

THE INDIAN ANOMALY: RETHINKING CREDIT RATING AGENCY REGULATION FROM THE ECONOMIC PERSPECTIVE OF HYMAN MINSKY

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Abstract

Policymakers have blamed credit rating agencies for the recent financial crisis – but they could be wrong. India can aid in understanding whether the agencies can still be relied upon as private “gatekeepers” in financial markets, or whether public institutions must take primary responsibility. The economist, Hyman Minsky, advocated for robust public regulation and a limited role for private actors. India can be seen as an example of his theories. If India’s agencies cannot prevent speculative credit from causing future economic problems, the problems could suggest that more structural measures are necessary to counter instability, as Minsky predicted. Analyzing India and the credit rating agencies through the frame of Minsky’s economic theories offers insights into how best to reform financial regulation to prevent future economic collapse.

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INTRODUCTION	3
I. SETTING THE SCENE: WHAT'S NEXT FOR INDIA	6
A. Phase I: India as "Firmly On the Growth Expressway"	6
B. Phase II: India as "Gasping Elephant"	9
II. PANNING WEST: BLAMING CONFLICTED RATING AGENCIES FOR THE FINANCIAL CRISIS	11
A. Agencies as "Gatekeepers": The "Referee in the Debt Game"	12
B. Egregious Behavior: "Market Share, Market Share, Market Share"	14
1. Senate Subcommittee Investigation	15
2. Securities and Exchange Commission Staff Examinations	16
3. European Studies	17
C. Getting Here: "How Can You Miss So Badly"	18
1. Adopting "Issuer Pays" Without New Regulation	18
2. Securitization and Increased Competition	20
D. Blaming the CRAs: "A Watchdog Paid By the Persons They Are to Watch"	23
III. COUNTER-NARRATIVE: HYMAN MINSKY AND THE ENDOGENEITY OF CRISES	24
A. Minsky's Theories: The Economy "Generates a Financial Structure Susceptible to Financial Crises"	26
B. Predicting Minsky's Reaction to Regulating Credit Rating Agencies: "No Simple Answer to the Problems of our Capitalism"	28
C. Minsky's Vision of the Crisis: "Financial Regulation is Both Indispensable and Imperfect"	32
IV. SPOTLIGHT INDIA: CONFLICTED RATING AGENCIES AND DELIBERATE DEREGULATION	34
A. More Conflicts of Interest: Credit Rating Agencies in India	35
1. Soaring Market Values	35
2. Conflicts of Interest	36
3. Diversification	38
B. Adherence to Minskyian Paradigms: Indian Market Development	39
1. Market Liberalization and Increased Cash Flow: Minsky Phase 1?	39
2. Deregulation and Debt Accumulation: Minsky Phase 2?	42
3. Speculative Euphoria and Fragility: Minsky Phase 3?	44
CONCLUSION	48

INTRODUCTION

Recent developments in India lend themselves to two diverging forecasts of its future.¹ The first predicts sustained growth: the narrative begins with the country liberalizing its economy, continues to its strong performance during the peak of the recent global financial crisis, and anticipates an accelerating trajectory that will eventually overtake the West.² The second story ends differently: the economic bubble bursts, as India's financial indicators reverse and its development slows.³

At the intersection of the two opposing visions are six Indian credit rating agencies ("CRAs").⁴ They earned large profits in recent years, and grew more influential.⁵ As India's debt markets have grown and diversified, the CRAs have provided positive ratings to increasingly risky financial products.⁶

The accuracy of the Indian CRAs is relevant to a debate that has gained intensity in the West.⁷ One side has blamed the recent financial crisis on the payment model that domestic CRAs employ,⁸ in which the agencies charge the issuers of the products for the ratings.⁹ The arrangement misaligns incentives, by this argument, and causes the agencies to raise their ratings in order to attract and retain new clients.¹⁰ U.S. and European regulators have in large part accepted this explanation of unreliable credit ratings, some resulting in

¹ See *infra* Part I.

² See *infra* Part I.A.

³ See *infra* Part I.B.

⁴ See *infra* Part IV.A.

⁵ See *infra* Part IV.A.1.

⁶ See *infra* Part IV.B.3; Tarun Jain & Raghav Sharma, *Credit Rating Agencies in India: A Case of Authority without Responsibility*, 3 COMPANY L.J. 89, 106 (2008) (India), available at <http://ssrn.com/abstract=1111553> ("[T]he Indian CRAs have made their foray into rating [structured finance] products.").

⁷ See, e.g., Amadou N.R. Sy, *The Systemic Regulation of Credit Rating Agencies and Rated Markets*, IMF WORKING PAPER, June 2009 at 3 (Int'l Monetary Fund, WP/09/129, 2009), available at <http://www.imf.org/external/pubs/ft/wp/2009/wp09129.pdf>.

⁸ Douglas Wayne Arner, Kwong Wing Chau, Berry F.C. Hsu, Frederik Izak Hendrik Pretorius & Lifan Pu, *Regulating Credit Rating Agencies in Hong Kong: Lessons from the Global Financial Crisis*, 25 BANKING & FIN. L. REV. 361, 373 (2010).

⁹ Claire Hill, *Limits Of Dodd-Frank's Rating Agency Reform*, 31 No. 5 BANKING & FIN. SERVICES POL'Y REP. 13, 13 (2012) ("[T]he agencies are paid by the issuers and the issuers can threaten to take their business elsewhere if they cannot get high ratings").

