest payments from a set of mortgages.[57] The securitization process generally proceeds as follows: an "originator," often a commercial bank, underwrites and services mortgages to borrowers who are in need of credit to purchase property, in this case real estate.[58] The originator then enters into a transaction with a bank or institution called the "arranger," which may be part of the same institution as the originator.[59] The arranger purchases a pool of loans from the originator by paying the originator a premium on the amount of capital extended to borrowers.[60] The originator has an incentive to sell these loans to the arranger because, upon sale, the risk of default is transferred to the arranger and the originator is afforded a risk-free return for servicing and underwriting the mortgages.[61]

The arranger then begins soliciting individual and institutional investors to purchase the pools of loans in security-form.[62] While the details of securitization are being finalized, the arranger "ware-

56. For a discussion of the incentives to lend created by certain OTD products, see *infra* notes 57-144 and accompanying text.

57. *See* CHRISTINE A. PAVEL, SECURITIZATION, THE ANALYSIS AND DEVELOPMENT OF THE LOAN-BASED/ASSET-BACKED SECURITIES MARKETS 3 (1989) (defining securitization as "the pooling and repackaging of loans into securities that are then sold to investors").

58. *See* Aschcraft, *supra* note 51 (discussing roles in OTD process). An "originator" is the person or entity that disperses funds to the borrower and services the loan. *See id.* (announcing originator's functions).

59. *See id.* (describing loan process). An "arranger," often an investment bank, is the entity that purchases mortgages from the originator and creates the special purpose vehicle that houses the pool of mortgages in ways that enable the issuance of structured products. *See id.* (discussing role of arranger in securitization process).

60. *See id.* (explaining purchasing, pooling and packaging process of arranger). For instance, an originator who extended credit in the amount of $100,000 to a pool of borrowers may accept $105,000 from an arranger to achieve liquidity to issue more loans and protection from risk of default. *See id.* (examining benefits of securitization to originator).

61. *See id.* (illustrating risk-transfer and capital infusion securitization provides to originating banks).

62. *See id.* at 6 (recognizing arrangers' function of soliciting and arranging sales of pools of loans in form of securities).

houses" the pools of loans and is responsible for any funding and liable for any losses incurred by the mortgages.[63] Once the details of the transactions are worked out with investors, the pool of loans is transferred to a special purpose vehicle that simultaneously shields the loans from the debts of the arranger and insulates the arranger from liability resulting from the loans.[64] A third party investor then pays the arranger a transaction fee and possibly a lump sum premium over the "par value" of the loans to secure rights to the payments.[65] The rights to payments that accrue from the pool of loans in the special purpose vehicle are what is commonly referred to as a structured product or securitized investment.[66]

The arranger often hires a "servicer" who manages the payments to and from the special purpose vehicle.[67] The servicer is responsible for, among other things, collecting loan payments, making advances of unpaid interest payments to those investing in the structured product, supervising foreclosures on real estate collateral, and selling the foreclosed upon collateral.[68]

This entire process is often consolidated and streamlined by investment banks that participate in many levels of the securitization process.[69] For example, Lehman Brothers Holdings Inc., an investment bank which participated heavily in securitized invest-

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63. *See* Wilmarth, *supra* note 6, at 1028-30 (recognizing investment bank practices to provide bridge financing and warehousing pools of loans exposing themselves to sub-prime risk). Warehousing pools of loans is the process of maintaining loans on investment banks' balance sheets until they can solicit investors to purchase the mortgage-backed securities. *See id.* (surveying systemic risk created through process of warehousing).

64. *See* PAVEL, *supra* note 57, at 23 (stating that pools of loans are usually sold by originator to "special purpose vehicles" created by investment banks). "Special purpose vehicle" is a bankruptcy remote trust created by investment banks. *See id.* (commenting that special purpose vehicle is created specifically to hold pools of loans and issue payments from loans). These trusts are usually set up as a separate business entity such as a limited purpose corporation and shield the assets from the investment banks and investors liabilities. *See id.* (describing special purpose vehicle and its purposes of shielding pool of loans from investor liability).

65. *See id.* at 34-35 (indicating investors interest in purchasing rights to payments because they could achieve fairly high return for perceived low risk).

66. *See id.* at 23-24 (discussing sale of assets from special purpose vehicle).

67. *See id.* at 22-23 (describing function and duties of servicer).

68. *See id.* at 24-26 (indicating servicer's responsibilities and noting that servicer's and arranger's functions may be assumed by investment bank).

69. *See* Wilmarth, *supra* note 6, at 963-65 (explaining that investment banks "pursued an "originate to distribute" strategy, which included (i) originating consumer and corporate loans, (ii) packaging loans into ABS and CDOs, (iii) creating OTC derivatives whose values were derived from loans, and (iv) distributing the resulting securities and other financial instruments to investors").

ments, often acted as originator, arranger, and servicer.[70] This consolidation is a key characteristic of the OTD model and played a major role in influencing the credit-boom and systemic risk creation.[71] The basic types and forms of structured products created through the OTD model are outlined below.[72]

a. Mortgage-Backed Securities

Mortgage-Backed Securities ("MBSs") are securities that afford investors rights to principal and interest payments from a pool of mortgages that are "backed" or "secured" by real estate collateral.[73] Investors who purchase MBSs receive cash payments due from the pool of mortgages, assume the risk of borrower default, and retain a security interest in the real estate collateral underlying the mortgages.[74]

MBSs can be structured in a variety of ways.[75] The most basic form of MBS is the "pass-through" MBS, which is appropriately labeled because principal and interest payments literally pass through from the borrower, to the originator, to the arranger, and

70. *See id.* (surveying functions assumed by investment banks). Lehman Brothers would serve as the originator, lend large sums of money to borrowers, step into the shoes of the arranger, solicit institutional investors seeking to gain exposure to pools of mortgages and *eventually* sell the loans to a special purpose vehicle created by the banks for the purposes of the transaction. *See id.* (explaining consolidation of OTD process by investment banks). Lehman Brothers would also act as servicer for the structured products, monitoring payments and defaults on loans and making advances of unpaid interest payments. *See id.* (noting investment banks' assumption of role of servicer in OTD model of securitization).

71. *See id.* (indicating that originate-to-distribute model incentivized subprime lending and increased systemic risk). Investment banks had incentives to keep the system going, and continue originating, arranging and servicing, in order to maintain high transaction fees. *See id.* (asserting need to realign investment banks' interests with overall economy).

72. For an outline of the basic types of structured products, see *infra* notes 73-118 and accompanying text.

73. *See* Moran, *supra* note 5, at 36 (outlining characteristics and functions of mortgage-backed securities). For instance, an investor of a mortgage-backed security generally pays a series of transaction fees or a lump-sum fee in order to gain the rights to principal and interest payments of mortgages. *See id.* (explaining MBSs). These rights also include security interests in the collateral underlying the mortgages, which is what made these investments seemingly risk-free and very appealing. *See id.* (explaining demand for MBSs).

74. *See id.* (detailing mortgage-backed securities as ways for institutional investors to assume risk of loan default in exchange for principal and interest payments on loans).

75. *See id.* at 36-37 (outlining various structures of mortgage-backed securities).

subsequently to the investors who purchase the MBSs.[76] All of the purchasers of a particular MBS are entitled to a pro-rata share of the principal and interest payments made by the borrowers as well as the proceeds from foreclosures on the collateral.[77]

b. Collateralized Mortgage Obligations

Some MBSs, however, are structured in ways that account for investors' risk preferences by providing investors with claims to specific portions of the pools of loans.[78] MBSs structured in this manner are called Collateralized Mortgage Obligations ("CMOs").[79] CMOs divide pools of loans into maturity classes known as "Tranches."[80] Each maturity class or tranche has different risks, maturity dates, rights to payments, and responsibility for debt.[81]

CMOs are often broken up into a senior tranche, mezzanine tranche, and equity tranche.[82] Investors with rights in the senior

76. *See id.* (analyzing pass-through mortgage-backed securities by explaining that "mortgage loans are pooled into a trust by a mortgage loan originator, which then sells interests in the trust to certain investors-certificate holders").

77. *See Mortgage-Backed Securities (CMOs)*, SEC. & EXCH. COMM'N, http://www.sec.gov/answers/mortgagesecurities.htm (last visited Mar. 1, 2011) (explaining mortgage-backed securities); *see also* Moran, *supra* note 5, at 37 (detailing benefits of mortgage-backed securities).

78. *See Collateralized Mortgage Obligations (CMOs)*, SEC. & EXCH. COMM'N, http://www.sec.gov/answers/tcmos.htm (last visited Mar. 1, 2011) (commenting on characteristics of collateralized mortgage obligations).

79. *See* Moran, *supra* note 5, at 378 (detailing characteristics of CMOs).

80. *See id.* (noting that these securities are similar to mortgage-backed securities, but are just structured differently). Collateralized Mortgage Obligations (CMOs), a type of mortgage-backed security, are bonds that represent claims to specific cash flows from large pools of home mortgages. *See id.* (detailing differences between pass-through MBSs and CMOs). The streams of principal and interest payments on the mortgages are distributed to the different classes of CMO interests, known as tranches, according to a complicated deal structure. *See id.* (noting investment banks custom of creating tranches of assets when pooling loans into CMOs). Each tranche may have different principal balances, coupon rates, prepayment risks, and maturity dates, ranging from a few months to twenty years. *See id.* (explaining that senior tranche is lowest risk because it is first to receive payments and last to become liable for default losses).

81. *See id.* (explaining division of structured products into tranches). Moran states that:

> these securities are divided into various tranches that receive credit ratings from credit rating agencies. These ratings ranged from senior tranches (rated AAA), mezzanine tranches (AA to BB), to equity tranches (unrated). The cash flows of principal and interest payments from each tranche are paid out by order of priority in a predetermined order, with the most risky tranches receiving payment last but benefitting from the highest interest rates.

Id.

82. *See id.* (stating that senior tranches were viewed as extremely low risk investments that afforded higher return than risk-free government bonds).

tranche of CMOs assume the least amount of risk because the senior tranche has shorter expected "maturity periods" and first right to principal and interest payments.[83] The mezzanine tranche collects after the senior tranche, and the equity tranche collects after the mezzanine tranche.[84] Conversely, losses resulting from CMOs are incurred first by the equity tranche, second by the mezzanine tranche, and last by the senior tranche.[85] Due to the increased default and interest rate risk the mezzanine and equity tranches assume, the equity tranche earns a higher rate of return than the mezzanine tranche and the mezzanine tranche earns a higher rate of return than the senior tranche.[86] Thus, investors are able to structure investments in CMOs according to their risk-reward preferences.[87]

c. Collateralized Debt Obligations

MBSs and CMOs provided originators with additional capital to lend and accordingly afforded arrangers new mortgages to package into MBSs and CMOs.[88] Eventually, however, financial innovation was needed to satisfy the seemingly perpetual investor demand for rights to principal and interest payments.[89] Collateralized Debt Obligations ("CDOs") were created to satisfy this demand.[90] CDOs

83. *See id.* (outlining rights of senior tranche of CMOs). The maturity date is the date a bond matures or is paid off. *See id.* (explaining maturity date).

84. *See id.* (explaining waterfall concept of CMOs).

85. *See id.* (explaining desirability to invest in senior tranche of structured products).

86. *See id.* (detailing risk-return of mezzanine and equity tranches). The equity tranche, for example, because of its longer maturity date and subordinated priority to payments, is exposed to a heightened level of default and interest rate risk and because of this increased risk exposure, is afforded a higher interest rate and higher rate of return. *See id.* (explaining inverse relationship of risk and return).

87. *See id.* (noting that investors who seek higher rates of return preferred mezzanine and equity tranches and assumed greater amount of risk).

88. *See* Wilmarth, *supra* note 6, at 969-71 (demonstrating investment banks' desire to collect large transaction fees by innovating new financial instruments to structure and sell).

89. *See id.* (explaining investment banks' innovation of financial products to satisfy demand for debt securities).

90. *See* Moran, *supra* note 5, at 38-40 (examining features of CDOs that made these structured products extremely attractive to many investors). Moran notes that investment banks wanted to maintain the income from transaction fees and thus innovated additional structured products to enable them to sell even more securities referencing the same underlying assets; Moran stated: "[f]urther expanding the potential investor base was the development of another structured product, collateralized debt obligations (CDOS), which are used to purchase asset-backed instruments such as MBSs or CMOs with various ratings and projected returns" and sell rights to these payments to institutional investors. *See id.* at 38 (sur-

are similar in structure to CMOs and are broken up into senior, mezzanine, and equity tranches.[91] CDOs, however, are constructed by forming a portfolio of a variety of debt obligations, including particular tranches of MBSs and CMOs.[92] Typically, CDOs are constructed by pooling securities with the lowest credit ratings in a strategic manner in order to increase the credit rating of the resulting financial product.[93] By combining a variety of types and grades of debt into one pool, investment banks were able to diversify the debt pool in a way sufficient to achieve investment grade credit ratings.[94] This process is termed credit enhancement, and through it, the senior tranche of CDOs was often afforded AAA ratings, notwithstanding the fact that the CDOs were often comprised of mostly

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veying financial innovation that led to sub-prime lending, systemic risk. and eventual financial crisis).

91. *See id.* at 39 (stating that CDOs are broken up into tranches with senior tranche having first rights to payments and final responsibility for losses).

92. *See id.* at 39-40 (summarizing CDO construction by stating "CDO securities are arranged by investment banker/securitizer into various tranches with input from the credit rating agencies. The *securities* pooled are typically those otherwise receiving the *lowest* rating by the credit rating agencies") (emphasis added). Thus, the worst loans were packaged into securities such as MBSs and CMOs and then the lowest rated of those securities were packaged into CDOs in a manner warranting AAA ratings notwithstanding the fact that the assets referenced in these securities were non-investment grade debt. *See id.* at 39 (recognizing potential for value of these securities to crumble). Moran explains the complexity of these securities by stating that:

> [c]ombining different types and grades of debt in one pool, these complex securities were designed to reduce the risk of the whole below the level of the individual pieces. But as very complex instruments, even the most sophisticated investors sometimes fail to appreciate their risks and substitute the rating supplied by the credit agency for the investors' own independent risk analysis.

Id. at 40.

93. *See id.* at 39 (delineating ways investment banks used credit enhancements to achieve AAA ratings on securities referencing other poorly rated securities).

94. *See id.* (analyzing waterfall structure of CDOs, payments would satisfy debt of senior tranche first; if there were enough cash left, payments would overflow to the mezzanine tranche; and if there was cash remaining the payments would overflow to equity tranche). Moran explains that this construction caused the senior tranche to be perceived as extremely low risk by noting that "[t]ypically, the credit rating agencies, gave a majority of the securities issued an investment grade rating, despite the fact that the pool backing the securities fell below investment grade, because they believed that any losses from the pool would be sufficiently covered by the investors in the lowest tranches." *See id.* at 40 (detailing transformation from many non-investment grade securities into one investment grade security). A security is investment grade when the prospects of payment on the investment are high; in other words, when a security is likely to pay what is promised to the investors it will be labeled investment grade. *See id.* (describing characteristics of investment-grade securities). Investment grade securities are perceived as low risk, and are accompanied by a lower interest rate. *See* HAMILTON, *supra* note 153, at 473-76 (analyzing investment grade bonds and non-investment grade bonds or "junk bonds" and explaining risks and rewards of each type of investment).

non-investment grade CMOs, MBSs, and other debt.[95] The senior tranche of CDOs, situated with first priority to payments, last responsibility for liabilities, and a retained security interest in the collateral was extremely attractive to investors because of the perception that the senior tranche, was a near risk-free investment that afforded a higher return than government-backed treasury notes.[96]

The creation of CDOs, however, was not enough to satisfy the endless investor demand, and to broaden the investor-base even further, investment banks created Squared CDOs.[97] Just as investment banks assembled low-grade MBSs and CMOs in a manner to achieve AAA rated senior tranches of CDOs, investment banks assembled lower-rated CDOs into AAA rated senior tranches of Squared CDOs by diversifying the debt obligations and prioritizing payments in a subordinated payment structure.[98] In the end, these

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95. *See* PAVEL, *supra* note 57, at 29-32 (examining investment banking practice of diversifying debt and establishing rights to payments in order to enhance creditworthiness of securities). Pavel notes that:

> [c]redit enhancement is a vehicle that reduces the overall credit risk of a security issue. The purpose of the credit enhancement is to improve the rating, and therefore the pricing and marketability, of an asset-backed security. . . . Credit has been enhanced by the issuer by providing recourse, a senior subordinated structure, overcollateralization, or a spread account.

Id. at 29. A senior-subordinated structure is a credit-enhancement mechanism where the investment bank creates tranches and assigns rights and responsibilities to each tranche in a way that lowers risk for senior tranche. *See id.* (explaining senior subordinations as credit enhancers and ways they decreases risk).

96. *See id.* (providing that because of senior tranche's perceived low risk and high interest rate relative to risk-free government bonds, these investment became extremely popular among institutional investors).

97. *See* Wilmarth, *supra* note 6, at 1029 ("Financial conglomerates used the same re-securitization process to transform mezzanine tranches of CDOs into higher-rated securities issued by 'CDOs Squared.'").

98. *See id.* (analyzing credit enhancements and questioning how senior tranches of squared CDOs achieved AAA ratings when securities consisted of: subprime loans packaged into non-investment grade MBSs and CMOs, that were packaged into mezzanine tranche or non-investment grade CDOs, and subsequently repackaged into investment grade squared CDOs). Although beyond the scope of this Comment, there are many critiques of credit rating agency practices and whether or not they were incentivized to provide these securities with heightened ratings because investment banks were paying their compensation. *See, e.g.*, Lynn Bai, *On Regulating Conflicts of Interest in the Credit rating Industry*, 13 N.Y.U. J. LEGIS. & PUB. POL'Y. 253, 253-13 (2010) (analyzing conflicts of interest within credit rating agencies); Deryn Darcy, *Survey: Credit rating Agencies and the Credit Crisis: How the "Issuer Pays" Conflict Contributed and What Regulators Might Do About It*, 2009 COLUM. BUS. L. REV. 605, 605-68 (2009) (commenting on "issuer pays" model and discussing possible regulatory responses in order to remove those conflicts); Timothy E. Lynch, *Deeply and Persistently Conflicted: Credit Rating Agencies in the Current Regulatory Environment*, 59 CASE W. RES. L. REV. 227, 227-04 (2009) (illustrating conflicts of interest present in credit rating industry).

debt securities were comprised of extremely risky debt that remained from previous transactions and were disguised as valuable, safe investments.[99]

d. Synthetic Collateralized Debt Obligations

From 2001-2007, the amount of debt due to MBSs increased almost ten-fold, growing from approximately $160 billion to nearly $1.5 trillion.[100] Additionally, by 2007, CDOs outstanding reached almost $2 trillion, $1 trillion of which was exposed to subprime mortgages.[101] Although MBS, CMO, and CDO exposure alone eclipsed the monetary amount of subprime loans outstanding, investment banks innovated yet another instrument that enabled even more investors to become involved in mortgage market investing.[102] This instrument is called the *synthetic* CDO.[103]

The synthetic CDO is created through the use of derivative contracts, mainly the credit-default swap.[104] A credit-default swap is a contractual instrument created for use by investors to hedge against risk associated with investing in a particular asset or commodity.[105] The simplest type of credit-default swap involves a hedg-

99. *See* Wilmarth, *supra* note 6, at 1029 (asserting that AAA ratings of many CDOs and Squared CDOs were artificial in light of quality, or lack thereof, of underlying debt).

100. *See id.* at 1027 (illustrating extreme increase in debt leveraging sub-prime mortgages that eventually went unpaid).

101. *See id.* (noting large amount of systemic risk pervasive in banking system through use of structured products).

102. *See id.* at 1030-31 (noting investment banks' creation of innovative financial products to maximize transaction fees).

103. *See id.* at 1031 (considering creation of synthetic CDOs and systemic risk created though their use).

104. *See* Moran, *supra* note 5, at 43-44 (outlining synthetic CDO construction). A derivative is a financial instrument that was created for use by industry professionals to hedge against business risk. *See id.* at 41 (explaining derivative securities). The value of these instruments, as their name suggests, is *derived* from underlying assets such as stocks, bonds, commodities, mortgages, or other securities. *See id.* (noting that value of derivative is based on underlying assets). As the value of the underlying assets rise or fall, the value of the derivative will increase or decrease accordingly. *See id.* (showing causal relationships of value between underlying assets and derivatives). "They operate by allowing investors to place *bets* on the direction they believe financial markets will move, without ever needing to own tangible assets." *Id.* (emphasis added). A credit-default swap, a type of derivative security, is a contractual instrument designed to insure hedging investors against losses. *See id.* (detailing credit-default swap function). Credit-default swaps are routinely used by investment banks to make markets between institutional investors and to facilitate bets on the value of assets such as MBSs or CDOs. *See id.* (acknowledging credit-default swaps use within synthetic CDOs to facilitate bets between large accredited investors).