¹⁰ See, e.g., Timothy E. Lynch, *Deeply and Persistently Conflicted: Credit Rating Agencies in the Current Regulatory Environment*, 59 CASE. W. RES. L. REV. 227, 256 (2009) (describing a study that demonstrated that the CRAs became less reliable in the period following their adoption of the "issuer-pays" model); See Hill, *supra* note 9, at 13 ("[T]he agencies have let themselves be bribed into giving high ratings even when such ratings are not warranted").

bank failures," and they have undertaken to reduce the conflict of interest.¹² Consequently, they have made few systemic changes, and they have not restricted trading of complex instruments, such as mortgage-backed securities.¹³

Others have found the response of the regulators too simplistic.¹⁴ They have put forward rival views,¹⁵ represented by the theories of the economist Hyman Minsky.¹⁶ Minsky hypothesized that unless the state imposed structural obstacles, economies would expand until they crashed.¹⁷ His writings suggested that simple – or “exogenous” – regulatory mechanisms, such as changing the way that CRAs are paid, could not substitute for robust public interventions on a structural – or “endogenous” level.¹⁸

¹¹ Aline Darbellay & Frank Portnoy, *Credit Rating Agencies Under The Dodd-Frank Act*, 30 No. 12 BANKING & FIN. SERVICES POL'Y REP. 1, 2 (2011) (“Lehman Brothers retained its investment-grade rating until a few days prior to collapsing”); EUROPEAN UNION COMMITTEE, HOUSE OF LORDS, 14TH REPORT OF SESSION 2008–09 HL PAPER 106–I, THE FUTURE OF EU FINANCIAL REGULATION AND SUPERVISION VOLUME I: REPORT, at 17 (U.K.) (“DG Markt explained that the regulation of rating agencies is a necessary reaction to their ‘massive failures’ revealed by the financial crisis. They described the conflicts of interest created when the issuers of a securitised bond pays for a rating, rather than the investor.”).

¹² See *infra* Part II.D.

¹³ See, e.g., Timothy J. Sinclair, *Credit Rating Agencies and the Global Financial Crisis*, 12 No. 1 ECONOMIC SOCIOLOGY (Max-Planck Institute for the Studies of Societies, Cologne, Germany), Nov. 2010 at 4, available at http://econsoc.mpihg.de/archive/econ_soc_12-1.pdf (“Although criticism of conflicts of interest may serve a useful political purpose, too much attention to issues at this level will produce complacency about the inherent volatility of global finance”); See *infra* Part III.

¹⁴ See, e.g., R. Michael Gadbaw, *Systemic Regulation of Global Trade and Finance: A Tale of Two Systems*, 13 J. INT’L ECON. L. 551, 552–55 (2010).

¹⁵ See, e.g., Justin Lahart, *In Time of Tumult, Obscure Economist Gains Currency*, WALL ST. J., Aug. 18, 2007. Academic economists including C.J. Whalen, L. Randall Wray, Paul Davidson, Riccardo Bellofiore and Joseph Halevi, along with other practitioners and journalists, have called the crisis a “Minsky moment”, see Alessandro Vercelli, *A Perspective on Minsky Moments: The Core of the Financial Instability Hypothesis in Light of the Subprime Crisis*, THE LEVY ECONOMICS INSTITUTE OF BARD COLLEGE WORKING PAPER NO. 579, Oct. 9, 2009 at 2 (2009).

¹⁶ Minsky, a Harvard-trained economist, taught on the faculties of Brown University, University of California at Berkeley, and Washington University in St. Louis, see Dimitri B. Papadimitriou & L. Randall Wray, *The Economic Contributions of Hyman Minsky: Varieties of Capitalism and Institutional Reform*, THE JEROME LEVY ECONOMICS INSTITUTE, WORKING PAPER NO. 217, Dec. 1997, at 1–3 (1997).

¹⁷ See *infra* Part III.A.

¹⁸ See *infra* Part III.C. See also, Jan Kregel, *Is This the Minsky Moment for Reform of Financial Regulation?* THE LEVY ECONOMICS INSTITUTE OF BARD COLLEGE WORKING PAPER NO. 586, Feb. 25, 2010 at 3 (2010) (“[R]egulation of the system cannot be effective if it is simply based on measures produced to remedy and reverse the conditions generated by

Observing developments in India offers insights for resolving this tension.¹⁹ It helps to illuminate whether private actors such as CRAs can be relied upon to regulate financial markets, so long as their incentives are aligned correctly,²⁰ or if public institutions must instead retain primary responsibility for governance.²¹

This paper presents India as a case study in order to contribute to the existing literature on the Western debate, identifying the CRAs not simply as private actors, but as “gatekeepers” that participate in regulation.²² The agencies controlled the flow of information about the quality of financial instruments and could influence public awareness of fraud.²³ Part I begins by describing the precarious position of modern-day India, with its past economic growth poised either to continue or to decline. The paper then establishes the role that CRAs have played in Western markets and the reasons for blaming their payment model for the recent financial crisis. Part III rebuts the argument and explains how an economist such as Hyman Minsky would have interpreted the causes of the crisis. Part IV introduces the Indian CRAs and points out both their similarities to Western agencies and their differences. It then sets out the proposal that India’s expanding debt markets and increased use of high-risk financial instruments can be seen as an example of Minsky’s theories. The theories would portend that the regulation of the Indian CRAs would not protect the country from future economic weakening.

The story of India awaits an ending. Though many variables interact, and diverse, legal, political, and cultural contexts shape the effects that rules have in different countries, India’s future could nevertheless offer some guidance.²⁴

the current ‘moment.’ It needs to reformulate the structure of the financial system . . . the current approach . . . [applies] cosmetic changes.”).

¹⁹ See *infra* Part IV.

²⁰ See, e.g., Howell E. Jackson, *Variation in the Intensity of Financial Regulation: Preliminary Evidence and Potential Implications*, 24 YALE J. ON REG. 253, 254–55 (2007) (discussing potential “capacity of market mechanisms to police certain activities more efficiently than government oversight.”).

²¹ Harry McVea, *Credit Rating Agencies, the Subprime Mortgage Debacle and Global Governance: the EU Strikes Back*, 59 INT’L & COMP. L.Q. 701, 702 (2010) (“CRAs became ‘important private makers of global public policy’ and were widely seen as key drivers of global governance . . .”).

²² See, e.g., *Turmoil in U.S. Credit Markets: The Genesis of the Current Economic Crisis: Hearing Before the S. Comm. on Banking, Housing, and Urban Affairs*, 110th Cong., 2nd Sess. 17 (2008) [hereinafter *The Genesis of the Current Economic Crisis Hearings*] (testimony of Eric Stein), available at http://www.banking.senate.gov/public/index.cfm?Fuseaction=Hearings&Hearing&Hearing_ID=6de8e10c-e115-4686-9e40-ebceeazf1cb6 (“The ratings industry became ‘the de facto watchdog over the mortgage industry.’”).

²³ See, e.g., Lynne L. Dallas, *Short-Termism, the Financial Crisis, and Corporate Governance*, 37 J. CORP. L. 265, 331 (2012).