105. *See id.* (recognizing hedging ability credit-defaults swaps afford). For instance, if investor A had a long position in Apple stock of $1000, he may enter into

ing party paying another investor periodic payments in exchange for the other investor's guarantee to cover the losses of the underlying asset beyond an agreed upon point.[106] Therefore, credit-default swaps operate similarly to insurance.[107] Periodic payments are exchanged for protection against losses resulting from a "credit event."[108] These derivative instruments are commonly used to assemble synthetic CDOs to hedge against the downward risk of investing in MBSs, CMOs, CDOs, Squared CDOs, and other debt.[109]

For instance, suppose investor A has ownership in a class of debt and (1) wants to protect against losses associated with a potential credit event or (2) believes that the value of a certain class of debt is going to decrease and wants to earn a profit on this decrease in value.[110] To accomplish these goals, investor A could assume a "short-position" in a synthetic CDO.[111] Meanwhile, Investor B believing that the debtors of the referenced debt are going to pay on schedule, would assume the "long-position" in a synthetic CDO.[112] The investment bank would complete a number of transactions between each party and a special purpose vehicle to facilitate their respective bets.[113] Through these transactions, Investor A effectively agrees to pay credit-default swap premiums to Investor B for

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a credit default swap with investor B and pay investor B periodic payments in exchange for credit protection guaranteed by investor B such that investor B would be liable to investor A if the value of Apple's stock decreased beyond an agreed upon point. *See id.* (illustrating use of credit-default swap).

106. *See id.* (explaining contractual terms regularly used in credit-default swaps and synthetic CDOs).

107. *See id.* (drawing similarities to insurance).

108. *See id.* (explaining why investors would purchase credit-default swap protection). A credit-event is an occurrence that adversely affects the underlying assets referenced by the credit-default swap or synthetic CDO. *See id.* at 42 (commenting on credit-default swaps' ability to protect investors against credit events that negatively affect underlying asset value). For instance, in the mortgage market, credit events consist of borrowers defaulting on their loans, bankruptcy of the borrower, restructuring of borrowers' debt, and credit rating changes of underlying assets. *See id.* (analyzing effect of value of underlying debt in light of credit events and protection provided by credit-default swaps).

109. *See id.* at 43 (analyzing synthetic CDOs and use of CDSs to structure these investment products).

110. *See* JANET M. TAVAKOLI, COLLATERALIZED DEBT OBLIGATIONS & STRUCTURED FINANCE: NEW DEVELOPMENTS IN CASH AND SYNTHETIC SECURITIZATION 117-70 (2003) (outlining common synthetic CDO transactions).

111. *See id.* (noting that investors who want to profit on decrease in value of asset would take short position in that asset).

112. *See id.* (explaining that investors who want to profit on increase in value of asset would take long position in that asset).

113. *See id.* (detailing common synthetic CDO construction).

an agreed upon amount, period of time, and frequency.[114] Additionally, in consideration for these payments, Investor B effectively guarantees Investor A for losses incurred by the underlying assets.[115]

These transactions do not afford either investor ownership rights in the underlying assets, but rather grant rights to payment from an adverse party.[116] Often, although occasionally used for legitimate hedging purposes, investors utilize synthetic CDOs to speculate on the performance and value of the referenced debt.[117] In plain language, synthetic CDOs were often pure gambles.[118]

2. *Securitization's Role in Incentivizing Sub-Prime Lending*

Investment banks' use of the OTD model created many incentives to increase subprime lending, eventually leading to the mortgage market bubble and its subsequent collapse.[119] Investment banks and commercial lenders did not have any incentive to stop, or even slow, the securitization process because of the perceived

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114. *See id.* (outlining rights and responsibilities of major parties of synthetic CDO). In actuality, Investor A pays premiums to the investment bank and the investment bank guarantees Investor A for any losses incurred by the underlying losses. *See id.* (illustrating technical process of structuring synthetic CDOs). The investment bank, however, takes an off-setting position with Investor B by paying Investor B identical or similar premium payments, while securing a guarantee from Investor B, thus making a market between Investor A and B; this explains why, in effect, Investor A and B are exchanging considerations. *See id.* (explaining actual constructs of synthetic CDO).

115. *See id.* (asserting effect of investment bank transactions).

116. *See* Wilmarth, *supra* note 6, at 1031-33 (describing synthetic CDOs and investors' interest in synthetic CDOs). Wilmarth describes the context of these investments by stating that:

> managed pools consisting *entirely of CDS* . . . credit protection *with reference to* the performance of nonprime RMBS or related indices. In practical effect, the packaging of CDS enabled [investment banks] to create a new class of investments that mimicked the performance of nonprime mortgages, even though the CDOs did not own either the mortgages themselves or nonprime RMBS.

Id.

117. *See* Moran, *supra* note 5, at 41 (noting speculative nature of synthetic CDOs).

118. *See id.* ("They operate by allowing investors to *place bets* on the direction they believe financial markets will move . . . ."). In addition, they were unregulated because of the perception that the market for these instruments was very small and "no systemic risk would exist since investors' inclinations to minimize their risks would protect the broader financial system." *Id.* at 42. (illustrating Congress's reasoning for failing to regulate these investments).

119. *See id.* at 44-51 (commenting on securitization's role in incentivizing subprime lending).

lack of risk the banks faced and the fees each were accruing.[120] Investment and commercial banks, driven by their interest in obtaining as many fees as possible, encouraged lending, influenced sub-standard lending practices, and eventually caused an elevated level of mortgage defaults, which lead to the housing market collapse.[121]

Investment banks had an incentive to perpetuate the securitization process because they transferred the default risks associated with pools of loans to a broad base of institutional investors and they enjoyed many transaction fees for structuring these securitized products.[122] As long as demand existed for structured products, the securitization process would not cease; and unfortunately for the U.S. economy, the demand did not slow until after the mortgage market bubble was created and was on the brink of collapse.[123]

Additionally, and perhaps more influentially, securitization freed commercial banks of the traditional constructs of lending and therefore incentivized increased credit extension and poor lending practices.[124] Commercial banks, rather than being responsible for borrowers' failure to pay, sold pools of loans to investment banks effectively transferring default risk off of their books.[125] The pro-

120. *See id.* at 44 (noting incentives to continue lending and structuring products because of fees collected and perceived risk-transfer).

121. *See id.* at 44-45 (describing originate-to-distribute model, incentives to lend to sub-prime borrowers, financial products increasing exposure to sub-prime loans). The originate-to-distribute model adopted by investment banks encouraged and enabled originating banks to extend a much greater amount of credit and provided no incentive for originating banks to properly screen and oversee loan applicants. *See* Wilmarth, *supra* note 6, at 994-95 (detailing originate-to-distribute model). Traditionally, originating banks managed loans from point of extending credit until the repayment of debt; accordingly, originating banks assumed the risk of borrowers defaulting on their loan payments, causing originating banks to properly screen and monitor borrowers. *See id.* (noting banks increased liquidity and decreased risk through use of securitization). In addition, banks traditionally provided loans by acting as intermediaries between depositors and borrowers; in other words, banks used the money that was deposited by some and lent the money out to others in order to gain interest payments. *See id.* (recounting benefits provided to commercial lenders by securitization). Thus, banks could only lend a limited amount based upon the amount of deposits they received; however, securitization and the originate-to-distribute model changed this traditional structure. *See id.* (noting effect of securitization on normal lending practices).

122. *See id.* (explaining investment banks interest in maintaining securitization process).

123. *See* Moran, *supra* note 5, at 54 (showing creation of market bubble, collapse and financial losses incurred by large investment banks which led to credit-crisis).

124. *See id.* at 32 (describing lenders traditional roles and practices).

125. *See id.* (explaining risk-transfer characteristic of securitization).

ceeds from the sale of these loans supplied commercial banks with the necessary capital to continue to lend and freed them of their traditional reliance on cash deposits to extend credit.[126] Commercial banks, now free of their reliance on deposits, were afforded the liquidity to lend at levels they were never able to achieve before.[127] Because of commercial banks' alleviation of default risk, the banks did not properly screen prospective borrowers or monitor mortgagees' behavior once they were granted credit.[128] Because commercial banks were willing and eager to lend "to nearly anyone capable of signing on the dotted line," housing prices skyrocketed, default rates inevitably increased, and the housing bubble eventually collapsed.[129]

3. *Securitization's Creation of Systemic Risk*

Not only did securitization incentivize a perverse credit-boom, but it also magnified the risks associated with the defaulting of those mortgages.[130] Through securitization, investment banks

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126. *See id.* (detailing liquidity infusion lenders received from investment banks through securitization process).

127. *See id.* (noting commercial banks increased lending liquidity).

128. *See* Patricia McCoy et al., *Systemic Risk Through Securitization: The Result of Deregulation and Regulatory Failure*, 41 CONN. L. REV. 1327, 1339-44 (2009) (acknowledging securitization's effect on lending standards). Lending standards deteriorated dramatically because:

> mortgage lenders and brokers, believing that they were transferring all risk to the [special-purpose vehicles] to which they sold mortgages, began lending to less qualified mortgagors and on property with inflated or otherwise questionable resale value. This accelerated the expansion of the housing bubble and decreased the quality of loans being packaged into mortgage-backed securities.

Id.

129. ANDREW ROSS SORKIN, TOO BIG TOO FAIL 5 (2010). *See* McCoy, *supra* note 128 at 1339-44 (asserting that because prices of housing were artificially inflated, only matter of time before housing prices adjusted to reflect actual value).

130. *See id.* at 1027-28 (explaining systemic risk created by investment banks). Mr. Wilmarth explains:

> Financial conglomerates used structured-finance techniques to create several categories of investment instruments whose risks and returns were derived from nonprime mortgages. As a practical matter, these structured-finance instruments created an inverted pyramid of risk, because the combined face values of the structured-finance instruments (representing the inverted "base" of the pyramid) were much larger than the "apex" of nonprime mortgages whose performance dictated the value of the instruments. Put another way, [large investment banks] used structured-finance instruments to pile multiple layers of financial bets on top of nonprime mortgages. In addition, while [investment banks] spread the risks of those bets among a large universe of investors, [investment banks] also retained significant risks in two ways. First, [investment banks] "warehoused" nonprime mortgages, [mortgage-backed securities] and [collateralized debt obligations] until they could be sold to investors.

packaged pools of loans into MBSs and CMOs, re-packaged MBSs and CMOs into CDOs, re-packaged CDOs into squared-CDOs, and facilitated high stakes bets on the value of these securities by creating synthetic CDOs referencing these packaged and repackaged debt securities.[131] Eventually, the combined face value of these structured products nearly doubled the face-value of the loans outstanding.[132] Thus, when the value of these securities' values began tumbling, huge losses were incurred by a large amount of investors.[133]

The main problem, however, and the primary source of systemic or economy-wide risk was the amount of risk the *investment banks* maintained on their balance sheets.[134] When default rates skyrocketed and the mortgage market collapsed, investment banks were crushed with losses.[135] By November 9, 2005 global financial institutions lost over $1 trillion and incurred estimated losses of

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> Second, [investment banks] transferred [mortgage-backed securities] and [collateralized debt obligations] to off-balance-sheet structured investment vehicles (SIVs) that relied on explicit or implicit support from the [investment banks]. When the subprime crisis broke out, [investment banks] incurred large losses from their exposures to "warehoused" instruments and SIVs.

Id.

131. *See id.* at 1028-39 (describing pooling, packaging, and repacking process investment banks pursued to maximize transaction fees).

132. *See id.* at 1031-32 (announcing U.S. economy's extreme level of exposure to sub-prime mortgages).

133. *See* Moran, *supra* note 5, at 54-62 (outlining backlash against investors and banks with respect to sub-prime market exposure).

134. *See* Wilmarth, *supra* note 6, at 1032-35 (noting investment bank exposure to sub-prime mortgages). As stated earlier, many investment banks warehoused these structured products until the details of the transaction were worked out and held subprime loans on their books until the banks could find investors to invest in the securitized loans. *See id.* (citing banks' warehoused mortgages and risks associated with mortgages). Second, many of the products investment banks structured were classified as partially-funded, and required the purchase of other assets to complete these transactions. *See id.* at 1033 (describing "reputation risk"). Investment banks often purchased these assets to facilitate the transactions. *See id.* (describing losses incurred as a result of reputation risk). The problem was that the assets required to fund these products were not perpetually available, thus investment banks took out lines of credit to ensure that these structured products maintained the funding needed. *See id.* at 1034-35 (discussing effects of risk maintained on balance sheets). Last, some investment banks intentionally retained senior tranches of these structured products because of their perceived appeal as low-risk rights to mortgage payments. *See id.* (arguing that risk-transfer perception was illusory).

135. *See id.* (striking causal relationship between losses of investment banks and credit-freeze).

more than $4 trillion by the end of 2010.[136] These losses have caused investment banks to lend only sparingly, leaving much of the economy without the ability to access much needed credit.[137] The reliance on the investment banking system for liquidity combined with the risks investment bank's assumed through securitization created systemic or economy-wide risk and is a primary reason why Wall Street losses affected Main Street prosperity so heavily.[138]

The financial crisis has exposed glaring weaknesses in the securities laws and the regulation of structured products.[139] Remedying these weaknesses is necessary to avoid the catastrophic consequences that the abuse of structured products can, and indeed did, cause.[140] Reform must center on the primary flaws of the existing legal framework, mainly the broad exemptions provided for privately-placed securities and the flawed assumptions underlying the securities laws generally.[141] As analyzed in Part IV and V, gambling regulation, if applicable, can be an effective framework to

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136. *See U.S., European Writedowns, Credit Losses*, REUTERS (Nov. 5, 2009, 11:44 AM) http://www.reuters.com/article/idCNL554155620091105?rpc=44 (detailing prospective losses associated with financial crisis).

137. *See* Christopher E. Ware & Laura Gramling Perez, *Main Street Meets Wall Street: the Mortgage Meltdown,* 80 WIS. LAWYER (2007), *available at* http://www.wisbar.org/AM/Template.cfm?Section=Wisconsin_Lawyer&template=/CM/ContentDisplay.cfm&contentid=68942#bio (stating that "[t]he woes facing the subprime mortgage market seem to affect every corner of our economy . . . .").

138. *See id.* ("Of course, Wall Street affected Main Street. Lenders with no Wall Street cash available, offered fewer loans and fewer opportunities to refinance high-rate loans and [adjustable-rate mortgages]. The housing boom became a housing bust.").

139. *See* Morrissey, *supra* note 8 at 647-50 (asserting that flaws of federal securities laws "jeopardize the soundness of our entire capital markets"). Securitization and the abuse of structured investments such as MBSs, CMOs, CDOs, Squared CDOs and synthetic CDOs played an integral role in causing the mortgage market collapse and the resulting financial crisis. *See id.* (describing structured products role in financial crisis).

140. *See* Quinn, *supra* note 8, at 567-69 (considering securitization's role in financial crisis); Morrissey, *supra* note 8, at 649 (providing main flaws of federal securities laws). Morrissey stated that:

> By adopting disclosure as the underlying philosophy of the federal securities laws, the framers of that legislation put too much faith in the prudence of investors and the self-policing mechanisms of the capital markets. . . . The weaknesses in such a half-measured approach were compounded when even that flawed system of financial regulation was undermined by an expansion of the exemptions to its central requirement, i.e., that securities first be registered before they are sold.

Id.

141. *See id.* (illustrating problem in securities laws and suggesting possible solutions).

remedy the primary flaws in the securities laws.[142] First, however, whether gambling regulation is an appropriate legal framework to apply to the regulation of structured products must be determined.[143] To ascertain the applicability of gambling law as a framework to reform securitization regulation, a comparison of the regulated activities and the issues that arise within each activity must be undertaken.[144]

III. THE APPLICABILITY OF A GAMBLING LAW FRAMEWORK

A. Comparing Investing and Gambling

Although often regarded as separate and distinct activities, investing and gambling are more similar than different.[145] Theodore Roosevelt once stated that "[t]here is no moral difference between gambling at cards or in lotteries or on the race track and gambling in the stock market."[146] Gambling and investing are similar in three main ways.[147] First, the *activities* of gambling and investing are inherently similar, especially when considering the amount of skill needed to effectively participate in these activities.[148] Second,

142. For an analysis of the potential effectiveness of gambling law to mitigate negative effects created by securitization, see *infra* 238-408 notes and accompanying text.

143. For a discussion of the applicability of a gambling law framework to structured product regulation, see *infra* notes 151-237 and accompanying text.

144. For a comparison of gambling and investing, including the inherent, definitional and behavioral similarities, see *infra* notes 151-237 and accompanying text.

145. *See generally* Hurt, *supra* note 20, at 987-88 (describing many similarities between gambling and investing); *see also* Erik Gerding, *Playing Bridge vs. Playing Poker: Goldman, ACA, and Paulson*, CONGLOMERATE (April 19, 2010), http://www.theconglomerate.org/gambling/ (comparing ABACUS synthetic CDO with gambling).

146. 42 Cong. Rec. 1346-50 (1908). *See* JOHN MAYNARD KEYNES, THE GENERAL THEORY OF EMPLOYMENT, INTEREST, AND MONEY 159 (1936) (observing that "casinos should, in the public interest, be inaccessible and expensive. And perhaps the same is true for Stock Exchanges"); *see also* Irwin Friend, *the Economic Consequences of the Stock Market*, 62 AM. ECON. REV. 212, 212-13 (1972) (recognizing that investing is similar to gambling by describing stock market as "legalized gambling casino").

147. *See generally* Hazen I, *supra* note 10, at 399-03 (noting main ways gambling and investing are similar); *see generally* Pickens, *supra* note 20, at 239-45 (explaining that dichotomy drawn between gambling and investing is unfounded and futile). Mr. Pickens notes that the distinction made between gambling and investing is an absurd elevation of formalism over more functional and logical reasoning. *See id.* at 239 ("Such a formalistic policy, despite receiving valid criticism, has preserved for more than a century."). *See infra* notes 151-237 and accompanying text.

148. For a discussion of the inherent and fundamental similarities between the activities of investing and gambling, see *infra* notes 151-162 and accompanying text.

when participating in these activities, gamblers and investors exhibit similar behavioral irrationalities.[149] Third, gamblers and investors participate in their respective activities for many of the same reasons.[150]

B. Inherent Similarities between Gambling and Investing

Gambling, by common law definition, is an activity where "a person pays consideration in order to participate in an activity, that's outcome is determined partly by chance, and may reward the participant with something of value."[151] Some investing activities, such as purchasing stock on the stock market, entering into futures contracts on the commodities market, purchasing corporate bonds, or assuming a position in a synthetic CDO are surely encompassed by the definition of gambling, especially the latter.[152] These activities, like gambling, involve assuming a risk in hopes of an accession to wealth.[153] Thus, gambling and investing are, at the very least, similar by definition.[154]

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149. For a discussion of behavioral irrationalities gamblers and investors exhibit, see *infra* notes 203-233 and accompanying text.

150. For a discussion of the motivations gamblers and investors demonstrate when choosing to invest and gamble, see *infra* notes 163-193 and accompanying text.

151. I. NELSON ROSE, GAMBLING AND THE LAW 75 (1986) ("Gambling under common law, is any activity in which: a person pays something of value, called consideration; the outcome is determined at least in part by chance; and, the winnings are something of value.") [hereinafter GAMBLING AND THE LAW].

152. *See* Hazen I, *supra* note 10, at 401-18 (comparing derivatives, securities, gambling, and inherent similarity between activities). A synthetic CDO is a product structured by investment banks that enable institutional investors to "place bets" on the value of underlying assets. *See* 2 MOORAD CHOUDHRY, FIXED-INCOME SECURITIES AND DERIVATIVES HANDBOOK: ANALYSIS AND VALUATION 360-62 (2005) (noting that synthetic CDOs are meant to be used for hedging or risk transfer purposes but are often used by speculators to place bets on value of pool of underlying assets). In a synthetic CDO transaction, one party believes the value of the assets will increase, while the other party believes the values of the assets are going to decrease. *See id.* (explaining that party expecting value of underlying assets referenced in synthetic CDO are going to rise, or at least maintain their value, insures other party for loss of value in assets). For a further discussion on synthetic CDOs, see *supra* notes 100-118 and accompanying text.