²⁴ For a discussion of the embeddedness of rules, see, e.g., Dan Danielsen, *Economic Approaches to Global Regulation: Expanding the International Law and Economics Paradigm*, 10 J. INT’L BUS. & L. 23, 68 (2011).

If the economy rebounds, the growth could suggest that private “gatekeepers” such as CRAs can effectively regulate markets, rendering the destabilizing effects of India’s increased debt levels and use of complex financial products inconsequential. If so, then perhaps the West has correctly focused on “exogenous” reforms, such as mitigating conflicts of interest among CRAs, rather than seeking more systemic solutions. If, however, the Indian economy contracts, the reversal could suggest the need for the state to participate more meaningfully to counter behaviors that increase credit supplies and contribute to instability, as Minsky proposed.²⁵ Studying India’s future thus contributes answers to three overlapping questions: 1) how intensively financial markets should be regulated and by whom; 2) whether policing by private actors provides an efficient substitute for government oversight; and 3) the extent to which market forces discipline financial actors.

I. SETTING THE SCENE: WHAT’S NEXT FOR INDIA

This section presents evidence for two possible scenarios of India’s future. Over the past twenty-one years, the country has developed rapidly and integrated its economy with global markets.²⁶ More recently, however, its progress has appeared to slow, and a more pessimistic outlook has taken hold.²⁷ India’s future economic path remains uncertain.²⁸

A. Phase I: India as “Firmly On the Growth Expressway”²⁹

Financial reforms have transformed India.³⁰ Between 2004 and 2008, the economy grew by close to ten percent each year.³¹ Analysts at the investment bank Goldman Sachs predicted that the country would surpass the United States in GDP before 2050.³² Its upward trajectory has promised to lift millions

²⁵ See, e.g., McVea, *supra* note 21, at 702 (“[T]he use (and abuse) of credit ratings . . . has today cast a long shadow over the ability of these ‘gatekeepers to provide reliable signals upon which parties – investors, financial institutions and regulators – can make informed decisions.”); See Kregel, *supra* note 18, at 3 (“Effective proposals can only emerge from analysis of the longer-term structural changes from the point of view of Minsky’s financial fragility hypothesis.”).

²⁶ Afra Afsharipour, *Rising Multinationals: Law and the Evolution of Outbound Acquisitions by Indian Companies*, 44 U.C. DAVIS L. REV. 1029, 1035–36 (2011).

²⁷ See, e.g., *India’s Economy: A Bric Hits the Wall*, THE ECONOMIST, May 31, 2012.

²⁸ See, e.g., Victor Mallet, *India Struggles to Restore Its Fortunes*, FINANCIAL TIMES, Aug. 7, 2012.

²⁹ GOLDMAN SACHS, BRICS AND BEYOND 12 (2007).

³⁰ See Afsharipour, *supra* note 26, at 1054–55.

³¹ See, e.g., *Id.* at 1035–36.

³² See GOLDMAN SACHS, BRICS AND BEYOND, *supra* 29, at 11.

out of poverty,³³ and their increased consumption has seemed likely to integrate the country more closely with international markets.³⁴

India's economic leadership has extended along with its growth, as other countries have studied its strong performance during the financial crisis.³⁵ During the peak of the crisis in 2009, its GDP continued to increase by seven percent,³⁶ as companies listed themselves on Indian stock exchanges³⁷ and the capital markets posted record highs.³⁸ By 2010, the economy resumed a growth rate of close to ten percent.³⁹ By contrast, the American economy shrunk by 3.1% in 2009 and grew by only 2.4% in 2010.⁴⁰ The Indian central bank, the Reserve Bank of India ("RBI"), had loaned equity to private banks, relaxed their capital requirements, and delayed collecting on loans, while countering declines in the rupee, India's currency, by allowing expatriate Indians to maintain domestic deposits.⁴¹

This success underscored the accomplishments of two decades of economic liberalization.⁴² Beginning in 1991, India unshackled its closed economy by lowering trade tariffs and boosting exports.⁴³ Tariffs fell from 200% to fifteen percent, exports rose by a factor of 14, and trade increased by twenty-five percent.⁴⁴ The state retreated from many industries, increasing competition.⁴⁵ The stock markets rose as resurgent Indian companies sold shares to diverse international investors.⁴⁶

³³ *Rolls-Royces and Pot-Holes*, THE ECONOMIST, Oct. 22, 2011.

³⁴ K. G. Viswanathan, *The Global Financial Crisis And Its Impact on India*, 9 J. INT'L BUS. & L. 41, 46-47 (2010).

³⁵ *Id.* at 46.

³⁶ Afsharipour, *supra* note 26, at 1035-36; Erik Wulff & Kiran Lingam, *Franchising in India: A Brave New Frontier*, 29 FRANCHISE L.J. 248, 248 (2010).

³⁷ Viswanathan, *supra* note 34, at 47 (referring to foreign investment into the equity markets and rises in the Bombay Stock Exchange).

³⁸ Shardul Shroff, *Outlook on India 2010: Delivering on the Promise in Turbulent Times*, 1815 PLI/Corp 63, 65 (2010).

³⁹ World Bank, Database of GDP growth, available at <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>.

⁴⁰ *Id.*

⁴¹ *See, e.g., Pulling Every Lever*, THE ECONOMIST, Feb. 4, 2012.

⁴² Viswanathan, *supra* note 34, at 46-47.

⁴³ Sarita Mohanty, *Sarbanes-Oxley: Can One Model Fit All?*, 12 NEW ENG. J. INT'L & COMP. L. 231, 235 n.15 (2006).

⁴⁴ Viswanathan, *supra* note 34, at 48.

⁴⁵ *See, e.g., The Power and the Glory*, THE ECONOMIST, Oct. 22, 2011.

⁴⁶ *See, e.g., Mohanty, supra* note 43, at 236.