153. *See* 4 ROBERT HAMILTON & RICHARD BOOTH, BUSINESS BASICS FOR LAW STUDENTS: ESSENTIAL CONCEPTS AND APPLICATIONS 178 (2006) (explaining that investing in corporation in hopes of accession to wealth involves elements of risk and chance); *see* Hazen I, *supra* note 10, at 410 (discussing risk-reward element of investing by stating "if an individual desires the high pay-off with sufficient intensity, then he or she will be acting rationally in tolerating risk that many other rational actors will not").

154. *Compare* GAMBLING AND THE LAW, *supra* note 151, at 75 ("Gambling under common law, is any activity in which: a person pays something of value, called consideration; the outcome is determined at least in part by chance; and, the winnings are something of value.") *with* Hazen I, *supra* note 10, at 410 ("[I]f an indi-

Gambling and investing are also similar because of the skills necessary to sway the odds of obtaining a favorable outcome.[155] A common misconception is that investing is different from gambling because investing requires analytical ability and gambling involves pure chance.[156] There are two problems with that notion.[157] First, many if not most investors pursue investment decisions for irrational and ill-informed reasons without the use of analysis or research.[158] Second, many gambling activities involve the same kind

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vidual desires the high pay-off with sufficient intensity, then he or she will be acting rationally in tolerating risk that many other rational actors will not."). To emphasize the inherent similarities between gambling and investing an example can be illustrative. *See* Hazen II, *supra* note 20, at 1017-19 (illustrating similarities between gambling "difference contract" and derivative investments). For example, if Mr. Goldman believes that the value of a certain class of assets will rise in the near future, and Ms. Sachs believes that the value of those assets are likely to decline, the two may choose to wager on the difference of the value of the assets over time; thus, if the value of the assets increase, Mr. Goldman would make money, and if the value decreased Ms. Sachs would make money. *See id.* (demonstrating construction of difference contract). This transaction is known as a "difference contract" and is illegal. *See id.* (noting that difference contracts are illegal under gambling laws). Mr. Goldman and Ms. Sachs, however, could enter into the same arrangement utilizing a synthetic CDO. *See id.* (explaining that identical transactions can be completed legally in different contexts). An investment bank would create a special purpose entity or bankruptcy trust and execute a series of credit default swaps between the parties in order to complete the desired outcome; essentially, Mr. Goldman would pay Ms. Sachs periodic payments while the value of the assets remain the same or increase, and Ms. Sachs would guarantee Mr. Goldman the losses of the asset classes if a credit event caused their value to decrease. *See id.* (using derivative contract to illustrate ability to wager utilizing investments). Thus, although a synthetic CDO transaction achieves the identical effect as an illegal difference contract, synthetic CDOs are legal, while difference contracts are forbidden. *See id.* (recognizing similarities between gambling and investing).

155. *See* Hurt, *supra* note 20, at 387 (explaining analytical abilities needed to increase chances of choosing lucrative investment and comparing them with analytical abilities needed for gamblers to make informed bets on certain metrics).

156. *See* ROBERT P. MILES, WARREN BUFFETT WEALTH: PRINCIPLES AND PRACTICAL METHODS USED BY THE WORLD'S GREATEST INVESTOR 167 (2004) (arguing that investing is not similar to gambling because investing requires "skill, knowledge, patience, and hard work"). Wise investing requires these characteristics; however, gambling successfully requires these characteristics as well. *See* Hurt, *supra* note 20, at 381-90 (explaining that participating in blackjack, poker or sports-betting requires skill and analytical abilities in order to be successful over period of time).

157. *See generally* Susanna Kim Ripken, *The Dangers and Drawbacks of the Disclosure Antitdote: Toward a More Substantive Approach to Securities Regulation*, 58 BAYLOR L. REV. 139, 139-204 (2006) (describing irrationalities investors regularly demonstrate and arguing that securities regulation should be reformed to address those irrationalities); Hurt, *supra* note 20, at 381-90 (noting level of skill needed to be successful when participating in gambling activities such as poker, blackjack or sports betting).

158. *See* Ripken, *supra* note 157, at 139-204 (discussing investor irrationalities).

of analytical ability, research, and skill that informed investing requires.[159]

For example, making an informed decision to purchase 100 shares of Apple Inc. involves researching Apple's financial statements, analyzing the effect new competitors may have on Apple's earnings, evaluating new product innovations, and even investigating the stability of management.[160] Likewise, prudently choosing to assume the position that the Minnesota Vikings are going to win more than nine games in the 2011 season involves analyzing the team's roster, noting any player acquisitions or departures that may affect the team's chances of winning, evaluating the difficulty of their schedule, determining their ability to match up against their opponents' style of play, and analyzing the risks that vital players may be injured, diminishing the Vikings' chances of finishing with more than nine victories.[161] Therefore, although investing is often perceived as a wise person's game, and gambling a degenerate's vice, gambling and investing require similar skills and preparation.[162]

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159. *See* Hurt, *supra* note 19, at 38-90 (demonstrating ability needed to gamble successfully).

160. *See id.*, at 387 (noting skills needed to succeed in certain gambling and investing activities). Professor Hurt states:

> Choosing . . . stocks and knowing when to sell does take skill, and the most skillful should realize more profits than the unskillful. However, the stock price is subject to elements outside of the investor's control: the decision management, trends in the industry, and the overall market economy. The stock price may change based on either factors specific to that company, that industry, or the market as a whole.

Id.

161. *See id.* (noting skills needed to succeed in certain gambling and investing activities). Professor Hurt states:

> Similarly, gamblers that bet on individual sports games, like football, basketball, or baseball may make informed bets based on information available on the teams and players involved. Like the wide availability of information on publicly-held corporations, the access to information on sports teams and players is remarkable. Notwithstanding, the strength of the players in a sports game, the final outcome of the game is easily impacted by elements beyond the gambler's control, such as injuries, lucky plays, and the mood of the crowd.

Id.

162. *See* Macchiarola, *supra* note 20, at 42-43 ("In contrast to unsavory gambling behavior, those activities fortunate enough to be labeled as investing have traditionally enjoyed great acclaim, with cheerleaders highlighting investing as an enterprise of skill in which the assiduous and diligent may earn deserved rewards."). *But see* Hurt, *supra* note 20, at 387 (demonstrating skill needed to succeed in certain gambling activities and rebutting investment/gambling dichotomy).

C. Motivations for Participation

1. *Overview*

In addition to definitional and inherent similarities, there are also similarities with respect to what motivates individuals to gamble and invest.[163] When describing individuals' motivations to gamble, leading gambling sociologists point to individuals': (1) need for play, (2) desire to achieve social prestige, (3) internal competiveness, and (4) craving for gambling's entertainment value.[164] Investors often possess many of the same motivations when they choose to invest.[165]

2. *Need for Play*

Many sociologists contend that the need for play is a basic human drive like the need for food and water.[166] Theorist Johan Huizinga states that "play [is] an important evolutionary biological adaptation" and "play activities serve both to relieve tension and to inspire states of euphoria that are otherwise unattainable."[167] These sociologists posit that gambling provides many individuals with the amusement, enjoyment, challenge, and action that those individuals need to satisfy their psychological drive to play.[168] Investing activities, such as day-trading, stock trading, and purchasing derivative contracts are similarly used by individuals to satisfy their

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163. *See* ROBERT J. SHILLER, MARKET VOLATILITY 59 (1989) (noting that "[i]nvesting in speculative assets clearly shares with gambling the element of play"). For a discussion on the need for play as a motivation to gamble and invest, see *infra* notes 164-171 and accompanying text.

164. *See* 2 MIKAL AASVED, THE SOCIOLOGY OF GAMBLING 86-100 (Charles C. Thomas ed., The Gambling Theory and Research Series) (2003) (discussing reasons why people gamble).

165. *See* Ripken, *supra* note 157, at 159-76 (2006) (discussing behavioral and cognitive biases exhibited by investors); Pouncy, *supra* note 10, at 283-13 (critiquing assumption of economic rationality in securities regulation); Donald C. Langevoort, *Theories, Assumptions, and Securities Regulation: Market Efficiency Revisited*, 140 U. PA. L. REV. 851, 857-72 (1992) (discussing decision-making of investors); Hazen I, *supra* note 10, at 399-12 (noting securities regulation's assumption of rational investor); Hazen II, *supra* note 20, at 996-05 (demonstrating investor irrationalities).

166. *See* AASVED, *supra* note 164, at 87 (explaining suggestion that "the need for play, like the need for food and sex, is an ancient instinctive drive that can be satisfied through gambling").

167. *Id.* Huizinga also noted that he "saw evidence of the purported 'play instinct' in all legal, philosophical, socioeconomic, technological, and artistic accomplishments of civilized societies. . . ." *Id.* at 88.

168. *See id.* (noting gambling's ability to satisfy need for play and theorized that "our reliance on gambling to satisfy or reduce this need is learned in childhood through such games as marbles, card playing, and other games in which no actual money is staked").

need to play.[169] Indeed, many professors and securities law experts posit that "people invest not simply to make money but also for investing's consumption or 'play' value . . . ."[170] Individuals are often drawn to investing and gambling to satisfy their need to play because of the excitement, risk, and rewards investing and gambling both provide.[171]

3. *Desire for Social Prestige*

Many individuals also gamble to satisfy their drive for social status or prestige.[172] Behavioral scientists have suggested that humans possess a learned or acquired need to achieve social status or prestige.[173] According to noted behavioral scientists James Smith and Vicki Abt, "various cultural signals actually condition would-be gamblers" and "the reflecting and teaching functions of culture may

169. *See* SHILLER, *supra* note 163, at 56-62 (1989) (mentioning that investors often invest for play value).

170. Langevoort, *supra* note 165, at 867-68. The need for play is often used to justify investor's decision to participate in day-trading, in light of the irrationality of day-trading as an activity. *See* DON DEVITTO, IRRATIONAL MARKETS AND THE ILLUSION OF PROSPERITY 143-50 (2001) (explaining that day-trading is irrational activity and that irrationalities drive investors to participate in this activity); *see also* SHILLER, *supra* note 163, at 57-61 (indicating that play value may explain why day-trading is so popular among investors). Day-trading when considering transaction costs and its adversarial process is a negative-sum activity; therefore when participating in day-trading over an extended period of time, an individual is more likely than not to actually lose money. *See* GARY W. ELDRED, VALUE INVESTING IN REAL ESTATE 36 (2002) (demonstrating why day-trading is negative-sum game). Eldred compares day-trading to gambling by stating that:

> Gambling is a negative-sum game. In the aggregate, gamblers lose. The house odds are stacked against them. . . . But playing the market, engaging in day-trading, and commodities trading, and buying futures contracts also represent forms of gambling. Absolutely no evidence supports the widely held belief that one can make money in trading in and out of positions on a short-term basis. Quite the opposite is true. Researchers have studied this topic exhaustively, and the results remain unambiguous: traders lose.

Id. Many individuals, nonetheless, continue to participate in day-trading. *See id.* (finding odds of making money are not in favor day-traders). This irrational persistence on participating in a negative-sum activity is often explained by individuals' drive to satisfy their need for play, including their desire for amusement, enjoyment, challenge and action. *See* SHILLER, *supra* note 163, at 57-61 (indicating that play value is one explanation of why day-trading is so popular among investors); s*ee* JAKE BERNSTEIN, THE COMPLEAT GUIDE TO DAY TRADING STOCKS 20-21 (2000) (describing "tremendous growth of day trading since the mid 1990s" and hypothesizing reasons for such growth).

171. *See* SHILLER, *supra* note 163, at 57-61 (explaining characteristics of investing that make investing so appealing).

172. *See* AASVED, *supra* note 164, at 92-93 (describing gambling and its ability to satisfy need for social status or prestige).

173. *See id.* (explaining that individuals acquire need for social status or prestige throughout life and often attempt to satisfy that need through gambling).

actually predispose Americans to gambling behavior."[174] Smith and Abt argue that in a society where wealth is the principal indicator of a person's self-worth, participating in adversarial and challenging activities that promise the award of wealth are a means of attempting to satisfy that need.[175] They also posit that "owing to the strong cultural pressures to compete and win, those who are not physically endowed or athletically inclined will seek other ways of [satisfying their need for social status or prestige]."[176] The thrill of competition and the possibility of an accession to wealth that gambling affords can draws individuals to gamble.[177]

Investing, like gambling, involves an element of competition and affords the potential for accession to wealth.[178] Accordingly, investing activities provide a means for individuals to satisfy their acquired need to achieve social status or prestige.[179] Indeed, industry professionals, who are perceived as the most rational investors of the markets, do not always invest in rational and self-maximizing ways and often make decisions based upon their "considerations of status."[180]

4. *Internal Competitiveness*

Innate and internal competitiveness is also a major reason why individuals choose to participate in investing and gambling activi-

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174. *Id.*

175. *See id.* (demonstrating that gambling is often used as means to experience an accession to wealth in order to satisfy need for social status or prestige).

176. *Id.* at 93.

177. *See id.* (explaining that competition afforded by gambling, and its purpose of obtaining wealth in order to gain social status or prestige is what attracts many to gamble).

178. *See id.* (describing characteristics of gambling and investing).

179. *See* BROOKE HARRINGTON, POP FINANCE 5 (2008) (stating want of status can influence individuals to invest and cause investors to invest irrationally). In the early 1990s, a large increase of stock-trading occurred among the wealthy, middle, and even the lower class. *See id.* at 11 (explaining growth of stock markets). Millions of individuals began investing and poured hundreds of billions of dollars into the stock market. *See id.* (noting extent of stock market growth). Congress described the influx of investors as "an explosion of stock ownership." Jim Saxton, *Roots of Broadened Stock Ownership*, Joint Economic Committee: 106th Cong. (April 2000), *available at*, http://www.house.gov/jec/tax/stock/stock.pdf. This explosion can be partly explained by individuals' need to obtain social status and prestige. *See* HARRINGTON, *supra* note 180, at 5 (explaining that individuals as well as professional investors are influenced by want of status when making decisions to invest and how to invest).

180. *Id.*

ties.[181] Charles Lamb once noted that "man is a gaming animal. He must be always trying to get the better in something or other."[182] A person's competitiveness and internal drive to excel motivates many individuals to gamble.[183] Media often portray gamblers as "daring, larger-than-life heroes thriving on risk."[184] Many individuals, because of their competitive personalities, are compelled to develop superior skills in gambling activities to assume these roles portrayed by the media.[185]

Moreover, the challenge posed by many gambling formats and the element of competition inherent in gambling, motivates many individuals to pursue this activity, notwithstanding media influence.[186] For instance, David Hayano, an anthropologist with a passion for gambling, stated that "[w]inning brings on a feeling of power and the sensation that the run of the cards and the attack of opponents are well under control."[187] Many seek this feeling when they choose to gamble.[188]

Individuals' competitive nature and confidence in their ability to "beat the market" also motivate many to invest.[189] For instance,

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181. *See* AASVED, *supra* note 164, at 100 (explaining competitive nature of many individuals and their propensity to choose certain activities because of that competitiveness).

182. CHARLES LAMB, ELIA: ESSAYS WHICH HAVE APPEARED UNDER THAT SIGNATURE IN THE LONDON MAGAZINE 83 (1823).

183. *See* AASVED, *supra* note 164, at 100 (positing that many gamblers "are motivated by their enjoyment of the game, and especially by the challenge of competitions and the opportunity to exercise their own skill and intelligence in playing a winning game").

184. *Id.* at 92.

185. *See id.* at 100-01 (noting that individual's internal competitiveness coupled with portrayals of successful gamblers cause many people to pursue gambling as avenue of competition).

186. *See id.* (explaining that adversarial framework of many gambling activities attracts many individuals to pursue gambling as avenue of competition notwithstanding media influence and perceptions of successful gamblers).

187. *Id.*

188. *See id.* (explaining that internal competitiveness causes individuals to experience thrill of victory and agony of defeat).

189. *See* Ripken, *supra* note 157, at 163-67 (noting that many individuals' competitiveness causes them to believe that their abilities are greater than their peers and that they are able to beat market averages in order to gain greater profit). "Beating the market" refers to a person's ability to value a security more accurately than the remainder of market participants. *See* HAMILTON, *supra* note 153, at 432-34 (explaining investors' goals to exceed average market rate of returns). The efficient market hypothesis posits that the price of a security reflects all publicly available information. *See id.* (noting that when information material to security's value is made public, investors trade pursuant to that information rapidly incorporating information into price of security). Thus, when information is made public, investors will buy or sell stock according to their perception of the information and the price will adjust to reflect this information. *See id.* (explaining that many irrational-

many investors overestimate their own knowledge and valuation skills.[190] Many individuals feel that they are smarter than other market participants, have a more intuitive sense of the value of certain companies, and can trade according to their estimates of value and achieve an accession of wealth and victory.[191] Individuals' innate competitiveness often causes them to believe that their own skills and strategies can lead to favorable outcomes, notwithstanding the large element of chance that is inherent in the activity.[192] This competitiveness and over-confidence leads many individuals to pursue day trading, stock trading, and positions in derivative contracts.[193]

5. *Investing and Gambling as Forms of Entertainment*

A significant reason people decide to gamble and invest is the entertainment value.[194] Many individuals participate in these activi-

ities may cause investors to overreact to certain information causing security's price to inaccurately reflect disclosed information). Beating the market would entail analyzing the information, its effect on a security, determining whether the price of the security is too high or too low, and trading accordingly. *See id.* (demonstrating that if efficient market hypothesis is correct, and investors rationally respond to all publicly available information, then "the goal of money managers and institutional investors to beat the averages in the long run is impossible").

190. *See* Ripken *supra* note 157, at 166 (explaining that investor's internal competitiveness can cause them to be "overconfident in their abilities to assess risks and to make wise investment decisions").

191. *See id.* ("Most investors overrate their stock-picking abilities and believe that their investment skills are above average.").

192. *See id.* (acknowledging that more people participate in gambling because their competitiveness leads them to "believe that positive investment outcomes are due to investor's own skills and superior strategy, rather than good luck").

193. *See id.* (explaining that more people participate in gambling because their competitiveness leads them to overestimate their skills). Individual's internal competitiveness and resulting overconfidence serves double functions as a motivation to invest as well as a behavioral irrationality of investing that results in noise trading and inefficient markets. *See id.* at 166-67 (demonstrating that individuals' competitiveness can influence investors to pursue investing as well as cause investors to exhibit irrational tendencies when investing).

194. *See* Hurt, *supra* note 20, at 9-11 (noting that participants in activities such as day-trading participate for entertainment purposes); *see also* Hazen I, *supra* note 10, at 401-02 ("Many investors participate in the securities or derivatives markets as a form of entertainment."). Professor Hazen notes that "market participants often view investing as a hobby or participate for the thrill of the game." *See id.* (explaining investors' motivations when choosing to invest). *See* Ian Ayres & Stephen Choi, *Internalizing Outsider Trading*, 101 MICH. L. REV. 313, 314 (2002) ("Investing in the United States has become a hobby for many."); Carl Richards, *Investing Is Not Entertainment* (Feb. 8, 2010, 11:42 AM), http://bucks.blogs.nytimes.com/2010/02/08/investing-is-not-entertainment/ (cautioning investors who are investing for entertainment purposes). Mr. Richards discussed the influx of entertainment investors by stating:

> Somewhere along the line, investing became America's favorite spectator sport. Everywhere you went people were talking about finding the next

ties for the "thrill of the game" and "to feel alive."[195] Most sociologists conclude that "the appeal of most common forms of gambling can be explained by their entertainment value."[196] Moreover, commentators have speculated that "[i]f we were to create a list of words that describe gaming, we would surely include excitement,

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> hot stock, mutual fund or alternative investment. Magazine covers like "10 Hot Funds You Have to Own Now" and "Five Stocks that Sizzle" made investing sound fun, and you couldn't go anywhere without seeing Jim Cramer screaming "Buy! Buy! Buy!"

Id. See also Michael Johnston, *Have Fun Investing*, SEEKING ALPHA (Oct. 27, 2009), http://www.gurufocus.com/news.php?id=91327 (emphasizing enjoyment gained from investing in Exchange Traded Funds (ETFs)); Kimberly Palmer, *Gen Y: Investing Is Fun Not Scary,* US NEW & WORLD REP. LP (Oct. 13, 2009) http://money.usnews.com/money/blogs/alpha-consumer/2009/10/13/gen-y-investing-is-fun-not-scary ("It turns out [investors] consider investing an enjoyable activity. . . . In fact, one in three of those surveyed said they invest because it's fun, an increase from about one in four last year.") There is even an "Investing For Fun" group on the social networking site, Facebook. *See* Investing For Fun, FACEBOOK, http://www.facebook.com/group.php?gid=22476024380 (last visited Mar. 9, 2011) (group dedicated to discussion of investment issues); Stacy Rapacon, *5 Steps to Start Investing: Find the fun in investing, and take control of your money*, KIPLINGER (April 14, 2010), http://www.kiplinger.com/columns/starting/archive/5-steps-to-start-investing.html (discussing fun in investing); AASVED, *supra* note 164, at 89 (explaining that gamblers gamble for the entertainment value afforded). *But see* Eugene Christiansen and Julie Brinkerhoff-Jacobs, *The Relationship of Gaming to Entertainment*, GAMBLING: PUBLIC POLICIES AND THE SOCIAL SCIENCES 11-48 (William R. Eadington & Judy A. Cornelius eds., 2007) (arguing that association of gambling and entertainment is attenuated).

195. *See* Hazen I, *supra* note 10, at 401-02 (arguing that many people invest to feel excitement). S*ee* AASVED, *supra* note 164, at 89 (holding that gambling is attractive to many because of its entertainment value).

196. David Spanier, *The Joy of Gambling*, LEGALIZED GAMBLING: CONTEMPORARY ISSUES COMPANION 32 (David L. Bender et al. eds., 1999). Although, this is an extreme stance, Mr. Spanier maintains that gambling is *not* about the money and that the "playful, active risk-taking is the true appeal of gambling." *See id.* at 34-35 (comparing money to gasoline by stating that "[m]oney is the fuel of gambling . . . as gasoline powers a car. But the pleasure of driving a car is not about the gas. It's about speed, style, movement. . . . In that sense, the real motives behind gambling are to be sought elsewhere"). Spanier holds that money is simply the object that is required for participation, and that many people gamble and spend so much money gambling for the entertainment value gambling affords. *See id.* (explaining that the appeal of gambling is action and entertainment involved). Spanier maintains that the entire gambling experience, from risking-taking, the inherent challenge, the excitement, and the mental separation from everyday life is the true reason that people gamble. *See id.* at 36-37 (disputing argument that people gamble to achieve accession of wealth). Spanier explains that the entertainment value afforded by gambling can be as attractive and addictive as sexual activity. *See id.* at 36 (noting similarity between gambling and sexual excitement). Spanier states that "[i]t's part physical, part psychological, highs and lows, over and over, in rapid succession." *Id.* "These fluctuations of loss and gain, the glint of light and action, awareness of other people gambling, the sense underneath it all of playing with risk, of living on the edge of danger, are exciting" and why people gamble. *Id.*

anticipation, entertainment, and chance."[197] These characteristics explain why gambling has become the largest grossing entertainment attraction in the United States, far exceeding the movie industry in earnings.[198]

Thomas Lee Hazen has posited that "investing in individual securities or derivative products provides a form of entertainment for some investors in much the same way as rational actors are willing to gamble, notwithstanding the odds and the cut to the house, because of the enjoyment of the game."[199] Investing, although not often perceived as a form of entertainment, possesses many of the same characteristics as gambling, and, individuals often invest because of this entertainment value.[200] Indeed, like gambling, inherent in investing is risk-taking, challenge, and the excitement of winning.[201] Thus, these characteristics attract many individuals to pursue investing as well as gambling.[202]

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197. M. Neil Browne, et al., *The Role of Ethics in Regulatory Discourse: Can Market Failure Justify Regulatory Casino Gaming?*, 78 NEB. L. REV. 37, 39 (1999).

198. *See* WILLIAM S THOMPSON, LEGALIZED GAMBLING 41 (1994) (recognizing gambling as leading form of entertainment).

199. Hazen I, *supra* note 10, at 150.

200. *See* Hurt, *supra* note 20, at 9-11 (noting that some people engage in activities such as day-trading for entertainment purposes); Hazen I, *supra* note 10, at 401-02 ("Many investors participate in the securities or derivatives markets as a form of entertainment."). Professor Hazen notes that "market participants often view investing as a hobby or participate for the thrill of the game." *Id. See also* Ayres, *supra* note 194, at 314 ("Investing in the United States has become a hobby for many.").

201. *See* HARRINGTON, *supra* note 180, at 13-16 (explaining characteristics of investing and why so many people begin investing).

202. *See id.* (noting appeal of investing to average individuals). Investing is often perceived as an activity that sophisticated professionals participate, using complicated models and analyzing complex information in order to maintain multifaceted, diversified portfolios that will appreciate in value over time. *See* Langevoort, *supra* note 165, at 851-72 (explaining persistent misconception that most investor's act rationally and conduct in depth analysis, when in fact few investors actually conduct such analysis). Admittedly, many market participants are that type, but they are the minority. *See id.* (noting that most investors are not sophisticated risk analysts and invest in variety of ways and for variety of reasons). The majority of investors, on the other hand, invest for a variety of other reasons, including entertainment value. *See* HARRINGTON, *supra* note 180, at 13-17 (explaining characteristics of investing and why so many people begin investing). Throughout the 1990's and into the twenty-first century, deregulation and technological innovations such as online investing afforded a greater number of people the opportunity to begin participating in investing. *See id.* (explaining developments that changed census of investors). The entertainment value of investing attracted many individuals to begin trading in the market. *See id.* (explaining that investing is form of leisure for investors). Indeed, market participants have described investing as "exciting, confusing, tumultuous and the only game worth playing." *Id.* at 5. Moreover, one executive of an investment group assembled in the 1990s stated that she invested at a high rate throughout the 1990s because of she was "caught up in the euphoria of the [expanding] market." *Id.* at 14. Invest-

D. Behavioral Irrationalities Exhibited by Gamblers and Investors

1. *Overview*

Investing and gambling are similar in a number of ways, including definitional and inherent similarities.[203] Additionally, investors and gamblers pursue and continue to participate in their respective activities due to many of the same motivations.[204] Most importantly, however, individuals that participate in each of these activities demonstrate similar behavioral and cognitive irrationalities.[205] Common behavioral and cognitive irrationalities that investors and gamblers exhibit are outlined above.[206]

2. *Overconfidence Bias*

Psychological literature has shown that individuals exhibit a striking degree of overconfidence.[207] A majority of people believe that they possess above-average skill in most activities.[208] Overconfi-

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ing has the physical and psychological effect that Mr. Spanier explained causes people to gamble. *See* Pickens, *supra* note 20, at 42-43 (explaining that investing activities have same kind of psychological and physical effects on individuals as gambling has on individuals). The highs and lows, the ebbs and flows, the risk and the excitement are all inherent characteristics of investing and make it an extremely attractive activity for many individuals. *See id.* (demonstrating that investing and gambling can pose "impulse control" problems that may lead to addiction to those activities). *See also* AASVED, *supra* note 164, at 86-100 ("Various cultural signals actually condition would-be gamblers. The media participate by romanticizing stories about gambling and gamblers frequently showing darling, larger-than-life heroes thriving on risk, and also by giving enormous publicity to game show contestants or gamblers who wins substantial prizes.").

203. For a discussion of the inherent similarities between gambling and investing, see *supra* notes 151-162 and accompanying text.

204. For an explanation of what motivates individuals to invest and gamble, see *supra* notes 163-202 and accompanying text.

205. See *generally*, Ripken *supra* note 157, at 139-90 (explaining behavioral and cognitive irrationalities that investors demonstrate and suggesting reform of securities laws to address biases).

206. See *infra* notes 207-237 and accompanying text.

207. *See* Ripken, *supra* note 157, at 163-68 (explaining overconfidence bias).

208. *See id.* at 163-67 (noting that many individuals are confident that their abilities are greater than their peers). Most people feel that they are above average drivers, more intelligent and ethical than the average individual, and are more likely to produce gifted children, have a higher than average salary, and greater than average happiness in their careers. *See* Ola Svensen, *Are We All Less Risky and More Skillful than Out Fellow Drivers?*, 47 ACTA PSYCHOLOGICA 143, 145-48 (1981), *available at* http://heatherlench.com/wp-content/uploads/2008/07/svenson.pdf (noting individuals overconfidence in their own driving abilities); Robert A. Prentice, *The SEC and MDP: Implications of the Self-Serving Bias for Independent Auditing*, 61 OHIO ST. L.J. 1597, 1613 (2000) (explaining individuals belief that they are smarter than average humans); Marsha T. Gabriel et al., *Narcissistic Illusions in Self-Evaluations of Intelligence and Attractiveness*, 62 J. PERSONALITY 143, 145-52 (1994),

dence can cause individuals to undertake certain ventures, without adequately considering the accompanying risks and believing that their *superior* skills will lead to a favorable outcome.[209] Individuals "making predictive judgments under uncertainty . . . are prone to exhibit far too much confidence in highly fallible choices."[210]

Overconfidence bias affects investors and gamblers alike.[211] Gamblers often believe that their superior ability to analyze the risks and odds of certain gambling activities will lead them to a favorable outcome.[212] Additionally, when results do not meet their expectations and losses occur, gamblers attribute the unfavorable outcome to being unlucky or unfortunate.[213] Similarly, investors are often overconfident in their abilities to analyze the merits of an investment opportunity and believe that their "above-average" abilities will lead to favorable returns.[214] "Although they recognize that risks of bad outcomes exist, investors are reluctant to believe that these risks apply to them personally."[215] Furthermore, even when investors incur bad losses, they tend to rationalize these losses by

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available at http://onlinelibrary.wiley.com/doi/10.1111/j.1467-6494.1994.tb00798.x/abstract (showing that humans irrationally believe they are more intelligent than they actually are); Shelley E. Taylor & Jonathan D. Brown, *Illusion and Well-Being: A Social Psychological Perspective on Mental Health*, 103 PSYCHOL. BULL. 193, 195-98 (1988), *available at* http://faculty.washington.edu/jdb/articles/Illusion%20and%20Well-Being.pdf (demonstrating confidence of newlyweds concerning prospects of their marriage). Newlyweds almost unanimously expect that their marriage will last until death despite their awareness of the extremely high divorce rate. *See* Lynn A. Baker & Robert E. Emery, *When Every Relationship Is Above Average: Perceptions and Expectations of Divorce at the Time of Marriage*, 17 LAW & HUM. BEHAV. 439, 443 (1993), *available at http://www.springerlink.com/content/rt5p27088122n430/fulltext.pdf* (explaining confidence related to marriage longevity).

209. *See* Ripken, *supra* note 157, at 163-67 (explaining overconfidence bias individuals demonstrate).

210. *Id.* at 165.

211. *See* Ripken, *supra* note 157, at 163-67 (explaining overconfidence exhibited by investors).

212. *See* AASVED, *supra* note 164, at 105 (explaining "attribution theory of gamblers where gamblers attribute losses to luck and winning to superior skill").

213. *See id.* at 105-11 (noting gamblers' persistence in attributing losses to bad luck rather than lack of skill). For example, in horse racing many gamblers often try to rationalize losses in a way that maintains their perception of their superior abilities. *See id.* at 111 (demonstrating gamblers' loss attribution biases). "There's always a logical explanation for a losing bet – the saddle slipped, the filly was in heat, the race was fixed etc." *Id.*

214. *See* Ripken, *supra* note 157, at 166 ("The illusion of control causes investors to believe that positive investment outcomes are due to investors' own skills and superior strategy than risk.").

215. *Id.* at 171.

attributing them to factors beyond their control, and thereby maintaining confidence regarding future investment opportunities.[216]

3. *Confirmation Bias*

Another cognitive bias that both gamblers and investors tend to exhibit is confirmation bias.[217] Confirmation bias is illustrated by individuals' tendencies to (1) seek out information that confirms their beliefs about uncertainties and (2) discard information contrary to their beliefs regarding a prospective outcome.[218] Once individuals reach a predictive conclusion about a particular outcome, typically "they filter information for evidence that supports their decisions or actions" and "tend to avoid, minimize, or reject new information that contradicts their previously established beliefs."[219]

Investors' decision-making processes are often clouded by confirmation bias.[220] Confirmation bias leads many investors to interpret corporate disclosures in light of their previously optimistic views about an investment opportunity and to discount information contrary to those optimistic beliefs.[221] "Investors have a systematic tendency to hold onto bad investments longer than they should, perhaps with the optimistic belief that the investment is bound to pay off."[222] Gamblers demonstrate this same irrationality.[223] Gamblers are generally acutely aware that the odds of a particular gambling activity are unfavorable or that a large proportion of

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216. *See id.* (describing gamblers' tendency to remain optimistic despite losses). Aasved proceeds to explain the psychological cycle many investors go through with respect to their optimism of future bets by stating:

> Most gamblers who encounter [bad losses] . . . initially start betting in an entirely uncontrolled manner. . . . They then enter a 'realization' phase during which they begin to acknowledge the irrationality and futility of this betting behavior, to regain some of their self-control, and to employ sound betting strategies. . . . Gamblers . . . resume betting in their normally controlled manner. This is known as "putting it all behind you.

Id.

217. *See* Ripken, *supra* note 157, at 172 (noting individuals' tendency to exhibit confirmation bias).

218. *See id.* at 172-76 (explaining confirmation bias).

219. *Id.* at 173.

220. *See id.* at 175-76 (demonstrating effect of confirmation bias on investors).

221. *See id.* (describing investors' tendency to emphasize certain information and discount other information due to optimism about investments and refusal to acknowledge risks associated with certain investments).

222. *Id.* at 176.

223. *See* AASVED, *supra* note 164, at 105-11 (explaining gamblers tendency in order to attach greater significance to information confirming their optimism to justify decision to gamble).

participants have lost money participating in that activity.[224] Gamblers, nonetheless, have a tendency to discount such information and highlight other information, such as the successful venture of another player who the gambler perceives to have above-average skill and more experience with that gambling activity.[225]

4. *Herd Behavior*

Many sociologists and securities experts have also noted individuals' tendency to invest or bet with the crowd or herd.[226] Herd behavior involves individuals mimicking others' actions often under the assumption that these actors may have information that the individual was not afforded.[227] This behavior is recognized as an individual's tendency to "run with the herd."[228] This behavior has been noted to be caused by an individual's fear of acting contrary to a majority of participants as well as the ability to share the blame with the herd if the outcome is less than desirable.[229] Investors and gamblers exhibit this irrationality frequently.[230] Investors who notice a large increase in trading volume of a particular security often decide to trade that stock as well in hopes that the other investors are trading in the observed manner because of their access to information that the investor is not afforded.[231] Gamblers also often exhibit this type of behavior, many times for inexplicable reasons.[232]

224. *See id.* (noting that most gamblers know that odds of game are against them).

225. *Id.*

226. *See* Hazen II, *supra* note 20, at 997-1000 (demonstrating that many investors trade according to how other traders are trading).

227. *See id.* (explaining herd behavior); *see also* David S. Scharfstein & Jeremy C. Stein, *Herd Behavior and Investment*, 80 AM ECON. REV. 465, 477 (1990), a*vailable at* https://umdrive.memphis.edu/cjiang/www/teaching/fir8-7710/paper/herd%20behavior%20and%20investment.pdf (suggesting that many traders focus on actions of other traders when making investment decisions).

228. *See* Hazen II, *supra* note 20, at 997-00 (explaining herding tendency). "Run with herd" refers to individuals' choice to proceed based on the actions of others. *See id.* (explaining individuals to side with majority of others in certain contexts).

229. *See id.* (identifying underlying causes of herd behavior).

230. *See* Scharfstein, *supra* note 227, at 477-80 (discussing investors tendency to invest in stocks that are being traded heavily); H. SHANE DARRISAW, COMMON SENSE AIN'T COMMON: A GUIDE FOR POSITIONING YOURSELF TO TAKE FULL ADVANTAGE OF YOUR CREDIT AND FINANCIAL OPPORTUNITIES 69 (2008) (explaining that herding behavior is exhibited in gambling and investing).

231. *See* Hazen II, *supra* note 20, at 997-1000 (describing effect of herding behavior by noting that "relatively miniscule price changes that might be attributable to rational factors can become 'highly leveraged' as signals of how other investors are likely to act").

232. *See* DARRISAW, *supra* note 230 at 69-70 (explaining that gamblers often place bets and raise according to how others playing the game bet).

For instance, while playing roulette participants are often influenced by the wagers of a majority of gamblers when deciding whether to place a bet on red or black.[233]

E. Applicability: Regulating in Light of Participant Behavior

Gambling law serves as a useful tool to reform securities regulation and the regulation of structured products. "The choice of the best regulatory structure for the markets is influenced by the ways in which we look at the market structure and *the behavior of market participants*."[234] Given the behavioral and cognitive similarities exhibited by gamblers and investors, gambling law, if effective, can serve as an applicable framework to regulate structured products.[235] To determine the effectiveness of a gambling law framework, an overview of securities and gambling regulation, including an analysis of each regime's effectiveness in mitigating the negative externalities associated with the regulated activities is necessary.[236] Part IV undertakes this overview and Part V provides suggestions for reform of structured products regulation using gambling law as a framework.[237]

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233. *See id.* (demonstrating gambler herd behavior).

234. Hazen I, *supra* note 10, at 396-97 (emphasis added).

235. *See* Margaret V. Sachs, *Materiality and Social Change: The Case for Replacing "The Reasonable Investor" with "The Least Sophisticated Investor" In Inefficient Markets*, 81 TUL. L. REV. 473, 473 (2006) (discussing current reasonable investor standard and arguing that standard should be altered within context of inefficient markets). As will be discussed, gambling regulation is premised upon these behavioral and cognitive irrationalities and regulates accordingly. *See* William N. Thompson et al., *Remedying the Lose-Lose Game of Compulsive Gambling: Voluntary Exclusions, Mandatory Exclusions, or an Alternative Method*, 40 J. MARSHALL L. REV. 1221, 1221 (2007) (explaining gambling laws ability to address cognitive irrationalities of gamblers). On the other hand, securities regulation bases its rules upon the "reasonable investor" and assumes that investors act rationally. *See* Sachs, *supra* note 235, at 473 (explaining reasonable investor standard). Often, assuming the plaintiff is a reasonable investor can lead to suboptimal results. *See id.* at 473-85 (noting unfair consequences of reasonable investor standard in certain contexts). Thus, securities regulation like gambling regulation should consider these irrationalities when deciding how to regulate. *See id.* (arguing for reform of securities laws in certain contexts).

236. For a brief overview of the securities laws, gambling regulation and each regime's effectiveness in addressing the negative externalities created by the regulated activities, see *infra* notes 238-329 and accompanying text.

237. For a proposal of how to reform the securities laws in order to reduce systemic risk in the economy and address investor irrationalities, see *infra* notes 330-408 and accompanying text.

IV. EFFECTIVENESS OF A GAMBLING LAW FRAMEWORK

A. Contrasting Securities Regulation with Gambling Law

Despite the similarities between investing and gambling, investing is afforded a much more lenient regulatory structure.[238] Indeed, structured products, the financial instruments that strongly influenced the financial crisis, were effectively exempt from regulation.[239] Gambling regulation, on the other hand, is pervasively regulated and provides for minimal exemptions.[240] Analyzing each regime's effectiveness in mitigating negative externalities while maintaining the intended benefits of the regulated activity can be instructive in determining the ways structured product regulation can be reformed.[241]

B. Gambling Law

1. *Regulatory Regime*

Gambling law, unlike securities regulation, is regulated primarily by the States.[242] State gambling regulations tend to focus on

238. For a discussion of gambling and securities regulatory regimes, see *infra* notes 242-328 and accompanying text.

239. *See* McCoy, *supra* note 128, at 1379 (explaining exemption that incentivized sub-prime lending).

240. For an overview of gambling law and its abilities to reduce the negative externalities associated with gambling, see *infra* notes 242-267 and accompanying text.

241. *See* Hazen I, *supra* note 10, at 401-18 (comparing derivates, securities, gambling and inherent similarities between activities, noting that their disparate regulatory regimes are unwarranted).

242. *See* Atlantic Coast Line R. Co. v. Goldsboro, 232 U.S. 548, 558 (1914) (stating that "the power of the state to establish all regulations that are reasonably necessary to secure the health, safety, good order, comfort, or general welfare of the community. . . . can neither be abdicated nor bargained away, and is inalienable even by express grant"). The Federal government has only intervened in gambling regulation in limited circumstances to address matters such as interstate gambling, criminal activities, and Indian gaming. *See* EDWARD A. MORSE & ERNEST P. GOSS, GOVERNING FORTUNE: CASINO GAMBLING IN AMERICA 94 (2007) (explaining federal government's limited role in governing gambling). Federal statutes that address interstate or cross-bordering gambling include the Wire Act, the Interstate Transportation of Paraphernalia Act, the Travel Act and the Amateur Sports Protection Act. *See* Wire Act, 18 U.S.C. § 1084 (2010) (providing in part that "[w]hoever being engaged in the business of betting or wagering knowingly uses a wire communication facility for the transmission in interstate or foreign commerce of bets or wagers . . . shall be fined . . . or imprisoned not more than two years, or both."); Interstate Transportation of Paraphernalia Act, 18 U.S.C.A. § 1953 (2010).