A unique and seemingly successful brand of capitalism has emerged.⁴⁷ Some state influence over the private sector has persisted, and politically-connected family firms predominate.⁴⁸ Resource limitations have propelled the companies to improvise affordable products, and Western competitors have sought to learn their techniques.⁴⁹ PepsiCo established a center in India to study their methods of “frugal innovation”.⁵⁰ Indian engineers won a contest sponsored by Renault-Nissan to contribute ideas for cutting costs.⁵¹

Ultimately, Indian companies have demonstrated their new strength by acquiring Western firms, and many observers have predicted a prosperous future both for them and for the broader Indian economy.⁵² In 2007, the Indian metals company Hindalco acquired American-Canadian Novelis for \$6 billion.⁵³ In 2008, Tata Motors paid \$2.3 billion to buy Jaguar and Land Rover from Ford.⁵⁴ The beverage arm of the Tata Group, Tata Tea, acquired the iconic British brand Tetley Tea,⁵⁵ and India’s Mahindra & Mahindra undercut the American market leader John Deere in sales of small tractors to American farmers.⁵⁶

⁴⁷ See *infra* text accompanying notes 48–51.

⁴⁸ See, e.g., *The Power and the Glory*, *supra* note 45; *The Bollygarchs' Magic Mix*, THE ECONOMIST, Oct. 22, 2011; *Adventures in Capitalism*, THE ECONOMIST, Oct. 22, 2011; Mohanty, *supra* note 43, at 235.

⁴⁹ The Hindi slang word, *jugaad*, is used to refer to the technique. See, generally, Reena Jana, *India's Next Global Export: Innovation*, BLOOMBERG BUSINESSWEEK, Dec. 2, 2009, available at http://www.businessweek.com/innovate/content/dec2009/id2009121_864965.htm; Karl Moore, *The Best Way to Innovation? - An Important Lesson from India*, FORBES, May 24, 2011, available at <http://www.forbes.com/sites/karlmoore/2011/05/24/the-best-way-to-innovation-an-important-lesson-from-india/>; Tim Ferguson, *Can 'Jugaad' Get to Core U.S. Problems?*, FORBES, Apr. 5, 2012, available at <http://www.forbes.com/sites/timferguson/2012/04/05/can-jugaad-get-to-core-u-s-problems/>.

⁵⁰ *Asian Innovation*, THE ECONOMIST, Mar. 24, 2012.

⁵¹ *Id.*

⁵² See *infra* text accompanying notes 52–56.

⁵³ Chidanand Rajghatta, *Novelis Acquisition Puts Indian Stamp on Every Coke, Budweiser Can*, TIMES OF INDIA, Feb. 14, 2007 (India), available at http://articles.timesofindia.indiatimes.com/2007-02-14/international-business/27870627_1_novelis-hindalco-shareholders-customers-on-four-continents.

⁵⁴ Heather Timmons, *Ford Sells Land Rover and Jaguar to Tata*, N.Y. TIMES, March 26, 2008.

⁵⁵ *Tetley Bagged by India's Tata*, BBC NEWS, Feb. 27, 2000, available at <http://news.bbc.co.uk/1/hi/business/658724.stm>.

⁵⁶ James Crabtree, *Mahindra Looks at International Acquisitions*, FINANCIAL TIMES, Apr. 15, 2012.

B. Phase II: India as “Gasping Elephant”⁵⁷

Other observers, however, have not expected the accomplishments to last.⁵⁸ Despite economic growth and increased prosperity, indications of future problems have emerged.⁵⁹

The Indian economy has no longer appeared to be insulated from the downturn in global markets.⁶⁰ In 2012, its growth fell to 5.3%, the lowest rate in seven years.⁶¹ Its dependence on borrowing foreign capital and on exporting to developed markets has left the country vulnerable to decreases in the supply of global credit and foreign demand.⁶²

Other financial indicators have also begun to change direction.⁶³ Inflation has risen to more than seven percent, leading to predictions of stagflation.⁶⁴ The rupee hit record lows against the dollar, shedding a fifth of its value in the past year.⁶⁵ Defaults by rated corporations hit a ten-year high,⁶⁶ and recent studies predicted that India could switch places with Indonesia in growth statistics for the emerging market economies.⁶⁷

The efforts that the country undertook to stave off the financial crisis appear to have weakened its condition.⁶⁸ The central bank distributed money and took responsibility over portions of the economy, leaving the quality of its own assets poor.⁶⁹ Approximately 4.6% of its outstanding loans have reached the brink of default.⁷⁰

Meanwhile, poverty has persisted.⁷¹ The official numbers indicate that 29.8% of the population, or 350 million people, remain below the poverty

⁵⁷ Leif Eskesen, *India*, HSBC GLOBAL RESEARCH REPORT, May 31, 2012.

⁵⁸ See, e.g., *Now Finish the Job*, THE ECONOMIST, Apr. 15, 2012 (quoting the governor of the central bank stating, “We are not saying the economy is in the pink of health . . . we should be concerned. . .”).

⁵⁹ See Part I. B.

⁶⁰ See, e.g., *Losing Its Magic*, THE ECONOMIST, March 24, 2012.

⁶¹ James Crabtree, *Bollygarchs at Bay*, FINANCIAL TIMES, June 5, 2012.

⁶² See, e.g., Viswanathan, *supra* note 34, at 44–45.

⁶³ See *infra* text accompanying notes 64–67.

⁶⁴ Crabtree, *supra* note 61.

⁶⁵ See *Rupee and the Bears*, THE ECONOMIST, Nov. 26, 2011.

⁶⁶ Nupur Acharya, *Indian Corporate Default Rate at Ten-Year High*, WALL ST. J., Apr. 4, 2012.

⁶⁷ Crabtree, *supra* note 61.

⁶⁸ See *infra* text accompanying notes 69–70.

⁶⁹ *Reflections of Reality*, THE ECONOMIST, Aug. 6, 2011.

⁷⁰ *My Conflicted Heart*, THE ECONOMIST, Apr. 21, 2012.

⁷¹ Wulff & Lingam, *supra* note 36, at 248.

line.⁷² India ranks as the poorest country among the emergent BRIC economies (Brazil, Russia, India, and China)⁷³ and the poorest member of the G-20.⁷⁴ Politicians appear to have struggled to promote business needs while also addressing the problems of the urban poor.⁷⁵ The economy has not expanded fast enough to support the creation of sufficient infrastructure, and many of its citizens still lack access to electricity and potable water.⁷⁶ As a demographic bulge reaches working age, ten million young people per year will need to find jobs over the next two decades.⁷⁷

Many obstacles, however, have seemed to stifle entrepreneurship and job creation.⁷⁸ State-controlled firms have accounted for close to half of corporate profits in India; family-owned companies have earned most of the rest.⁷⁹ The companies have sprawled into chains of holding companies, in order to compensate for deficiencies such as poor infrastructure, unreliable sources of labor and materials, and weak enforcement.⁸⁰ They have built their own infrastructure and supply chains and have leveraged their size to gain influence.⁸¹ Outsiders have had limited ability to compete against them.⁸²

In addition, relations between the government and private companies have appeared to worsen.⁸³ Business leaders have protested burdensome regulations by investing abroad rather than in India.⁸⁴ In May 2012, heads of the largest Indian telecommunications companies met with politicians in New Delhi to complain.⁸⁵ The chief executive of the Indian steel company

⁷² Tripti Lahiri, *Is India Fudging Its Poverty Numbers*, WALL ST. J., March 20, 2012.