> [w]hoever . . . knowingly carries or sends in interstate or foreign commerce any . . . device . . . designed for use in (a) bookmaking; or (b) wagering pools with respect to a sporting event; or (c) in a numbers, policy bolita, or similar game shall be fined . . . or imprisoned for not more than five years or both.

consumers' concerns and protect against fraudulent, unfair, or otherwise dangerous practices that potentially affect the community, its citizens, and the economy.[243] States' discretion to grant licenses to and oversee the operations of casino owners and employees is a central feature of state regulatory regimes.[244] These powers serve as the state's primary means of control over the gaming industry within their state.[245]

a. Licensing

State gaming commissions are granted discretion by the state to require, issue, deny, suspend, or revoke gambling licenses.[246] The commissions also have the power to adopt gaming regulations and initiate disciplinary proceedings.[247] For example, Nevada's licensing practices involve restricting licenses to individuals (1) without a criminal record, (2) who demonstrate "good character,

Id. See also Travel Act, 18 U.S.C.A. § 1952 (2010) (providing in part that "whoever travels in interstate or foreign commerce or uses the mail or any facility in interstate or foreign commerce with the intent to (1) distribute the proceeds of any unlawful activity; or. . .(2) otherwise promote, manage, establish, carry on, or facilitate . . .any unlawful activity"); *see* Amateur Sports Protection Act, 28 U.S.C.A. § 3702 (2010) (forbidding sports gambling in all states besides states that legalized sports gambling before passage of this Act).

243. *See* MORSE, *supra* note 242, at 100 (noting states' goals of regulating gambling activities). For instance, Nevada regulatory regime seeks to protect the general welfare of the state and its inhabitants. *See id.* (outlining Nevada's gambling regulatory scheme). Nevada's Gaming Control Act states in part that:

> All establishments where gaming is conducted and where gaming devices are operated . . . must therefore be licensed, controlled and assisted to protect the health, safety, morals, good order and general welfare of the inhabitants of the state . . . to preserve the competitive economy and policies of free competition of the State of Nevada.

Id. See also Nevada Gaming Control Act, Nev. Rev. Stat. Ann. § 463.0129(d) (setting forth goals of Nevada gambling regulation). State regulations also ensure that state governments collect taxes imposed against casinos, maintain the economic viability of the gaming enterprise within the state, and protect those vulnerable to compulsive gambling behaviors. *See* MORSE, supra note 242, at 99 (noting other purposes of state gambling regulation).

244. *See* MORSE, *supra* note 242, at 102 (explaining Nevada's use of licensing as their main means of control over gaming industry). For example, Nevada Gaming Control Act states that it is unlawful for an "owner, lessee, or employee" to carry on any gaming activity without possession of a license. *See* Nevada Gaming Control Act, Nev. Rev. Stat. Ann. § 463.0152 (noting requirement of license to carry on gambling venture).

245. *See* MORSE, *supra* note 242, at 102 (detailing states' power to control gambling).

246. *See id.* (describing Nevada's use of licensing as their main impetus of control over gaming industry); I. Nelson Rose, *The Legalization and Control of Gambling*, 8 FORDHAM URB. L.J. 245, 267-300 (1979-1980) [hereinafter Rose] (outlining main measures to control gambling).

247. *See* GAMBLING AND THE LAW, *supra* note 151, at 181 (demonstrating states control over gambling industry to state ordained commissions or agencies).

honesty, and integrity," (3) who have adequate business sophistication within the industry, and (4) who have proposed financing that is "adequate for the nature of the proposed operation; and from a suitable source" in order to be licensed as a gambling enterprise.[248]

b. Operational Control

Nevada's gaming agencies also have authority to continuously oversee a licensee's operations.[249] This continuous supervision provides close scrutiny of gambling enterprises' operations and ensures that the enterprises are acting with good faith to mitigate the negative externalities affecting the state's inhabitants and economy.[250] The agencies have broad authority to inspect gaming premises, gambling equipment, and demand access to the institution's records and documents.[251] This broad authority is effective in mitigating the possible negative externalities associated with gambling enterprises.[252]

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248. Rose, *supra* note 246, at 271. *See also* MORSE, *supra* note 242, at 102-03 (describing Nevada's use of licensing to control most aspects of gaming industry).

249. *See* Rose, *supra* note 246, at 271 (demonstrating great deal of control state agencies and commissions have over gambling licensees).

250. *See id.* at 271-72 (showing that purpose of pervasive control afforded to state agencies is reduction of negative externalities associated with gambling, such as problem gambling, and possible illegal activity that would stunt growth of economy).

251. *See id.* at 271-73 (stating that Nevada Gaming Commission requires gambling enterprises to make periodic financial reports to the commission and must allow independent auditors to inspect their financial documents); Nevada Gaming Control Act, Nev. Rev. Stat. Ann. §§ 463.158-463.159 (mandating commission's responsibilities and duties to conduct financial oversight). Section 463.157 states that:

> The commission shall by regulation require periodic financial reports from each non-restricted licensee and: (1) Specify standard forms for reporting financial condition, results of operations and other relevant financial information. (2) Formulate a uniform code of accounts and accounting classifications to assure consistency, comparability and effective disclosure of financial information. (3) Prescribe the interval to which such information shall be furnished. . . .

Id. § 463.158. In addition section 463.159 mandates that "[t]he commission shall by regulation require audits of financial statements of all non-restricted licensees with an annual gross revenue of $1,000,000 or more . . . not less frequently than once a year." *Id.* § 463.1589. The Nevada Gaming Commission also mandates that transfer of ownership of the gaming operation is strictly prohibited and unqualified individuals are forbidden to be involved in any aspect of a gambling institution. *See id.* § 463.300 ("It is unlawful for any person to sell, purchase, lease, hypothecate, borrow, or loan money, or create voting trust agreement or any other agreement of any sort to or with any licensee in connection with any gaming operation, except in accordance with the regulations of the commission.").

252. *See* Rose, *supra* note 246, at 254 (explaining deterrence of organized crime, which would affect surrounding community and economy).

c. Other Regulatory Devices

Other states have more stringent gaming regulations than Nevada. New Jersey operates under a system of licensing and auditing that is very similar to Nevada's licensing system, but has additional layers of control. New Jersey constrains licenses to particular areas of the state and requires gambling institutions to include certain amenities connected to their gambling premises, such as an approved hotel of at least 500 sleeping units.[253] New Jersey restricts gambling to specific areas of the state in order to better control corruption, organized crime, and other negative externalities of gambling.[254]

Additional regulatory devices that other states employ include (1) restricting the hours of operations of gambling enterprises, (2) limiting who may participate, (3) disallowing gambling on margin, (4) prohibiting gambling institutions from offering certain amenities, and (5) broadly taxing gambling revenues, and controlling an institution's right to advertise.[255] These regulatory devices provide state gaming agencies the authority to closely monitor and strictly regulate all aspects of gambling.[256] In sum, states have broad authority to decide who can operate gambling enterprises, how those

253. *See id.* at 284 (explaining regulations New Jersey has promulgated in addition to strict license standards).

254. *See id.* at 286 (recognizing that limiting gambling activity to certain areas of state "make it easier to control corruption and organized crime because there would be fewer applicants to investigate, fewer operating casinos to police," " subject the [fewer number of applicants] to closer scrutiny and force operators to screen their ties more carefully").

255. *See* Gabaldon, *supra* note 20, at 278-84 (outlining other methods gambling commissions use to constrain externalities of gaming industry). Most state restricts the time and place gambling can occur in order to ensure that gambling is not made easily available. *See id.* at 278-79 (outlining access to gambling limitations). These restrictions guard against impulse gambling and force gamblers to cease their gambling operations at some point. *See id.* (stating purpose of access restrictions). States also restrict gambling to adults and have discretion to force gamblers to cease playing if deemed necessary by the agency. *See id.* at 279 (noting restriction of individuals allowed to participate). Restricting a casino's ability to extend credit to patrons is also a measure taken by state commissions in order to prevent gamblers from becoming increasingly leveraged, aggravating the local economy due to individuals defaulting on their loans from the casinos. *See also* MORSE, *supra* note 242, at 110 (outlining restrictions on gamblers' ability to gamble on margin and becoming increasingly leveraged in their gambling activities); Gabaldon, *supra* note 20, at 279-80 (noting purposes of credit restrictions to protect consumers and to protect economy).

256. *See* Hurt, *supra* note 20, at 987-88 (demonstrating strictness of gambling regulation by stating that "many gambling activities and investing activities can be described as equally as speculation. . . . Notwithstanding this reality, investing is an activity that the law supports and encourages, but gambling is an activity that the law at least nominally discourages and at most prohibits"); Hazen I, *supra* note 10, at 375-80 (recognizing disparate regulatory treatment of investing and gambling).

entities can operate, who they can employ to aid in the enterprises' operations, who can participate in the enterprises activities, what amenities the enterprise can offer, to what extent the institution can advertise, and to inspect these enterprise in order to ensure compliance with all the aforementioned standards and preserve the integrity and health of the surrounding community and economy.[257]

2. *Ability to Address Gambler Irrationalities*

Gambling regulation, unlike the federal securities laws, addresses the irrationalities that gamblers exhibit and the possibilities for those irrationalities to pose costs to the community and economy.[258] Gambling regulation is concerned not only with the licensing, control, and operations of actual gambling facilities, but also contemplates socially sensitive issues, such as compulsive gambling.[259] For instance, gambling regulation addresses the irrational behaviors exhibited by intoxicated patrons by holding establishments responsible for gamblers' losses if the establishment allows patrons to continue gambling while visibly intoxicated.[260] In addition, gambling institutions often monitor the behavior and wagering practices of known compulsive gamblers to ensure their well-being as well as the welfare others.[261]

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257. *See generally* Rose, *supra* note 246, at 267-300 (noting elements of control states utilize to prohibit negative externalities of casinos). For a further discussion, see *supra* notes 242-256 and accompanying text.

258. *See* Cory Aronovitz, *The Regulation of Commercial Gaming*, 5 CHAP. L. REV. 181, 200 (2002) ("Compulsive and underage gambling, alcohol consumption, and the scope of authorized gaming are the most common sensitive issues that confront lawmakers and regulators. Typically, these issues are addressed in the gaming legislation where, with varying degree, lawmakers provide a framework for regulators to follow."); *see also* Browne, *supra* note 197, at 41-42 (acknowledging regulatory efforts to examine and regulate economic and societal impact of gambling).

259. *See* Aronovitz, *supra* note 258, at 199-202 (asserting gambling regulation and its attention to social and economic externalities).

260. *See* GNOC Corp. v. Aboud, 715 F. Supp 644, 644 (D.N.J. 1989) (holding that casino has duty to refrain from knowingly allowing intoxicated patron to gamble); *see also* Jessica L. Krentzman, *Dram Shop Law – Gambling While Intoxicated: The Winner Takes it All? The Third Circuit Examines a Casino's Liability for Allowing a Patron to Gamble While Intoxicated, Hakimoglu v. Trump Taj Mahal Associates*, 41 VILL L. REV. 1255, 1268-70 (1996) (arguing that casino's should be held liable for losses of visibly intoxicated patrons). *See* Aronovitz, *supra* note 258, at 202 ("Alcohol is a sensitive issue for casinos because of local regulation, hours of consumption, and complimentary drinks for casino patrons. Like compulsive gambling, alcohol consumption invokes strong emotions.").

261. *See* Aronovitz, *supra* note 258, at 200 ("Missouri has been the leader in regulatory programs that address problem gambling. The Commission . . . offers free compulsive gambling counseling to both problem gamblers and their family

Other measures that gambling regulation institutes in order to guard against gambler irrationalities include the following: (1) restricting the hours of operations of gambling facilities to allow gamblers cooling-off periods so that they can regroup; (2) regulating the advertising of gambling as to not entice individuals, especially impressionable individuals, to participate; (3) restricting the amount of credit casinos can extend to patrons in order to decrease the incentive to gamble beyond the individual's means; and (4) establishing programs designed to educate gamblers about the odds of particular gambling activities and the dangers of compulsive gambling, enabling them to make rational choices concerning when and how to gamble.[262]

3. *Gambling Regulation's Focus on Systemic Risk*

Legalized gambling activities are subject to strict scrutiny by state gaming agencies.[263] "Many people fear that gaming will produce substantial negative impacts on society, either because gaming has a colorful past filled with unsavory individuals, or because it has the potential to wreak social havoc, absent direct and continuous oversight."[264] All jurisdictions that have legalized gambling have opted to create a governance structure to ensure that the costs associated with gambling do not become invasive to the community or economy.[265] Indeed, state legislatures, when deciding to legalize gambling recognize "the potential negative impacts of gaming, and establish a comprehensive regulatory framework that strictly governs virtually every aspect of the business."[266] As a result, the opportunity for systemic risk and pervasive externalities to affect the surrounding community and economy are effectively mitigated,

members. The Commission also created a voluntary exclusion program, whereby problem gamblers can isolate themselves from the temptations of gaming.").

262. *See id.* at 190-99 (outlining regulatory measures states adopt to ensure stability of community and economy); *see also* Gabaldon, *supra* note 20, at 251-52 (detailing common state gambling regulations designed to eliminate negative externalities associated with gambling activities).

263. *See* Rose, *supra* note 246, at 267-99 (summarizing gambling regulations and noting stringency and effectiveness).

264. Aronovitz, *supra* note 258, at 181.

265. *See* Browne, *supra* note 197, at 42-43 (emphasizing externalities of gambling and need for strong oversight). State legislatures recognize "that legalized gambling creates moral decay and destroys the lives of gambler's along with the families and loved ones" that it "attracts corruption and organized crime and encourages compulsive gambling and its accompanying social woes such as street crime, domestic violence, and bankruptcy." *Id.* Additionally, many realize that if unchecked gambling can "drain local economies rather than invest in them." *Id.*

266. Aronovitz, *supra* note 258, at 190.

while the intended benefits such as economic revitalization and its entertainment value are maintained.[267]

C. Securities Regulation

1. *Regulatory Regime*

The regulation of securities is primarily governed by federal law rather than state law.[268] The Securities Act of 1933 ("Securities Act") and the Securities Exchange Act of 1934 ("Exchange Act," and collectively with the Securities Act, the "Securities Laws") are the major federal statutes applicable to a broad range of corporations and investments.[269] The Securities Act regulates the offering

267. *See* Rose, *supra* note 246, at 286-87 (discussing models of casino control and their ability to control corruption).

268. *See* 1 THOMAS LEE HAZEN, TREATISE ON THE LAW OF SECURITIES REGULATION 34-38 (6th ed. 2009) [hereinafter HAZEN TREATISE 1] (explaining that securities markets are predominantly governed by federal law). The first securities laws were enacted by states and are known as blue sky laws; however, states have been largely preempted by the federal government with respect to regulation of securities and commodities trading. *See id.* at 32-34 (explaining state law regulatory structure that preceded federal laws). Most state securities laws required merit review of each security that was offered in the state. *See id.* at 33 (noting stringency of state securities laws). Merit review involved the state securities commissioner to review the terms of each deal and grant or deny a license to sell the securities in a state depending on whether the deal was fair, just and equitable. *See id.* (emphasizing states focus on reviewing the merits of investments rather than merely requiring broad material disclosures). The federal securities laws rejected merit review in favor of a disclosure based philosophy to securities regulation. *See id.* at 34-35 (acknowledging disclosure approach favored by Congress as opposed to state merit regulation). Disclosure-based philosophy is based on the assumption that informed investors are the best judges of the merits of an investment and that disclosure of pertinent information by companies is the best way to inform investors. *See id.* at 35-38 (explaining assumption of federal laws that investors are able to make informed decisions based on broad disclosures).

269. *See id.* at 34-38 (introducing Securities Act of 1933 and Securities and Exchange Act of 1934). Federal Securities laws only apply in connection with the purchase or sale of a *security*. *See generally id.* at 82-162 (analyzing comprehensively what type of investments are considered securities rather than commodities). The more similar a particular financial instrument is to a share of stock the more likely the instrument will be considered a security and within the jurisdiction of the federal securities laws. *See id.* at 83-84 (describing characteristic of securities). The Supreme Court established four factors to determine whether a financial instrument is a security: (1) the investment of money, (2) in a common enterprise, (3) with the expectation of profits, (4) solely from the efforts of others. *See* Sec. & Exch. Comm'n v. W.J. Howey Co., 328 U.S. 293, 295-99 (1946) (enunciating factors that became known as "Howey Test"). Many cases have expanded on the Howey test broadening the jurisdiction of the federal securities laws. *See generally* Landreth Timber Co. v. Landreth, 471 U.S. 681 (1985) (holding that sale of majority of shares of closely held corporation constituted sale of *securities* subject to federal jurisdiction despite fact that selling controlling interest in corporation does not satisfy *Howey* test). *See generally* Reves v. Ernst & Young, 494 U.S. 56 (1990) (creating presumption that promissory note is security for purposes of federal se-

of securities to the public, while the Exchange Act regulates the trading of issued securities on national exchanges and markets.[270]

a. The Securities Act of 1933

The Securities Act was enacted to prevent investors from being defrauded in connection with the sale or purchase of securities in interstate commerce.[271] The Securities Act attempts to mitigate fraudulent activity by requiring public companies to register a disclosure document with the Securities and Exchange Commission ("SEC") before offering or selling securities to the public.[272] The purpose of the registration statement is to *disclose* all *material* facts to investors so that they can make an informed decision when investing.[273] The reasoning underlying these requirements is that full

curities laws, but, noting that presumption may be rebutted by showing that transaction was not likely to be available for trading by public).

270. *See* HAZEN TREATISE 1, *supra* note 268, at 182-87 (explaining that Securities Act governs public offerings while, Exchange Act governs trading of securities on secondary market). The SEC was created to enforce these federal laws and have played an integral role maintaining the efficiency and integrity of the securities markets. *See id.* at 38-39 (explaining role of SEC in securities regulation). The SEC has the responsibility of administering the federal securities laws and does so through rule-making, adjudications, investigatory and enforcement powers. *See id.* at 58 (emphasizing large role SEC plays in securities regulation). Additionally, an organization called Financial Industry Regulatory Agency ("FINRA") governs the conduct of national securities exchanges such as the New York Stock Exchange ("NYSE") and the National Association of Securities Dealers ("NASD"). *See* Macchiarola, *supra* note 20, at 63-70 (explaining FINRA's role in regulating securities markets). FINRA governs the exchanges conduct by establishing and enforcing standards for members of the exchanges and any other listed companies. *See id.* (outlining FINRA responsibilities).

271. *See* HAZEN TREATISE 1, *supra* note 268, at 34-36 (explaining reasons why Congress enacted Securities Act).

272. *See id.* at 34-36 (describing disclosure requirements of Securities Act). The SEC completes a detailed review of the registration statement and may request clarification of certain aspects of the statement from the corporation. *See* HAMILTON, *supra* note, 153 at 349-50 (detailing Securities Act and role of SEC in enforcing that Act). Moreover, the SEC has the power to issue a stop order in connection with any security offering in violation of securities laws. *See id.* (noting SEC's ability to prohibit investments in violation of securities laws).

273. *See id.* (describing disclosure philosophy of federal securities laws). The federal securities laws do not grant authority to federal agencies to inspect the merits of particular investment opportunities. *See id.* (illuminating contrasting approach the state laws). Rather, the securities laws posit that full and fair disclosure allows investors to make informed decisions about the merits of certain investments. *See id.* (explaining underlying assumptions of securities laws). Most initial public offerings, must be registered by filing a SEC form called the S-1 which is the most comprehensive form the SEC requires. *See id.* (outlining registration requirements of corporation making public offering). After the initial public offering, if a corporation issues more stock, referred to as a secondary offering, the company only has to complete a S-1 or S-2 which are less extensive disclosure forms. *See id.* (explaining registration forms that are required when a corporation sells additional shares of stock).

disclosure allows investors to evaluate the merits of investment opportunities obviating the need for government merit analysis of the securities offered by corporations.[274]

If a public company offers or sells a security to the public without prior registration with the SEC, the company will be subject to severe civil liabilities and possible criminal prosecution.[275] Moreover, under Section eleven of the Securities Act, if the registration contains misrepresentations or omissions of material facts, the company, its board of directors, its officers, the underwriters, and any experts that signed or consented to be included within the registration statement can be held liable for the misstatement or omission of material fact.[276]

b. The Securities Exchange Act of 1934

The Exchange Act governs five main areas of securities regulation: periodic filing; shareholder proxy regulation; tender offers; insider trading; and other manipulative behavior in connection

274. *See id.* (showing assumptions of disclosure philosophy).

275. *See id.* (noting consequences of failing to register public offering).

276. *See id.* (outlining parties that may be held liable for sale of unregistered securities). Entities involved in purchasing or selling securities must disclose all material information that is required by disclosure guidelines or necessary to ensure that a disclosure is not misleading. *See* Glenn F. Miller, *Staff Accounting Bulletin No. 99: Another Ill-Advised Foray into the Murky World of Qualitative Materiality*, 95 NW. U. L. REV. 361, 368 (2000) (explaining when material information must be disclosed). *See, e.g.*, Wharf Ltd. V. United Int'l Holdings, 532 U.S. 588, 593 (2001) (noting that material information need not be disclosed without duty to do so); Yvonne Ching Ling Lee, *The Elusive Concept of "Materiality" Under U.S. Federal Securities Laws*, 40 WILLIAMETTE L. REV. 661, 661 (2004) (discussing materiality standard); Jennifer O'Hare, *Retail Investor Remedies Under Rule 10b-5*, 76 U. CIN. L. REV. 521, 536-37 (2008) (noting that materiality must be proven to recover under 10b-5). A misstatement or failure to disclose information, where there was a duty to disclose, is actionable if the misstated or withheld information is material. *See* Lee, *supra* 276, at 661 (discussing materiality standard and its application difficulties). Thus, the concept of materiality is used to determine *what* information must be disclosed to investors. *See id.* (explaining policy objectives of securities laws). Whether a fact is material "depends on the significance the reasonable investor would place on the withheld or misrepresented information." *See* TSC Indus. v. Northway, Inc., 426 U.S. 438, 449 (1976) (emphasis added) (establishing materiality standard for proxy fraud). A misrepresentation or omission is material if there is a "*substantial likelihood* that the disclosure of the omitted fact would have been viewed by the *reasonable investor* as having significantly altered the '*total mix*' of information made available." *Id.* To be material, the misstated or omitted information must affect the decisional process of the reasonable investor. *See* James O. Hewitt, *Developing Concepts of Materiality and Disclosure*, 32 BUS. LAW. 887, 891 (1976-1977) (discussing purposes of requiring disclosures of material information). In other words, to be material, the information must be considered important or significant by the reasonable investor when deciding whether to complete a certain transaction. *See* O'Hare, *supra* note 276, at 536-37 (explaining materiality standard).

with the purchase or sale of securities.[277] While the Securities Act monitors and regulates corporations issuing stock, the Exchange Act regulates the issuers once the stock is being traded on the secondary markets.[278]

The Exchange Act dictates that public companies must register and submit periodic reports with the SEC.[279] These reports are not the equivalent of a registration statement required when offering a security to the public, but are rather disclosures required by the SEC that are intended to update and inform the public of the continued health and viability of a corporation.[280] Accordingly, once the corporation has issued stock, which is being traded on the secondary market, these periodic disclosures are required.[281]

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277. *See* 2 THOMAS LEE HAZEN, TREATISE ON THE LAW OF SECURITIES REGULATION 456-59 (6th ed. 2009) [hereinafter HAZEN TREATISE 2] (setting forth requirements of Exchange Act). Once stock has been issued by a company and is being traded on a National Exchange, the stock is subject to the requirement of the Exchange Act. *See* Securities Exchange Act of 1934, 15 U.S.C.A. § 78l(a) (1976) (outlining registration requirements). Shareholder proxies enable shareholders to elect a person or entity to represent their interests at shareholder meetings; in order to solicit votes from other shareholder by use of proxy the Exchange Act procedures and registration requirements must be followed. *See* Securities Exchange Act of 1934 § 14(a), 15 U.S.C.A. 78n(a), 17 C.F.R. §§ 240.14a-1 (setting forth rules governing proxy solicitation). Tender offers, generally speaking, involve an offer to purchase securities of a single class of stock; these offers can be used to attempt a corporate takeover and are governed by the Exchange Act. *See* Securities Exchange Act of 1934 §§ 13(d),(e), 14(d), (e), (f), 15 U.S.C.A. §§ 78m(e),(f), 78n(d), (e), (f) (providing protections for corporations against corporate takeovers). Insider trading is when a corporate insider has material information concerning the value of the company's security and trades on that information without properly disclosing that material information to the public. *See* Securities Exchange Act of 1934 § 16(a), 15 U.S.C.A. § 78p(a) (requiring disclosures concerning insider trading).

278. *See* HAZEN TREATISE 2, *supra* note 277, at 456-57 (stating that Exchange Act applies to publicly held companies and "required continued registration and periodic reporting").

279. *See* Exchange Act of 1934 § 12(g), 15 U.S.C.A. § 78*l*(a) (1976) (requiring registrations of security if traded on national exchange). Over-the-counter securities are securities that are not traded on a national exchange but are rather transactions between a limited amount of participants and must make periodic reports if the issuing company has more than $10,000,000 in assets and have more than 500 shareholders on record investing in the company's equity. *See* Securities Exchange Act of 1934, 15 U.S.C.A. § 78l(g), 17 C.F.R. § 240.12g-1 (denoting requirements for non-exchange traded securities to complete periodic reports).

280. *See* Securities Exchange Act of 1934 § 13(a), 15 U.S.C.A. § 78m(a) (outlining requirements of periodic reporting).

281. *See id.* (requiring periodic reporting in order to enable investors to make informed decisions concerning their investments). Corporations are required to file annual reports called a form 10-K, quarterly reports called 10-Q forms, and under certain circumstances 8-K forms which are reports required when matters of major significance affects the corporation. *See* 17 C.F.R. §§ 249.10-K, 10-Q, 8-K (enforcing reporting of financial metrics as well as other material information). A form 10-K is an annual report that includes information about the corporation,

The Exchange Act also governs the use of shareholder proxies and shareholder proposals.[282] State laws require corporations to hold annual shareholder meetings in order to vote for and elect the board of directors of the corporation.[283] The majority of shareholders, however, are usually absent from these meetings.[284] As such, interested parties such as other shareholders or current management may wish to solicit voting rights from those shareholders who do not wish to attend through the use of proxy solicitations.[285] The Exchange Act mandates that an interested party must deliver a proxy statement to a shareholder before soliciting them for their voting rights.[286] The proxy statement must detail the matters that

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including a description of the business and the companies property, the management's discussion and analysis of the financial condition of the company and the results of operations, fully audited financial statements, description of any material legal proceedings the company is involved, quantitatively and qualitatively material disclosures about market risk, and information concerning the company's directors and officers. *See* HAMILTON, *supra* note 153, at 366 (explaining 10-K requirements). A form 10-Q is a quarterly report, containing unaudited financial data and any other material information that concerns the performance of the company such as commencement of significant litigation. *See id.* at 366-67 (detailing 10-Q requirements). A form 8-K is a report that must be filed when specific material events occur that may affect the company's performance, including when there is a change in control of the company, an acquisition or disposition of critical assets, a filing for bankruptcy, a change in the company's auditor, resignation of director or principal officer, election of a new director or principal officer, change in fiscal year, material events regarding employee compensation, earnings releases, amendment or waiver of the company's code of ethics, the addition or cancellation of a material business contract, a change in the credit rating of the company's security, or an amendment to the certificate of incorporation or the corporation's bylaws. *See id.* at 367 (outlining 8-K requirements). In addition, any time an issuer of securities voluntarily discloses information that is not required by the Exchange Act, the issuer must do so in a way that ensures that the entire public has access to the information as to ensure that all interested investors and analysts are informed of the information; this rule is called Regulation FD and was promulgated by the SEC pursuant to the Exchange Act. *See id.* at 367-68 (discussing requirements of voluntary disclosures).

282. *See* 3 THOMAS LEE HAZEN, TREATISE ON THE LAW OF SECURITIES REGULATION 456-59 (6th ed. 2009) [hereinafter HAZEN TREATISE 3] (explaining that securities markets are predominantly governed by federal law). Proxy regulations allow shareholders to appoint agents to vote on behalf of the shareholder and also allow shareholders to make proposals to the board of directors suggesting certain changes to the corporate culture. *See* Securities Exchange Act § 14a-8, 17 C.F.R. § 240.14a-8 (regulating shareholder proxies and proposals).

283. *See, e.g.*, Del. Gen. Corp. L. tit. 8 §§ 2.11, 2.12 (2010) (requiring corporations to hold annual shareholder meetings in order to elect shareholder directors).

284. *See* HAMILTON, *supra* note 153, at 370-72 (explaining shareholders' ability to vote without attending shareholder meetings).

285. *See id.* (explaining shareholders' ability to vote through proxy solicitation).

286. *See id.* (detailing prerequisite to soliciting shareholders for their voting rights).

are to be voted on at the shareholder meetings, include information about the solicitors, and their reasons for soliciting the shareholders' voting rights.[287] The purpose of these disclosures is to ensure that the shareholders are making informed decisions about granting their voting rights to another shareholder or agent.[288]

Shareholder proposals, on the other hand, are a means for corporate shareholders to influence the direction and policy of the corporation.[289] The board of directors comprise the strategic management body of a corporation and retain discretion to make all policy decisions concerning the company.[290] Shareholders, however, can make use of proxy statements to include suggestions of changes that they want the board of directors to implement.[291] Although shareholder proposals cannot force the board of directors to adopt any changes to the corporate governance structure, a majority of shareholders may influence the board of directors' policy decisions in light of the shareholders' ability to remove directors and elect new board members.[292]

The Exchange Act also provides remedies to investors or shareholders who have been misled or defrauded.[293] For instance, an

287. *See id.* at 371-72. The proxy statement must include: the date, time, and place of meeting; the deadline for submitting shareholder proposals; detailed information concerning the identity and background of individuals nominated for director; matters that are being voted on; the process of that vote; the identity of the party who is soliciting the shareholders voting rights; detailed information about officer compensation; stock performance compared to major competitors and peer companies; equity compensation plans such as dividend; and any transactions that the corporation entered into with a director, officer, five-percent shareholder of the corporation, or any family member of those individuals. *See id.* at 371 (setting forth formal requirements of proxy statements). Additionally, when the party soliciting the shareholder voting rights are the management of the company and relating to an annual meeting where directors are to be elected, the proxy statements must be accompanied by an annual report to shareholders including the financial statements of the company previous two fiscal periods, information about the company's stock and dividend payments, industry segment information, and information about the directors and officers of the company. *See id.* at 372 (outlining additional disclosures required when management is soliciting voting rights from shareholders).

288. *See id.* at 372-74 (explaining purpose of shareholder proxies).

289. *See id.* at 374 (specifying purpose of shareholder proposals).

290. *See id.* (noting role of board of directors of corporation).

291. *See id.* (explaining shareholders use of shareholder proposals to influence board of directors as to management and business affairs of firm).

292. *See id.* (showing that shareholder proposals may influence board of directors to change management structure because of their desire to remain director of corporation).

293. *See* Securities Exchange Act of 1934 § 9, 15 U.S.C.A. § 78i (discussing regulation fraud). Section Nine of the Exchange Act outlaws manipulative practices in connection with the purchase or sale of securities on public markets and provides a implied private right of action for private investors. *See id.* (forbidding

aggrieved investor or shareholder, or alternatively the SEC through enforcement actions, may bring claims against corporations, broker-dealers, or investment banks if any of these entities defrauded an investor or shareholder.[294] The most common claims brought against these entities are proxy fraud, securities fraud, and insider trading claims.[295] Each of these remedies is designed to facilitate full and fair disclosure enabling investors and shareholders to make well-informed decisions regarding investment opportunities and voting rights.[296]

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manipulative or deceptive behavior in connection with trading securities). Sections 10(b) and 15 supplement Section Nine by regulating manipulation in connection with over-the-counter derivatives. *See* Securities Exchange Act of 1934 §§ 10(b) & 15(c), 15 U.S.C.A. §§ 78j(b), 78*o*(c) (regulating manipulative deceptive conduct).

294. *See* HAZEN TREATISE 3, *supra* note 282, at 472-85 (outlining anti-fraud provisions of Exchange Act).

295. *See id.* (noting common fraud claims).

296. *See id.* (maintaining goal of securities laws). Proxy fraud claims are claims brought by shareholders against the corporation alleging that the proxy statements misstated or omitted material facts making the proxy materials misleading. *See id.* (explaining common proxy fraud claim). SEC rule 14a-9 creates a implied private right of action for damages caused to shareholders due to the material omission or misstatement. *See* J.I. Case Co. v. Borak, 377 U.S. 426 (1964) (holding that SEC rule 14a-9 grants private parties authority to bring claims of proxy fraud against corporations). Securities fraud is a broad anti-fraud provision that grants redress for investors or shareholders that have been defrauded due to a misstatement or omission of material fact, in connection with the sale or purchase of securities that rendered required disclosures inadequate or misleading. *See* Securities Exchange Act of 1934 § 10(b), Manipulative and Deceptive Devices, 15 U.S.C. § 78j(b) (2009) (establishing securities fraud claim). SEC rule 10b-5 provides:

> It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce, or of the mails or of any facility of any nation securities exchange, (a) To employ any device, scheme, or artifice to defraud, (b) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading, or (c) To engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.

Id. To successfully litigate a misrepresentation or omission claim under section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5 promulgated pursuant to section 10(b), a plaintiff must plead and prove, that the defendant (1) made a misstatement or omission (2) of material fact (3) with scienter, (4) in connection with the purchase or sale of securities, (5) by means of the mails, interstate commerce, or national securities exchange, (6) the plaintiff relied on the defendant's misstatement or omission, and (7) the defendant's material omission proximately caused the plaintiff to suffer monetary harm. *See* Securities Exchange Act of 1934 10(b), Manipulative and Deceptive Devices, 15 U.S.C. § 78j(b) (2009) (establishing necessary elements of plaintiff's claim); Employment of Manipulative and Deceptive Devices, SEC Rule 10b-5, 17 C.F.R. § 240.10b-5 (2010) (forbidding fraud and manipulative practices in connection with purchase or sale of securities). *See also* ECA, Local 134 IBEW Joint Pension Trust of Chicago v. JP Morgan Chase Co., 553 F.3d 187, 197 (2d Cir. 2009) (setting forth elements of securities fraud claim);

c. Exemptions from the Federal Securities Laws

While the Securities Laws appear comprehensive and stringent, as time passed, Congress and the SEC granted many exemptions to increase efficiency and financial innovation.[297] Unfortunately, these exemptions allowed many of the most dangerous securities to go unregulated.[298] Prior to 2008, investment banks abused these exempted structured products and lead the global economy into a financial crisis.[299]

The Securities Act of 1933 provides for three main statutory exemptions from the requirements to register with the SEC before offering or issuing securities to the public.[300] SEC's "Regulation A" exempts offerings up to $5,000,000 from the traditional SEC registration statement and allows a simplified registration process.[301] "Regulation D" is the primary exemption from registration and is

Geman v. Sec. & Exch. Comm'n., 334 F.3d 1183, 1191 (10th Cir. 2003) (noting that Securities and Exchange Commission is not required to prove reliance or injury in enforcement actions). Insider trading occurs when a corporate insider such as a director, officer, agent or major stockholder obtains material non-public information that will likely affect the corporation's stock price and subsequently trades on account of that information; trading on inside information is broadly prohibited by the Exchange Act. *See* In re Cady Roberts, Inc., 40 S.E.C. 907, 08-11 (1961) (holding that trading upon receipt of material non-public information constitutes securities fraud).

297. *See* HAZEN TREATISE 1, *supra* note 268, at 509-59 (explaining exemptions created pursuant to Securities Act).

298. *See* Mendales, *supra* note 11, at 1388 (explaining de-regulation and increased exemptions as catalysts for the credit-freeze).

299. *See id.* at 1360 ("The spark that set off the 2007-2008 explosion in the financial markets was the failure of the market for collateralized debt obligations. . . . and the role that the failure of securities regulation played in the blow-up.").

300. *See* 15 U.S.C.A §§ 77(c), (d) (providing exemptions from registration requirements). These exemptions do not exempt from the anti-fraud provisions. *See* HAZEN TREATISE 1, *supra* note 268, at 437 (noting that exemptions are from registration requirements, not anti-fraud provisions).

301. *See* Regulation A, 17 C.F.R §§ 230.251-230.264 (2009) (establishing exemption for small offerings). This exemption allows issuers to distribute a prospectus document outlining the investment opportunity and the document constituting an offer of securities without prior registration. *See* HAZEN TREATISE 1, *supra* note 268, at 509-10 (creating exemption for small issuers and enabling them to see prospects of issuance before sustaining costs associated with registration). Regulation A requires that the offering is accompanied by an offering circular, which is essentially a watered down version of the registration requirements of non-exempt issuers. *See id.* (requiring less extensive disclosure). In addition, Regulation A, allows smaller issuers to "test the waters" by affording those issuers the opportunity to solicit investors before completing an offering statement. *See id.* (enabling small issuers to pursue capital more freely by obviating their obligation to sustain large registration costs before knowing whether they have opportunities for capital infusion). This exemption allows smaller issuers to solicit investors and make necessary disclosure in a more efficient and cost-effective manner. *See id.* (lowering costs for smaller issuers to enable them to gain capital more freely).

generally used to, among other things, exempt *private placement* offerings or offerings that are not offered to the *public*.[302] Regulation D posits that the particular investors do not need the protections of the registration documents and that such investors can fend for themselves, rendering the registration statement surplusage and unnecessary.[303]

These exemptions enabled investment banks to abuse securitized investments to the point of financial collapse.[304] Without adequate oversight, exempted securities such as MBSs, CDOs, squared CDOs, and synthetic CDOs were created and purchased at a rapid rate leading to an artificial increase in housing prices and the creation of an extensive amount of systemic risk.[305]

d. Philosophy and Assumptions of the Federal Securities Laws

Louis Brandeis famously stated that "[s]unlight is said to be the best disinfectants; electric light the most efficient policeman."[306] The Securities Act of 1933 and the Securities Exchange Act of 1934 base most provisions on the premise that disclosure of all material

302. *See* HAZEN TREATISE 1, *supra* note 268, at 528 (outlining Regulation D and exemptions provided). Regulation D consists of three integrated exemptions and was designed to expand the availability of exemptions allowed under the Securities Act; Regulation D consists of Rule 504, which provides certain exemptions for offerings not exceeding one million dollars for a twelve-month period, Rule 505 which provides a set of exemptions for offerings not exceeding five million dollars in a twelve-month period, and Rule 506 which permits non-public offerings to qualified or accredited investors without the need of registration and has no dollar limit with respect to accredited investors. *See id.* at 528 (explaining scope of exemptions).

303. *See* HAZEN TREATISE 1, *supra* note 268, at 577 ("Rule 506 is a safe harbor rule."). Rule 506 under Regulation D exempts sales to no more than thirty-five non-accredited investors and without a prior registration statement; accredited investors, however, are not counted toward this thirty-five person limit. *See id.* (referencing constructs of exemption). Thus, for example if an investment bank was issuing mortgage backed securities, they could potentially issue the securities to one hundred investors as long as less than thirty-five of the investors are unaccredited. *See id.* (noting that person limit is largely illusory). An investor is accredited if they are sophisticated in the financial and business industry, are capable of evaluating the merits and the risks involved in an investment situation, and are affluent enough to bear the downside risk of investments. *See* 15 U.S.C.A. §§ 77(b)(a)(15)(ii) (2010) (describing characteristics of accredited investor). Thus, investment banks often pursued accredited investors with respect to structured products and were exempt from direct oversight from the SEC. *See* HAZEN TREATISE 1, *supra* note 268, at 577 (explaining effect of exemption).

304. *See* Mendeles, *supra* note 25, at 1360-63 (referencing exemptions as catalyst to sub-prime mortgage market crisis).

305. *See id.* (explaining how structured products incentivized sub-prime lending while simultaneously leveraging exposure to underlying loans resulting in large amount of systemic risk).