⁷³ See, e.g., *A Bric Hits the Wall*, *supra* note 27.

⁷⁴ *ECONOMIC SURVEY 2012-13: INDIA POOREST AMONG G20 NATIONS DESPITE GROWTH*, INDIA TODAY, MAR. 15, 2012 (INDIA).

⁷⁵ Wulff & Lingam, *supra* note 36, at 248.

⁷⁶ See, e.g., Charles Runckel, *Infrastructure India: A Long Road Ahead*, Business-in-Asia.com (last visited Nov. 25, 2013), http://www.business-in-asia.com/asia/infrastructure_india.html.

⁷⁷ *Farewell to Incredible India*, THE ECONOMIST, June 9, 2012.

⁷⁸ See *infra* text accompanying notes 79-82.

⁷⁹ See, e.g., *The Power and the Glory*, *supra* note 45; See Afsharipour, *supra* note 26, at 1029, 1083, 1085.

⁸⁰ *Building India Inc.*, THE ECONOMIST, Oct. 22, 2011; *Adventures in Capitalism*, *supra* note 48; *The Bollygarchs' Magic Mix*, *supra* note 48; Umakanth Varottil, *Evolution and Effectiveness of Independent Directors in Indian Corporate Governance*, 6 HASTINGS BUS. L.J. 281, 288-89 (2010).

⁸¹ *Looking for the Next Infosys*, THE ECONOMIST, Oct. 22, 2011.

⁸² See, e.g., *id.*; *Now Finish the Job*, *supra* note 58.

⁸³ See *infra* text accompanying notes 84-86.

⁸⁴ Crabtree, *supra* note 61.

⁸⁵ *Id.*

ArcelorMittal threatened not to initiate any domestic projects for the next five years.⁸⁶

What will the future hold? American CRAs have already cast votes against India's future.⁸⁷ In June 2012, Standard & Poor's⁸⁸ and Fitch revised their outlooks on India from stable to negative.⁸⁹ Analysts at Standard & Poor's speculated that India could become the first of the BRICs to fail.⁹⁰

II. PANNING WEST: BLAMING CONFLICTED RATING AGENCIES FOR THE FINANCIAL CRISIS

Ironically, policymakers in America and Europe have viewed the CRAs as the villains of the most recent financial crisis.⁹¹ They alleged that these entities had conflicts of interest, because they adopted an "issuer-pays" model, in which the issuers of financial instruments paid the agencies to rate them.⁹² This model, they maintained, incentivized the agencies to award inflated scores, in order to please the issuers and retain their business.⁹³ Regulators concluded that the model resulted in inaccurate public information on default risk and that the inaccuracies caused the financial markets to crash.⁹⁴ This

⁸⁶ *Id.*

⁸⁷ See, e.g., Bruce Einhorn, *India's Growth Story Dims on S&P Downgrade*, BLOOMBERG BUSINESSWEEK, Apr. 25, 2012.

⁸⁸ Penny MacRae, *S&P Downgrades India Outlook to Negative*, AGENCE FRANCE-PRESSE, Apr. 25, 2012.

⁸⁹ *Fitch downgrades India's outlook to 'negative'*, BBC NEWS, June 18, 2012.

⁹⁰ Joydeep Mukherji & Takahira Ogawa, *Will India Be the First BRIC Fallen Angel?* STANDARD & POOR'S, GLOBAL CREDIT PORTAL, June 8, 2012.

⁹¹ John C. Coffee, *Ratings Reform: The Good, The Bad, and The Ugly*, COLUMBIA LAW AND ECONOMICS WORKING PAPER NO. 359, Sept. 2010 at 2 (2010) ("Broad consensus exists that inflated credit ratings and conflict-ridden rating processes played a significant role in exacerbating the 2008 financial crisis."); European Commission, *Consultation by the Commission Services on Credit Rating Agencies (CRAs)*, July 31, 2008, available at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/1224&format=HTML&aged=1&language=EN&guiLanguage=fr> ("It is generally accepted that CRAs underestimated the credit risk of structured credit products and failed to reflect early enough in their ratings the worsening of market conditions"). The European Commission opened proceedings against Standard and Poor's in 2009, see Arner et. al, *supra* note 8, at 380–81.

⁹² See, e.g., Dallas, *supra* note 23, at 288 ("As for credit rating agencies, they had a conflict of interest because the issuers of securities paid their fees").

⁹³ Stephane Rousseau, *Enhancing the Accountability of Credit Rating Agencies: The Case for a Disclosure-Based Approach*, 51 McGill L.J. 617, 629 (2005) (Can.), available at <http://www.lawjournal.mcgill.ca/userfiles/other/5366167-Rousseau1.pdf>.

⁹⁴ FINANCIAL STABILITY FORUM, REPORT OF THE FINANCIAL STABILITY FORUM ON ENHANCING MARKET AND INSTITUTIONAL RESILIENCE, April 7, 2008, at 32, available at

section explains why and how the regulators have focused on eliminating the conflict of interests in order to prevent a future crisis.

A. Agencies as “Gatekeepers”: The “Referee in the Debt Game”⁹⁵

In 2008, Henry Paulson, the U.S. Treasury Secretary under President George W. Bush, presented a policy statement in which he emphasized the responsibility of the CRAs for the crisis.⁹⁶ The report indicated the depth of the certainty of the regulators that the agencies were corrupt, and their reliance on the agencies to perform a “gatekeeping” role.⁹⁷ “Gatekeepers” deter fraud by monitoring financial markets and disseminating information.⁹⁸

For the last century, the CRAs facilitated financial investment by publishing assessments of the risks of buying financial products from specific issuers.⁹⁹ When issuers sell financial products to investors, the products represent promises from the issuers that they will pay back the full purchase price at fixed installments, plus interest.¹⁰⁰ The investors therefore relied on the CRAs’ assessments of the likelihood that the issuers would return all of the

http://www.financialstabilityboard.org/publications/r_0804.pdf, (“Poor credit assessments by CRAs contributed both to the build up to and the unfolding of recent events.”); *The Genesis of the Current Economic Crisis Hearings*, *supra* note 22, at 3 (“Being able to gather and understand relevant information about a company’s financial health and performance is critical to the proper functioning of the markets.”); Dallas, *supra* note 23, at 331 (“[T]he ratings on structured financial products have proven to be inaccurate . . . contribut[ing] significantly to the mismanagement of risks by financial institutions and investors, which in turn adversely impacted the health of the economy”).

⁹⁵ Arthur Levitt, *Conflicts and the Credit Crunch*, WALL ST. J., Sept. 7, 2007 at A15.

⁹⁶ Sinclair, *supra* note 13, at 4.

⁹⁷ THE PRESIDENT’S WORKING GROUP ON FINANCIAL MARKETS, POLICY STATEMENT ON MARKET DEVELOPMENTS, March, 2008, at 2, 4, 14-15, available at http://www.naic.org/documents/committees_e_rating_agency_comdoc_presidents_wg.pdf.

⁹⁸ Rousseau, *supra* note 93, at 620 (“[T]hese institutions have become central to the financial markets’ infrastructure through their role in rectifying information asymmetries that exist between issuers and investors.”); *Credit Rating Agencies and the Financial Crisis*, Hearing Before H. R. Comm. on Oversight and Governmental Reform, 110th Cong., 2nd Sess. 4 (2008) [hereinafter *Credit Rating Agencies and the Financial Crisis Hearings*] (statement of Henry Waxman), available at <https://house.resource.org/110/org.c-span.281924-1.pdf> (“Millions of investors rely on [CRAs] for independent, objective assessments. The rating agencies broke this bond of trust”).

⁹⁹ Arner et. al., *supra* note 8, at 370; Rousseau, *supra* note 93, at 622.

¹⁰⁰ See, e.g., Richard L. Kuersteiner, James O. Johnston, Richard L. Wynne & Lance Miller, *Your Bond Issuer Has Filed for Bankruptcy? A Survey of the Trips, Traps, and Opportunities that Await Corporate Bondholders in a Chapter 11 Case*, 2008 NORTON ANN. SURV. BANKR. L. 6 (2008) (“A bond represents the debtor’s promise to repay borrowed money over a specified period of time at a specified rate of interest.”).

money,¹⁰¹ in order to decide: 1) whether to buy financial products from particular issuers, and 2) how much interest to charge the issuers, in order to protect themselves against possible loss.

The CRAs carried out a quasi-regulatory role, ensuring the stability of the markets by promoting responsible behavior among issuers.¹⁰² The agencies rewarded issuers that managed their risks with high ratings, which made their financial products more marketable.¹⁰³ The agencies also increased the availability of credit for the issuers by providing accurate information to investors.¹⁰⁴ In theory, the information enabled the investors to charge lower interest rates.¹⁰⁵ If they trusted the ratings, then they did not need to add large margins of error, in order to cushion themselves against unexpected losses.¹⁰⁶ The lower interest rates made credit cheaper.¹⁰⁷

Charging issuers to be rated earned profits for the CRAs,¹⁰⁸ provided information to investors, and enabled issuers to sell their products,¹⁰⁹ but it

¹⁰¹ *The Genesis of the Current Economic Crisis Hearings*, *supra* note 22, at 18 (statement of Eric Stein) (“Investors - the world financial markets - trusted the rating agencies because of their long history”).

¹⁰² Frank Partnoy, *Rethinking Regulation of Credit Rating Agencies: An Institutional Investor Perspective*, COUNCIL OF INSTITUTIONAL INVESTORS WHITE PAPER, Apr. 2009 at 3 (Univ. of San Diego Sch. of Law, Research Paper no. 09-014) (“[R]ating agencies wield immense, quasi-governmental power.”); Essentially, the agencies intermediated between the issuers and investors, (see Arner et al., *supra* note 8, at 363); Economists have assumed that investors would not have gathered enough information on their own to inform themselves about the financial position of the issuers, (see BASEL COMMITTEE ON BANKING SUPERVISION, CREDIT RATINGS AND COMPLEMENTARY SOURCES OF CREDIT QUALITY INFORMATION, July 2000 at 11, [hereinafter *Basel Committee on Banking Supervision*] available at <http://www.bis.org/publ/bcbs72a.pdf>); The investors would have had to fund the full cost of an investigation, but they would not have received the full benefits. Other people could have accessed the information that they uncovered without having to pay for it. Economists have referred to the information on the issuers’ risk of default as a “public good,” because of the difficulty of preventing others from sharing in it, (see Rousseau, *supra* note 93, at 623). CRAs have also been described as correcting “information asymmetries,” (see, e.g., Arner et al., *supra* note 8, at 363).

¹⁰³ Steven Schwarcz, *Disintermediating Avarice: A Legal Framework For Commercially Sustainable Microfinance*, 2011 U. ILL. L. REV. 1165, 1195 (2011)

¹⁰⁴ Arner et al., *supra* note 8, at 363; Basel Committee on Banking Supervision, *supra* note 102, at 11.

¹⁰⁵ Arner et al., *supra* note 8, at 370.

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* Because the CRAs provided the service of investigating issuers when no one else would have undertaken it, economists have described them as correcting a “market failure,” (see Basel Committee on Banking Supervision, *supra* note 102, at 11). The specialization and expertise of the agencies enabled them to collect the information at a lower cost. Economists have referred to their cost advantages as “economies of scale,” (see Rousseau, *supra* note 93, at 623; Coffee, *supra* note 91, at 54).