306. LOUIS D. BRANDEIS, OTHER PEOPLE'S MONEY AND HOW THE BANKERS USE IT 92 (1914).

information is the most effective way of ensuring that investors and shareholders make informed decisions.[307] This is known as the "disclosure-based philosophy" to securities regulation.[308]

Disclosure-based securities regulation is based upon several rationales.[309] First, it assumes that disclosure of material facts can influence corporate managers, broker-dealers, and investment banks to behave with more candor because entities acting with bad faith would deter capital infusions from shareholders and prospective investors.[310] Second, Congress posited that as long as investors and shareholders were afforded all material information, they would be able to independently analyze the merits of particular securities and make informed decisions.[311] While disclosure-based regulation offers certain advantages for regulating the securities markets and exchanges, particular problems are posed due to its underlying assumptions and the realities of investing.[312] Mainly, the assumption that investors act rationally and analyze all available information when deciding whether to invest is in direct contravention with the irrationalities investors' exhibit when investing as outlined below in Section III-D.[313]

2. *Cognizance of Investor Irrationalities*

The Securities Laws posit that full and fair disclosure allows investors to analyze the merits of an investment opportunity and make informed judgments.[314] This hypothesis assumes that investors act rationally and review and digest the material information

307. *See* Ripken, *supra* note 157, at 149-59 (explaining securities laws use of disclosure philosophy).

308. *See id.* at 149-50 (outlining purposes of securities laws). The Securities Act and the Exchange Act were enacted by Congress shortly after the stock market crashed in 1929. *See id.* at 149-50 (demonstrating motivations for securities laws). Many investors lost their life savings as a result of purchasing securities from companies that were worthless. *See id.* (outlining goals of securities laws and disclosure philosophy). The Securities Act and the Exchange Act were enacted with the goal of restoring investor confidence by eliminating the abuses and maintaining the integrity of the capital markets. *See id.* (outlining purposes and goals of the Acts). Comprehensive disclosure was the means by which this goal was to be reached. *See id.* (noting assumption that well-informed investors was proper response to fraudulent and manipulative investment practices).

309. *See id.* at 151-59 (explaining rationale of enactment of securities laws and their approach).

310. *See id.* at 151 (demonstrating first rationale of disclosure philosophy).

311. *See id.* at 152-53 (stating second rationale of disclosure philosophy).

312. *See id.* at 156 (noting flaws in disclosure philosophy).

313. *See id.* (explaining that irrationalities demonstrated by investors are problematic to securities laws underlying assumptions).

314. *See* Pouncy, *supra* note 10, at 290-305 (describing disclosure philosophy and its failures).

afforded to them.[315] The rational choice model of human behavior "assumes that a person can perfectly process available information about alternative courses of action, and can rank possible outcomes in order of expected utility."[316] This model also supposes that "an actor will choose the course of action that will maximize his personal expected utility, which may, of course, reflect a concern for the welfare of others."[317]

Unfortunately, as shown previously in section III-D of this Article, the constraints of human reasoning and cognitive limitations often cause investors to act irrationally.[318] Thomas Lee Hazen has noted that investors "often view investing as a hobby or participate for the thrill of the game" and "basing investment regulation solely on the efficient market or rational choice theories ignores a significant segment of the market."[319] Accordingly, the disclosure-based philosophy may not protect investors from meritless investments because of investors' limited ability to effectively comprehend and use corporate disclosures to make informed decisions.[320]

Corporate disclosures have become so complex "that many investors [are] unable to detect even blatant fraud solely by reading [the disclosures]."[321] Over time, companies have become increasingly complex and diversified.[322] As a result, corporations have difficulty describing their financial health in simple and easily understandable ways.[323] With the increasing complexity of disclosures combined with Securities Laws failure to consider the irra-

315. *See* Ripken, *supra* note 157, at 149-59 (explaining securities laws use of disclosure philosophy and underlying assumptions).

316. Robert C. Ellickson, *Bringing Culture and Human Frailty to Rational Actors: A Critique of Classical Law and Economics*, 65 CHI-KENT L. REV. 23, 23 (1989).

317. *Id.*

318. *See* Ripken, *supra* note 157, at 149-59 (outlining failure of disclosure philosophy to consider many investor behaviors).

319. Hazen I, *supra* note 10, at 401-18.

320. *See id.* (noting that even when investors can comprehend information they often construe information in ways reflecting certain biases such as overconfidence, optimism, confirmation or herding bias).

321. Alison Grey Anderson, *The Disclosure Process in Federal Securities Regulation: A Brief Review*, 25 HASTINGS L.J. 311, 325 (1974). Advocates of merit regulation, as opposed to disclosure-based regulation, argue that disclosures have become so broad and so complicated that even sophisticated investors are unable to fully understand the implications of the disclosures. *See* Jay T. Brandi, *Securities Practitioners and Blue Sky Laws: A Survey of Comments and a Ranking of States by Stringency of Regulation*, 10 J. CORP. L. 689, 693 (1985) (explaining benefits of merit regulation).

322. *See* Hazen I, *supra* note 10, at 401-18 (explaining investor inability to understand corporate disclosures even when investors choose to analyze them).

323. *See id.* (describing complexity of disclosures). Additionally, disclosure documents have become a means to circumvent liability by having corporate attorneys formulate broad based disclaimers rather than trying to provide investors with

tional rather than the rational investor, investors and sophisticated analysts are not properly protected by the securities laws.[324]

3. *Inability to Reduce Systemic Risk Created by Structured Products*

"The severe recession that began in 2008 appears to have been caused, at least in part, by the same failure of financial regulation that contributed substantially to the Great Depression more than seventy-five years earlier."[325] Congress's choice in the 1930s to pursue a disclosure-based rather than a merit-based philosophy to the federal securities laws coupled with heavy deregulation and increased exemptions created a regulatory environment that was not capable of mitigating the extreme amount of systemic risk created by securitization.[326]

Part II's discussion of the financial crisis and its causes provides clear evidence that the securities laws are flawed and need to be reformed.[327] Gambling law, given its applicability to structured product regulation as established in Part III and its effectiveness in deterring the negative externalities associated with the regulated activity as established in Part IV, can be used as a rough framework to reform the securities laws.[328] By utilizing gambling law as a framework to regulate structured products, the government can mitigate the externalities created by the abuse of securitization while maintaining the intended benefits of structured investments.[329]

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meaningful information. *See* Ripken, *supra* note 157, at 160-63 (explaining problems with corporate disclosures).

324. *See* Hazen I, *supra* note 10, at 401-18 (criticizing disclosure philosophy). *See* Ripken, *supra* note 157, at 160-63 (detailing problems with disclosure philosophy).

325. Morrissey, *supra* note 8, at 647.

326. *See* Hal S. Scott, *An Economy in Crisis: Law, Policy, and Morality During the Recession: Article I: Suggestions for Regulatory reform: The Reduction of Systemic Risk in the United States Financial System*, 33 HARV. J.L. & PUB. POL'Y 671, 672-75 (describing abuses of investments causing financial crisis). Systemic risk is the risk that failure of one significant financial institution can cause or contribute to the failure of other significant financial institutions as a result of their linkages to each other. *See id.* (defining and explaining systemic risk).

327. For a discussion of the financial crisis and the role of structured products, see *supra* notes 26-138 and accompanying text.

328. *See* Scott, *supra* note 326, at 672-75 (demonstrating that with proper oversight sub-prime mortgage market crisis could have been mitigated).

329. For an analysis of how gambling law can be used to effectively revise the securities laws, see *infra* notes 331-408 and accompanying text.

V. APPLYING GAMBLING LAW TO REGULATE STRUCTURED PRODUCTS

A. Investment Banks as Architects of Their Own Destruction

> *Skyrocketing markets that depend on purely psychic support have invariably succumbed to the financial law of gravitation. Unsustainable prices may persist for years, but eventually they reverse themselves. Such reversals come with the suddenness of an earthquake; and the bigger the binge, the greater the resulting hangover. Few of the reckless builders of castles in the air have been nimble enough to anticipate these reversals perfectly and escape without losing a great deal of money when everything came tumbling down.*[330]

For the past decade, investment banks, as the architects of their own destruction, engineered a mortgage market bubble that was simply unsustainable.[331] Placed upon seemingly stable fault lines, the housing market was perceived as an indestructible foundation for the construction of structured products.[332] Once the tectonic plates shifted, however, and the earthquake began, the foundation of the housing market crumbled, the castles in the sky succumbed to the financial laws of gravity, and not even the mighty investment banks were nimble enough to avoid the tumbling wreckage.[333] The quake shook the very understructure of our economy, tearing down the value of homes, devastating employment rates, bankrupting businesses, shattering the stock market, and leaving the U.S. economy and American citizens to toil in the rubble.[334]

As with all major earthquakes, precursor signals preceded the mortgage market quake.[335] Unfortunately for the U.S. economy, however, these precursor signals went unnoticed or were simply ig-

330. BURTON G. MALKIEL, A RANDOM WALK DOWN WALL STREET: THE TIME-TESTED STRATEGY FOR SUCCESSFUL INVESTING 4 (1981).

331. For a discussion of the creation of the mortgage market bubble, its subsequent collapse, and the resulting financial crisis, see *supra* notes 26-56 and accompanying text.

332. For a discussion of the widespread perception that structured products, especially the senior tranche, were extremely safe investments, see *supra* notes 93-96 and accompanying text.

333. For an analysis of the underlying causes of the financial crisis, and the resulting externalities, see *supra* notes 56-138 and accompanying text.

334. For a brief discussion of the economic effects of the financial crisis, see *supra* notes 26-31 and accompanying text.

335. *See* Max Wyss, *Second Round of Evaluations of Proposed Earthquake Precursors,* 149 PURE AND APPLIED GEOPHYSICS 1, 1 (1997), *available at* http://www.springerlink.com/content/h53502g6244q2l66/fulltext.pdf ("Currently this List contains five cases of precursors: (1) foreshocks, (2) preshocks, (3) seismic quiescence before major aftershocks, (4) radon decrease in groundwater, and (5) ground

nored.[336] The rapid and unprecedented expansion of household and consumer debt, sub-prime lending, and structured product transactions, were either not perceived as a legitimate risk or were ignored by the financial industry because of the transaction fees they were achieving through these practices.[337]

The creation of price bubbles exposes the economy to high levels of systemic risk, especially when financial institutions integral to the stability of the economy, such as investment banks, are susceptible to the risk of a price bubble's collapse.[338] In the past three decades, Congress and the SEC progressively deregulated the financial industry.[339] By creating broad based exemptions, especially those for privately placed securities, Congress and the SEC afforded investment banks the freedom to abuse structured products.[340]

Additionally, the irrationalities of individual and institutional investors assumed major roles in providing the psychic support that created these pricing bubbles.[341] Without the support of seemingly continuous investor demand for structured products, the price bubble would not have reached such unsustainable levels.[342] The Securities Laws failed to prevent the financial crisis because the government-established exemptions undercut the minimal and flawed protection that the existing regime afforded investors and by doing so sacrificed the stability of our capital markets and economy.[343]

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water level increase."); *see also* Mendales, *supra* note 11, at 1388-92 (outlining economic indications that severe economic collapse was brewing).

336. *See* Mendales, *supra* note 11, at 1388 (asserting that economic indications of financial crisis went unnoticed).

337. *See id.* at 1388-91 (outlining reasons why indications were ignored or unnoticed).

338. *See* Scott, *supra* note 326, at 673-79 (defining systemic risk as "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").

339. *See* Morrissey, *supra* note 8, at 653-58 (analyzing exemptions that allowed investment banks to abuse securitization, create large amounts of systemic risk and bring U.S. economy into recession).

340. *See id.* (illustrating lack of oversight of securitization).

341. For an analysis of the irrationalities that investors as well as gamblers exhibit, see *supra* notes 203-233 and accompanying text.

342. *See* Wilmarth, *supra* note 6, at 969-71 (demonstrating investment banks' desire to collect many transaction fees by innovating new financial instruments to structure and sell).

343. *See* Morrisey, *supra* note 8, at 649-50 (explaining primary flaws in securities laws). Morrissey posits that:

> By adopting disclosure as the underlying philosophy of the federal securities laws, the framers of that legislation put too much faith in the prudence of investors and the self-policing mechanisms of the capital

With all financial meltdowns, however, a vital opportunity for financial reform presents itself; an opportunity to rectify prior wrongs and an opportunity to secure the future health of the United States economy.[344] "The choice of the best regulatory structure for the markets is influenced by the ways in which we look at the market structure and *the behavior of market participants*."[345] "A gambling rationale . . . make[s] regulators and policy-makers consider factors that traditionally have not been in play in determining regulatory schemes."[346] Gambling law provides a rough, yet applicable framework that can effectively decrease the externalities posed by structured products, address the irrationalities exhibited by individual and institutional investors, and reduce systemic risk created by the securitization process.[347]

B. A "Rational" Framework

1. *Overview*

The devices that states employ to regulate gambling institutions include the following: controlling the licensing of gambling enterprises; monitoring the daily operations of gaming organizations; restricting the hours of operations; limiting who may participate; disallowing gambling on margin; prohibiting gambling institutions from offering certain amenities; broadly taxing gambling revenues; and controlling an institution's right to advertise.[348] These regulatory devices provide state gaming agencies with the ability to closely monitor and strictly regulate all aspects of gambling to ensure compliance with all the aforementioned standards and to preserve the integrity and health of the surrounding com-

> markets. As such they passed up the opportunity to exercise more meaningful control over the quality of issued securities by a regime of merit regulation. The weaknesses in such a half-measured approach were compounded when even that flawed system of financial regulation was undermined by an expansion of the exemptions to its central requirement, ie., that securities first be registered before they are sold.

Id. at 649 (internal citations omitted).

344. *See* Mendales, *supra* note 11, at 1360-61 (2009) (acknowledging imperative need "to analyze the causes of a breakdown in the intended function of protective law after its occurrence, and to propose changes in the law to prevent it from recurring"); David Leonhardt, *The Big Fix*, N.Y. TIMES, Feb. 1, 2009, at MM22 (quoting President Obama's Chief of Staff Rahm Emanuel as stating "you never want a serious crisis to go to waste").

345. Hazen I, *supra* note 10, at 397 (emphasis added).

346. *Id.* at 410.

347. For a discussion of gambling regulation, see *supra* notes 242-267 and accompanying text.

348. For a discussion of gambling regulatory devices, their purposes, and their effectiveness, see *supra* note 242-267 and accompanying text.

munity and economy.[349] Similar standards should be adopted to regulate structured products in order to increase economic stability.[350]

To ensure the reduction of systemic risk and increase economic stability, securitization regulation should be altered in the following ways: (1) a single, unified administrative agency should be created to govern all participants and transactions in the financial markets; (2) regulatory gaps, such as the private-placement exemption, should be filled; (3) structured products should be limited to legitimate hedging transactions; (4) margin requirements should be imposed upon all structured product transactions; (5) systemically important financial institutions that participate in structured products should be subject to greater capital and liquidity requirements; (6) credit rating agencies and broker-dealers should be regulated according to strict licensing guidelines set forth by the federal government; (7) programs designed to educate investors about the risks that accompany structured products should be established; (8) tax incentives should be established to deter irrational investing; and (9) advertisement of investing activities, especially low-cost securities, should be restricted or eliminated.[351]

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349. *See* Hurt, *supra* note 20, at 374 (demonstrating strictness of gambling regulation by stating that "many gambling activities and investing activities can be described equally as speculation . . . . Notwithstanding this reality, investing is an activity that the law supports and encourages, but gambling is an activity that the law at least nominally discourages and at most prohibits"); s*ee also* Hazen I, *supra* note 10, at 375-80 (recognizing disparate regulatory treatment of investing and gambling).

350. *See generally* Joshua, *Ruby, Sound and Fury, Confused Alarms, and Oversight: Congress, Delegation, and Effective Responses to Financial Crises*, 47 HARV. J. ON LEGIS. 209, 209-52 (2010) (outlining policy changes prompted by financial crisis); s*ee also* SEC Proposed Rule, Disclosure for Asset-Backed Securities Required by Section 943 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, 75 Fed. Reg. 62718-01 (2010) (proposing rule that would require "securitizers of asset-backed securities to disclose fulfilled and unfulfilled repurchase requests across all transactions . . ."). Requiring disclosures associated with the purchase or sale of asset-backed securities is necessary to cure the problems with the securitization process; however, this is not enough and more paternalistic measures should be adopted to ensure the stability of the U.S. economy.

351. For an analysis of how structured product regulation should be altered, see *infra* notes 352-408 and accompanying text.

2. *Providing Consistent Operational Oversight: Consolidating Regulatory Duties for Structured Products and Removing Regulatory Gaps*

Legalized gaming enterprises are subject to intense scrutiny from state gaming agencies.[352] Meanwhile, structured products were exempt from regulatory oversight.[353] Even if structured products had been subject to the securities laws, mere disclosures would be unlikely to have mitigated the externalities created by securitization in light of investor irrationalities.[354] In light of these biases, a more paternalistic approach to securities regulation and the regulation of structured products is warranted and can effectively decrease the systemic risk created by these investments.[355]

To ensure consistent operational oversight of the financial markets and structured products, a single, unified administrative agency should govern all participants and transactions in the financial markets.[356] The consolidation and harmonization of administrative agencies governing varying facets of financial markets, institutions, and exchanges would enable open communication between many financial regulators, increase efficiency of the administrative agencies' aggregate actions, and breed consistency and predictability into the legal framework governing the financial sec-

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352. *See* Rose, *supra* note 246, at 275-90 (acknowledging pervasive operational control state gaming agencies exert over gambling enterprises in order to maintain integrity of gambling operation, surrounding community and economy). For an overview of the gambling laws and their strict oversight, see *supra* notes 242-267 and accompanying text.

353. *See* Rose, *supra* note 246, at 275-90 (explaining results of strong operational control).

354. *See* Morrissey, *supra* note 8, at 684 ("merit review [is] premised on the belief that disclosure alone [is] insufficient."). For a discussion of the limitations of disclosure-based regulation, see *supra* notes 314-328 and accompanying text.

355. *See* Hazen I, *supra* note 10, at 396-97 (asserting that securities regulation could benefit from more paternalistic approach to regulation). Hazen posits that:

> To some extent, any form of market regulation is paternalism, but paternalism that may well be justified. One of the longtime premises of securities regulation is that investors need protection not only against those who would take advantage of them, but also against themselves. . . . The fact that regulation is protectionist and therefore to some extent paternalistic is not a bad thing.

Id. (internal citations omitted).

356. *See* John C. Coffee, Jr., *Competition Versus Consolidation: The Significance of Organizational Structure in Financial and Securities Regulation*, 50 BUS. LAW. 447, 447-84 (1995) (asserting that consolidation of financial regulatory agencies provides more consistent and efficient regulatory oversight than competition among multiple financial regulatory agencies).

tor.[357] Integrated cooperation between, and consolidation of, the SEC, CFTC, Federal Deposit Insurance Corporation ("FDIC"), the Federal Reserve Board, and the Office of the Comptroller of Currency ("OCC") into a single, cabinet-level department called the Financial Oversight & Regulatory Department ("FORD") would provide the consistent operational oversight of the financial markets that the U.S. economy needs.[358]

Moreover, the creation of an "oversight council," within FORD, designed to mitigate the creation of systemic risk is justified given the inability of the markets to account for and eliminate systemic risk.[359] An oversight council with the flexibility to regulate financial institutions according to the level of risk that institution may be assuming or imposing on the U.S. economy would diminish the amount of systemic risk created by these institutions.[360] Like gambling agencies, this oversight board should have broad latitude to commence institutional stress testing, impose higher capital requirements, dismiss executive officers or directors, restrict executive compensation, impose leverage limits, implement liquidity requirements, and prohibit investment transactions that lack merit or pose a significant risk to adversely affect the economy.[361] With this authority, a competent oversight board can effectively combat investor irrationalities and dilute systemic risk.[362]

Lastly, to ensure consistent operational oversight, regulatory gaps, such as the private-placement exemption, need to be filled.[363] Indeed, as the Chairwoman of the FDIC stated "[t]he principal en-

357. *See id.* at 447 ("New developments in rapidly evolving markets, it is argued, require a consolidation of agencies to generate broader perspective, to create a 'level playing field,' and to end the possibility of a 'race to the bottom'.").

358. *See id.* (outlining Chicago Mercantile Exchange (CME) proposal of consolidating host of financial administrative agencies into "one giant mega-regulator"). The Financial Oversight & Regulatory Department ("FORD") is a hypothetical administrative agency that represents the fictitious consolidation of many financial administrative agencies into one, cabinet-level department.

359. *See* Scott, *supra* note 326, at 726-30 (arguing that financial markets and institutions require greater oversight in order to function properly).