¹⁰⁸ See *infra* text accompanying notes 109–113.

also introduced conflicts of interest.¹¹⁰ The agencies charged the issuers for their ratings, and then disseminated their assessments to the public for free.¹¹¹ The three dominant agencies in the West, Standard & Poor's, Moody's Investors Service and Fitch Ratings, have depended on issuers for roughly ninety percent of their revenues.¹¹² "Clearly the rating agencies skewed their assessments to please their clients," Paul Krugman wrote in the New York Times in 2010.¹¹³

Others have shared Krugman's concern.¹¹⁴ In the wake of the crisis, evidence of inaccurate ratings emerged. Regulators in the United States and in Europe sought to remedy the conflicts, stressing that investor confidence in the financial markets depended on their belief in the accuracy of the ratings.¹¹⁵

B. Egregious Behavior: "Market Share, Market Share, Market Share"¹¹⁶

"[A] rating, which is supposed to be an honest, objective, independent assessment of the likelihood of an investment paying off . . . is not performing that function when you have this kind of pressure on people to rate a certain way in terms of their own pay," Senator Carl Levin said in April 2010, in the opening statement of a Senate Subcommittee investigation of the financial

¹⁰⁹ See *supra* text accompanying notes 102–107.

¹¹⁰ See *infra* text accompanying notes 111–113.

¹¹¹ SECURITIES EXCHANGE COMMISSION, 2011 SUMMARY REPORT OF COMMISSION STAFF'S EXAMINATIONS OF EACH NATIONALLY RECOGNIZED STATISTICAL RATING ORGANIZATION, (2011), available at http://www.sec.gov/news/studies/2011/2011_nrsro_section15e_examinations_summary_report.pdf ("Of the ten registered NRSROs, seven—including the three larger NRSROs—operate predominantly under the issuer-pay model."); Lynn Bai, *On Regulating Conflict of Interests in the Credit Rating Industry*, 13 N.Y.U. J. LEGIS. & PUB. 253, 295 (2010) (explaining that CRAs generally provide the information to the public "free of charge").

¹¹² Arner et al., *supra* note 8, at 373.

¹¹³ Paul Krugman, *Berating the Raters*, N.Y. TIMES, Apr. 26, 2010, at A23, available at <http://www.nytimes.com/2010/04/26/opinion/26krugman.html?dbk>.

¹¹⁴ See, e.g., Joseph E. Stiglitz, *Capitalist Fools*, VANITY FAIR, Jan. 2009.

¹¹⁵ THE PRESIDENT'S WORKING GROUP ON FINANCIAL MARKETS, POLICY STATEMENT ON MARKET DEVELOPMENTS, *supra* note 97, at 2, 4, 14–15; European Union Committee, House of Lords, *supra* note 11, at 17 ("DG Markt explained that the regulation of rating agencies is a necessary reaction to their 'massive failures' revealed by the financial crisis. They described the conflicts of interest created when the issuers of a securitised bond pays for a rating, rather than the investor.").

¹¹⁶ *Wall Street and the Financial Crisis: The Role of Credit Rating Agencies: Hearing before Permanent Subcomm. on Investigations of the S. Comm. on Homeland Sec. and Governmental Affairs*, 111th Cong. 32 (2010) [hereinafter *Wall Street and the Financial Crisis Hearings*] (statement of Sen. Carl Levin), available at <http://www.gpo.gov/fdsys/pkg/CHRG-111shrg57321/html/CHRG-111shrg57321.htm>.

crisis.¹¹⁷ The testimony that followed, along with information uncovered by the Securities and Exchange Commission ("SEC"), the European Commission, and the British House of Lords, depicted an industry whose actions had jeopardized the stability of the global economy.¹¹⁸ This part examines the evidence that the agencies inflated ratings to increase their profits.

1. Senate Subcommittee Investigation

Evidence presented at the Senate investigation revealed deliberate inaccuracies in ratings.¹¹⁹ "Sold some more crap to Pursuit," an analyst at the investment bank UBS wrote in an internal email, in reference to securities that had earned a high, "investment-grade" rating.¹²⁰ "Version 6.0 [of the ratings model] could've been released months ago and resources assigned elsewhere if we didn't have to massage the sub-prime and Alt-A numbers to preserve market share," an analyst at Standard & Poor's wrote in another.¹²¹

Clients had appeared to assume that they could demand higher ratings, either by purchasing them outright or by providing the agencies with false information.¹²² An investment banker at Merrill Lynch implied that he expected higher fees to buy more favorable ratings: "We are okay with the revised fee . . . under the assumption that this will not be a precedent for any future deals and that you will work with us further on this transaction to try and get to some middle ground with respect to the ratings," he said in an email to an analyst at Moody's.¹²³ An analyst at Standard & Poor's appeared to indicate that the agency had agreed to rate fake data:¹²⁴ "[T]he 25ish assets that they included in our closing date portfolio that were dummies were replaced in less than twenty-four hours with assets that would have been notched and made the portfolio worse," he wrote.¹²⁵

¹¹⁷ *Id.*

¹¹⁸ See *infra* Part II.B.1-3.

¹¹⁹ See *infra* text accompanying notes 120-21.

¹²⁰ *Wall Street and the Financial Crisis Hearings*, *supra* note 116 (internal quotation marks omitted); See Schwarcz, *supra* note 103 ("The higher the rating, the lower the rating agency has assessed the credit risk.").

¹²¹ *Wall Street and the Financial Crisis Hearings*, *supra* note 116 (internal quotation marks omitted).

¹²² See *infra* text accompanying notes 123-25.

¹²³ *Wall Street and the Financial Crisis Hearings*, *supra* note 116 (internal quotation marks omitted).

¹²⁴ See *id.* ("The documents show how investment bankers argued with the credit rating analysts, substituted worse assets at the last minute, and pressured analysts to waive their procedures and standards.").