360. *See id.* (noting benefits that increase of oversight may have on stability of U.S. economy).

361. *See id.* (summarizing functions that could be afforded to government in order to reduce, externalities, systemic risk and irrationalities created by investment banking practices).

362. *See id.* (asserting that with adopted procedures systemic risk creation would be limited).

363. *See* Reza Dibadj, *Four Key Elements to Successful Financial Regulatory Reform*, 6 HASTINGS BUS. L.J. 377, 385-86 (2010) (explaining that "[t]here are many examples of actors and products that have 'fallen through the cracks' of regulatory oversight: mortgage brokers, hedge funds, and derivative instruments such as credit default swaps").

ablers of our current difficulties were institutions that took on enormous risk by exploiting regulatory gaps between banks and nonbank shadow financial system, and by using over-the-counter derivative contracts to develop volatile and potentially dangerous products."[364] These gaps and exemptions, allow opportunity for abuse, and must be eliminated in order for investors to truly have confidence in structured product investments, and to dilute the prospect of another financial crisis.[365]

3. *Controlling Credit Agencies and Broker-Dealers through Licensing*

Broker-dealers, including investment banks, should be strictly regulated through the use of government licensing to decrease systemic risk created by these entities. Gaming agencies have broad discretion to grant, hold, or refuse licenses to applicants who wish to carry on a gambling enterprise.[366] An applicant must pass background checks, be deemed financially responsible, and have a requisite level of business competence.[367] Although, there is a similar regulatory structure existing for broker-dealers and investment banks, the stringency should be increased to match the potency of gaming licensing procedures to ensure honest and candid brokering practices.[368] With increased barriers to entry and greater government authority to revoke licenses to sell securities or structure

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364. Sheila C. Bair, Op-Ed, *The Case Against a Super-Regulatory*, N.Y. TIMES, Sept. 1, 2009, at A29.

365. *See* Dibadj, *supra* note 363, at 385 (asserting need to eliminate regulatory gaps); Ruby, *supra* note 350, at 223-24 (explaining gaps in securities laws and proposing various solutions to fill gaps). The SEC proposed a rule to increase the net worth standard for Accredited Investors, which would limit the amount of institutions or individuals that would be able to use these exemptions. *See* SEC Proposed Rule, Net Worth Standard for Accredited Investors, 76 Fed. Reg. 20 (Jan. 31, 2011) (proposing to require "the definitions of 'accredited investor' in our Securities Act to exclude the value of a person's primary residence for purposes of determining whether the person qualifies as an 'accredited investor' on the basis of having a net worth in excess of $1 million"). This proposed rule limits only a small proportion of investors as most institutional investors eclipse the $1 million net worth requirement easily. *See* Dibadj, *supra* note 363, at 385 (explaining regulatory gaps and their consequences).

366. *See* Rose, *supra* note 143, at 267-75 (outlining stringent licensing procedures state gaming agencies require applicants to endure before granting them license to operate gambling enterprise).

367. *See id.* (explaining financial, cognitive, and ethical requirements applicants must satisfy in order to be afforded license to operate gambling enterprise).

368. *See* Gabaldon, *supra* note 20, at 278 (acknowledging regulatory scheme securities laws adopted for licensing to brokers and investment banks and indicating that law could be improved).

financial products, the merits of investment transactions would likely increase.[369]

Strict control of licensing should also be used to ensure independent, third-party, rating agencies with the requisite business acumen and resources to properly grade structured products so that they accurately reflect the level of risk they actually pose to the investors.[370] Additionally, government licensing should entail close monitoring of rating agency's compensation as to prevent the agencies from issuing favorable ratings in order to receive increased compensation.[371] Thus, governmental licensing could effectively eliminate the conflict of interests rating agencies faced, and ensure unbiased and accurate credit ratings of structured products.[372]

4. *Limiting Market Participants*

Structured products transactions should be limited to legitimate hedging transactions. Gambling regulation imposes limits on who is allowed to participate in gaming activities and has broad discretion to refuse those privileges.[373] Gaming agencies or gambling enterprises limit gambling to people of certain age and can deny their services to intoxicated participants and compulsive gamblers.[374] Similarly, securities regulation is practically limited to

369. *See id.* (implying that with increased stringency of licensing procedures investments would be less likely to be fraudulent).

370. *See* Lynch, *supra* note 98, at 230-49 (explaining why credit agencies might issue inaccurately high credit ratings, how these credit ratings influenced institutional investors to invest large sums of money into structured products, and how regulation could address problems related to inaccurately high credit ratings); SEC Proposed Rule, Issuer Review of Assets in Offerings of Asset-Backed Securities, 76 Fed. Reg. 16 (Jan. 26, 2011) (proposing to "require any issuer registering the offer and sale of an asset-backed security ("ABS") to perform a review of the assets underlying the ABS" and disclose nature of their findings and conclusions).

371. *See id.* at 247-49 (acknowledging that investment banks often paid credit rating agencies' compensation and as a result, credit rating agencies were more likely to afford investment banks' structured products high credit ratings in order to ensure investor interest).

372. *See id.* (suggesting framework to address conflict of interests that affected credit rating agencies independent valuations). Lynch notes that "credit rating agencies are sensitive to the needs and desires of their paying clients - the issuers [of the securities]." *See id.* at 246 (recognizing main conflict of interest affecting credit rating decisions).

373. *See* Rose, *supra* note 246, at 267-300 (detailing gaming agencies broad authority to decide who may participate in gambling activities).

374. *See* GNOC. v. Aboud, 715 F. Supp. 644, 655 (D.N.J. 1989) (holding that casino has duty to refrain from knowingly allowing intoxicated patrons to gamble); Krentzman, *supra* note 260, at 1269 (1996) (explaining arguments in favor of extending liability for intoxicated patrons to casinos); Aronovitz, *supra* note 258, at 200-02 (noting Missouri Gaming Commission's voluntary exclusion program that

adults because of the capital and sophistication requirements.[375] Moreover, structured products are limited to investors who meet specified net-worth requirements.[376] Additional restrictions, however, should be implemented.[377]

Structured products were innovated largely to enable market participants to hedge against potential losses and to allocate reciprocal risks to other hedging parties.[378] Derivatives trading and structured product transactions, however, have largely become mediums affording speculators opportunities to bet on the future value of certain assets.[379] While speculators are integral to the liquidity of these markets, the purpose of these financial innovations must be maintained.[380] Thus, the securities laws should require prerequisite approval of these transactions in order to ensure that at least one party to the transaction has a legitimate hedging motive.[381]

Securities regulation should require that the parties rebut a presumption that they are mere speculators before the transaction may commence.[382] Once determined that one party has a legitimate hedging purpose, that party should be required to prove that the amount the party is attempting to hedge is comparable to the protection necessary to offset potential losses from another venture.[383] Requiring a hedging party, and limiting the hedging

requires casinos to deny participation to compulsive gamblers and recognizing minimum age requirements for gambling in all jurisdictions).

375. *See* Gabaldon, *supra* note 20, at 279 (noting margin requirements and suitability of investments as factors broker-dealers impose upon investors).

376. *See* Morrissey, *supra* note 8, at 655 (explaining that structured products were only offered to investors who were "able to fend for themselves because of their wealth and sophistication").

377. *See* Hazen I, *supra* note 10, at 377, 437 (acknowledging that many financial instruments, including structured products, were created in order for industry professionals to hedge against risk).

378. *See id.* (discussing hedging purposes of structured products as well as other derivative investments).

379. *See id.* at 435(asserting that although created for hedging purposes, structured products are subject to abuse by speculators).

380. *See id.* at 436 (noting functions speculators serve within capital markets but noting volatility they create).

381. *See id.* at 421 (proposing that maintaining one investor as legitimate hedger reduces systemic effect of that transaction).

382. *See id.* at 416-18 (drawing analogy between insurance and derivatives trading). Hazen posits that: "the law in essence sets up a presumption that an insurance contract is a wager on the occurrence or nonoccurrence of a particular contingency but allows the presumption to be rebutted by demonstrating an insurable interest – 'proof of circumstances that negative the existence of a wagering intent."). *Id.* at 421.

383. *See id.* at 424 (explaining need for application of insurable interest doctrine to derivatives regulation to prevent problem of over-insurance beyond scope

party's position to what is necessary to offset downward risk, would substantially lower the possibility for the creation of a price bubble and greatly reduce market volatility and systemic risk.[384]

5. *Imposing Margin, Capital, and Liquidity Requirements on Structured Product Transactions*

Margin, capital, and liquidity requirements should be imposed upon investors and financial institutions that participate in structured product transactions. Gambling enterprises are substantially limited with respect to the amount of credit they can extend to patrons.[385] These limitations are intended to prevent participants from indebting themselves beyond recovery and to ensure stability of the local economy.[386] Similar to gambling law, margin requirements should be imposed upon structured investment transactions.[387] Institutional investors that become over-leveraged on a structured product transaction can easily be forced into insolvency with one bad transaction.[388] Implementing margin requirements can guard against these disastrous transactions and stabilize the economy by lowering insolvency rates.[389]

Additionally, financial institutions should be subject to greater capital and liquidity requirements to reduce systemic risk associated

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of anticipated losses). The CFTC has proposed position limits for derivatives, which are intended to limit the amount of money investors could spend on derivatives contracts. *See* Notice of Proposed Rulemaking, CFTC Position Limits, 76 Fed. Reg. 17 (2011) (stating that "the Commission shall proclaim and fix such limits on the amount of trading which may be done or positions which may be held by any person as the Commission finds are necessary to diminish, eliminate or prevent such burden"). Although this is a step in the correct direction, this will not effectively diminish market volatility unless derivative trading is limited to the amount necessary to hedge against industry risk, on an ad-hoc basis. *See* Hazen I, *supra* note 10, at 424 (emphasizing need to limit market volatility).

384. *See* Hazen I, *supra* note 10, at 424 (arguing that limitations on hedger's transactions to reflect actual risk of loss would reduce market volatility and systemic risk).

385. *See* Gabaldon, *supra* note 20, at 282 (analyzing gambling regulation and its limitations on how much credit can be extended to gamblers).

386. *See id.* (noting purposes of such limitations is to limit negative externalities posed from indebted gamblers).

387. *See* Hazen I, *supra* note 10, at 426-30 (asserting that margin requirements reduces risk of individual and institutional investors becoming insolvent because of overly leveraged positions).

388. *See id.* (explaining severe risk posed by leveraged positions and exposure to structured investments); Aaron Lucchettie & Serena NG, *Abacus Deal: As Bad as They Come*, WALL ST. J. (Apr. 20, 2010), http://online.wsj.com/article/SB10001424052748703757504575194521257607284.html (outlining Abacus deal that produced losses of over one billion dollars).

389. *See id.* (asserting that margin requirements can help investors avoid severe losses).

with the practices of these institutions.[390] The current capital requirements proved to be grossly inadequate, allowing investment banks to achieve a thirty-to-one debt-to-equity ratio.[391] Indeed, insufficient capital and liquidity was a significant cause of the failure of three major investment banks at the inception of the financial crisis.[392] With increased capital and liquidity requirements, financial institutions would be better situated to survive and recover from losses and acute stress scenarios.[393] Requiring financial institutions to reserve a greater amount of capital and liquidity increases their ability to deal with large losses and accordingly reduces systemic risk in the economy.[394]

6. *Educational Efforts to Reduce Investor Irrationalities*

Programs designed to educate investors about the risks that accompany structured products should be established to educate institutional and individual investors about the risks that accompany structured product transactions. State gaming agencies provide comprehensive educational programs to educate gambling participants concerning the risks involved in various gambling activities.[395] These educational programs have resulted in a decrease in irrational gambling and reduced the negative externalities associated with gambling activities.[396] Efforts to educate individuals and insti-

390. *See* Hal. S. Scott, *Reducing Risk Through Reform of Capital Regulatio*n, 13 J. INT'L ECON. L. 763, 763-78 (2010) (positing that capital and liquidity requirements can aid in reducing economy-wide risk); Notice of Proposed Rulemaking, Department of Treasury Risk-Based Capital Guidelines: Market Risk, 76 Fed. Reg. 1890-01 (2011) (proposing revisions to market risk capital rules "to modify their scope to better capture positions for which the market risk capital rules are appropriate; reduce pro-cyclicality in market risk capital requirements; enhance the rules' sensitivity to risks that are not adequately captured under the current regulatory measurement methodologies; and increase transparency through enhanced disclosures").

391. *See* Scott, *supra* note 390, at 765-66 ("The SEC's Basel II-based rules permitted the top five major investment banks to achieve leverage of over 30 to 1.").

392. *See id.* at 767 ("Insufficient capital was a significant cause of the failure of Lehman Brothers and Bear Stearns, and also played a major role in forcing Merrill Lynch to sell itself to Bank of America.").

393. *See id.* at 771-72 (outlining possible liquidity rules that would reduce systemic risk).

394. *See id.* at 778 ("However elusive a concept 'systemic risk' may be, capital requirements reflecting true balance sheet values and market risks are indisputably necessary to shore up a financial system against the threat of a chain-reaction collapse arising from a bank or large financial institution's inability to meet its obligations.").

395. *See* Gabaldon, *supra* note 20, at 280 (explaining education efforts of gambling regulation and benefits of such education).

396. *See id.* (illustrating how educational efforts can be effective in mitigating investor irrationalities and market volatility).

tutional investors must become a more prominent element of securities and structured product regulation.[397] Investors need to be better educated concerning market fundamentals, valuation of securities, and risks associated with various investments.[398] In light of widespread investor irrationalities and the complexities of various securities, investors often enter into transactions under flawed assumptions and create volatility and inefficiencies in the markets.[399] Increased educational efforts could have a potential stabilizing effect on the economy, reduce volatility, and decrease the potential creation of artificial price bubbles that will inevitably approach equilibrium.[400]

7. *Taxing to Influence Rational Investing Behavior*

Tax incentives should be established to deter irrational investing and the creation of systemic risk. The proceeds of gambling are heavily taxed to provide revenue and funding for the continued regulation of gambling enterprises and activities.[401] Securities laws could adopt similar provisions in order to incentivize long-term investment practices rather than short-term trading, and can influence investors, especially institutional investors, to assume less risk

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397. *See* George Nnona, *In the Wake of the Mortgage Bubble and Financial Crisis: What Should Securities Regulation Become?*, 79 UMKC L. REV. 31, 56-57 (2010) (arguing that securities regulation should educate investors in order to protect investors and stabilize economy); Henry T. C. Hu, *Faith and Magic: Investors Beliefs and Government Neutrality*, 78 TEX. L. REV. 777, 777-882 (explaining investor irrationalities and governmental aggravation of those irrationalities); Dibadj, *supra* note 363, at 388 (emphasizing need for investor education). Dibadj stated that:

> [l]ike it or note, almost every working adult is now an investor. Yet too many customers are making risky, life-changing decisions without having sufficient knowledge of financial basics such as the time value of money or the implications of credit. We thus need to place new emphasis on financial education, perhaps beginning as early as elementary or middle school.

Id.

398. *See* Nnona, *supra* note 397, at 56 ("Individuals should be allowed to take risk, but they should be better educated about the nature of risk and the indeterminacy of value.").

399. *See* Hu, *supra* note 397, at 779 ("The Securities and Exchange Commission and the Federal Reserve find themselves in an apparent dilemma between respecting market primacy and confronting investor enthusiasm for equities.").

400. *See id.* at 780 (insinuating that investor education can provide economic stability). Hu notes that the current practice of administrative agencies "have distorted the thinking of even sophisticated investors and created an unnecessary amount of moral hazard." *Id.*

401. *See* Gabaldon, *supra* note 20, at 281 (discussing tax treatment of earnings from gambling enterprises and their function of maintaining strict regulation of industry to maintain its integrity).

by entering into safer transactions.[402] Securities laws can do this by implementing what is known as a Pigovian taxation theory, or a sin tax, that aims "to correct the negative externalities of market activities."[403] A Pigovian tax can effectively deter irrational investing and the creation of systemic risk.[404]

8. *Restricting Advertising of Investing*

Advertising of investing and low-cost securities in particular should be restricted to reduce investor irrationalities. State gaming agencies closely monitor the placement and content of advertising by gambling enterprises.[405] Securities regulation could adopt similar practices to reduce the influence on investors to invest for fun or in an attempt to beat the market.[406] As discussed earlier, this irrational behavior can lead to market volatility and systemic risk.[407] Restricting advertising and controlling the content of the advertisements may reduce the level of irrational investing decreasing market volatility and systemic risk.[408]

VI. CONCLUDING REMARKS

On July 21, 2010, President Barack Obama signed the Dodd-Act vying that this Act will spark the reform necessary to mitigate abuses within the financial system.[409] The Act, however, is only the starting point; effective implementation of this Act is necessary to cure the primary flaws of the current regulatory framework.[410]

402. *See* Mary Ann Liebert, Inc. & Bret F. Meich, *The Power to Destroy: The Psychology of Gaming Taxation*, 12 GAMING L. REV. & ECON. 458, 461-63 (outlining ways taxes can influence regulation).

403. *Id.* at 462.

404. *See id.* at 463 (recognizing ability to influence certain behavior in order to reach desired outcomes through taxation).

405. *See* Gabaldon, *supra* note 20, at 281 (illustrating effect advertising can have on gambling and investing).

406. *See id.* (noting that control of investment advertisements could afford market stability).

407. *See id.* (indicating advertising's ability to influence behavior).

408. *See id.* (explaining that if control of advertising can influence investors to act rationally, markets will suffer less systemic risk and volatility).

409. *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. Law 111-203 (July 21, 2010) (reforming securities laws); *See also* Barack Obama, *Remarks by the President at Signing of Dodd-Frank Wall Street Reform and Consumer Protection Act*, White House (July 21, 2010), http://www.whitehouse.gov/the-press-office/remarks-president-signing-dodd-frank-wall-street-reform-and-consumer-protection-act.

410. *See* Commissioner Luis A. Aguilar, *An Insider's View of the SEC: Principles to Guide Reform*, 27 NO. 1 CORP. COUNS. Q. ART. 1, 1-6 (2011) (outlining SEC's goals for reform). Commissioner Aguilar noted that "[n]ow that the Dodd-Frank Act is law, the focus has moved from Congress to the regulators, including the SEC, to

Congress has delegated this challenge to various administrative agencies including the SEC, CFTC, and Federal Reserve.[411] These agencies have many issues to address, one of the most important being regulation of securitization and the structured products created through this process.[412]

The current Securities Laws fail to properly oversee the securitization process and do not account for the irrationalities institutional and individual investors exhibit.[413] The current framework allowed systemic risk to build up within the economy and without proper regulatory intervention this will continue.[414] Applying gambling law concepts to the regulation of securitization and structured products could aid in the dilution of systemic risk pervasive in the U.S. economy and address the inadequacies of the Securities Laws.[415] Accordingly, gambling law can serve as an applicable and effective framework to properly reform the Securities Laws and the regulation of securitization.[416] With an increased focus on investor irrationalities and systemic risk reduction, the prospect of another severe financial crisis would become less worrisome.[417]

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fill in the details and to write rules that will make financial reform a reality. *See id.* (emphasizing role of regulators); *see* Proposed Rules to Implement Dodd-Frank Act, COMMODITY FUTURES TRADING COMMISSION, http://www.cftc.gov/LawRegulation/DoddFrankAct/Dodd-FrankProposedRules/index.htm (last visited Jan. 18, 2011) (listing rules CFTC are proposing for implementation of Dodd-Frank Act).

411. *See* Chairman Gary Gensler, *Remarks before the Institute of International Bankers,* U.S. COMMODITIES FUTURES TRADING COMMISSION (Oct. 21, 2010) http://www.cftc.gov/PressRoom/SpeechesTestimony/ChairmanGaryGensler/opagensler-56.html (explaining that the Dodd-Frank Act "requires the CFTC and the Securities and Exchange Commission (SEC) to write rules within 360 days").

412. *See id.* ("The Dodd-Frank Act is very detailed, addressing all of the key policy issues. . . .").

413. For a discussion of the securities laws and an analysis of their failures to address investor irrationalities, the creation of systemic risk, and the mitigation of negative externalities, see *supra* notes 268-324 and accompanying text.

414. For an illustration of why financial reform is necessary, see *supra* note 268-324 and accompanying text.

415. For a discussion of gambling regulation and its ability to address externalities, systemic risk and gambler irrationalities, see *supra* notes 242-267 and accompanying text.

416. See *supra* notes 145-408 and accompanying text.

417. For a discussion of systemic risk, investors' irrationalities, and their propensity to cause financial crises, see *supra* notes 26-144 and accompanying text.

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