¹²⁵ *Id.*

The agencies' compensation structures encouraged the analysts to acquiesce.¹²⁶ "[M]ost employees owned either a lot of options or restricted stock in the company, as well as the profitability of the group did influence the size of the bonus, yes," the former head of the structured products group at Moody's, Eric Kolchinsky, testified.¹²⁷ Moreover, the importance of maintaining revenues appeared to increase over time.¹²⁸ A former vice president and senior credit officer at Moody's, Richard Michalek, described "a revision . . . where a larger percentage of our compensation [depended on] whether or not we were reaching our revenue numbers on a quarterly and annual basis which would allow us to, maximize our – or max out our bonuses."¹²⁹

The Senate testimony seemed to demonstrate that the CRAs continued to boost their ratings in order to preserve market share, even in the midst of the crisis.¹³⁰ "Despite the . . . market implosion we were witnessing, it appeared to me that my manager was more concerned about losing a few points of market share than about violating the law," the former Moody's executive, Eric Kolchinsky, said.¹³¹ He elaborated:

Managers of rating groups were expected by their supervisors to build, or at least maintain, market share. It was an unspoken understanding that loss of market share would cause a manager to lose his or her job. . . Senior management would periodically distribute emails detailing their departments' market share . . . Colleagues have described enormous pressure when their market shares dipped.¹³²

2. Securities and Exchange Commission Staff Examinations

The information that emerged in the Senate tracked the findings of an SEC examination of selected CRAs.¹³³ The SEC investigation suggested that

¹²⁶ See *infra* text accompanying notes 127–29.

¹²⁷ *Wall Street and the Financial Crisis Hearings*, *supra* note 116 (statement of Eric Kolchinsky).

¹²⁸ See *id.* (statement of Richard Michalek).

¹²⁹ *Id.* (internal quotation marks omitted).

¹³⁰ See *infra* text accompanying notes 131–32.

¹³¹ *Wall Street and the Financial Crisis Hearings*, *supra* note 116 (statement of Eric Kolchinsky).

¹³² *Id.*

¹³³ See *infra* text accompanying notes 134–41.

analysts at the agencies knew about revenues and raised their ratings in order to increase them.¹³⁴

The SEC had observed that analysts at the CRAs participated in fee negotiations and allowed the discussions to influence the ratings that they assigned.¹³⁵ “Analysts appeared to be aware, when rating an issuer,” the Commission report stated, “of the ratings agency’s business interest in securing the rating of the deal.”¹³⁶ Clients that pressed for higher ratings “could influence the rating agencies’ decisions on whether to update a model when such an update would lead to a less favorable outcome,” the report continued.¹³⁷

The SEC based its findings on internal emails that emphasized the pressure to sacrifice accuracy in order to maintain profits.¹³⁸ “[W]e are meeting with your group this week to discuss adjusting criteria for rating CDOs of real estate assets . . . because of the ongoing threat of losing deals,” one internal email said.¹³⁹ “[A]spects of the firm’s ratings methodology w[ill] have to be revisited to recapture market share from the competing rating agency,” stated another.¹⁴⁰ “[L]et’s hope we are all wealthy and retired by the time this house of cards falters,” an analyst responded.¹⁴¹

3. European Studies

Evidence that conflicts of interest from the “issuer-pays” model produced inaccurate ratings also surfaced in Europe.¹⁴² A 2008 survey discussed in the European Commission indicated that eleven percent of the members of a professional society of financial analysts, the Chartered Financial Analysts Institute, had “witnessed a CRA changing a rating as consequence of pressure or influence from an investor, issuer or underwriter.”¹⁴³ Members of the British

¹³⁴ SEC. & EXCH. COMM’N, SUMMARY REPORT OF ISSUES IDENTIFIED IN THE COMMISSION STAFF’S EXAMINATIONS OF SELECT CREDIT RATING AGENCIES, at 25 (July 2008), *available at* <http://www.sec.gov/news/studies/2008/craexamination070808.pdf> (“Rating agencies do not appear to take steps to prevent considerations of market share and other business interests from the possibility that they could influence ratings or ratings criteria.”).

¹³⁵ *See infra* text accompanying notes 136–37.

¹³⁶ SECURITIES AND EXCHANGE COMMISSION, *supra* note 134, at 25.

¹³⁷ *Id.* at 32.

¹³⁸ *See infra* text accompanying notes 139–41.

¹³⁹ SECURITIES AND EXCHANGE COMMISSION, *supra* note 134 (footnote omitted) (internal quotation marks omitted).

¹⁴⁰ *Id.*

¹⁴¹ *Id.* at 12 n.8; *See, e.g., Dallas, supra* note 23, at 265, 340.

¹⁴² *See infra* text accompanying notes 143–45.

¹⁴³ *See McVea, supra* note 21, at 701, 713.

House of Lords described “miscalculation” of risks because of “flaws in the methodologies of rating agencies” at a 2008 hearing.¹⁴⁴ The problems had been “exacerbated by conflicts of interests caused by the originator . . . purchasing the rating,” they concluded.¹⁴⁵

C. Getting Here: “How Can You Miss So Badly”¹⁴⁶

Conflicts of interest did not always compromise the CRAs.¹⁴⁷ This part describes the agencies’ shift from charging investors to charging issuers and the power that they gained in the absence of strict regulation.¹⁴⁸ It then explains how the introduction of securitized financial products intensified their conflicts of interest.¹⁴⁹ The new products produced three changes: they offered the agencies higher profits¹⁵⁰ and less need for accuracy,¹⁵¹ as well as fewer potential clients over whom to compete.¹⁵²

1. Adopting “Issuer Pays” Without New Regulation

Changes in technology, coupled with the rising influence of the CRAs, triggered the shift to the “issuer-pays” model.¹⁵³ At the turn of the century, investors paid the CRAs.¹⁵⁴ Cheap photocopying began to enable them to

¹⁴⁴ European Union Committee, House of Lords, *supra* note 11, at 8.

¹⁴⁵ *Id.*

¹⁴⁶ *Wall Street and the Financial Crisis Hearings*, *supra* note 116 (statement of Senator Kaufman).

¹⁴⁷ See Rousseau, *supra* note 93, at 634.

¹⁴⁸ See *infra* Part II.C.1-2.

¹⁴⁹ See John C. Coffee, *Ratings Reform: The Good, The Bad, and The Ugly*, 1 HARV. BUS. L. REV. 231, 236 (2011) (“[T]he conflicts were stronger and the prospects for ratings arbitrage greater in the case of structured finance.”).

¹⁵⁰ See Dallas, *supra* note 23, at 289, 340.

¹⁵¹ See *Credit Rating Agencies and the Financial Crisis Hearings*, *supra* note 98, (statement of Henry Waxman) (“These new financial inventions were so complex that virtually no one really understood them.”).

¹⁵² See Hill, *supra* note 9, at 13, 16 (2012) (describing “close relational ties”).

¹⁵³ See *infra* text accompanying notes 154–57.

¹⁵⁴ See D. Andrew Hatchett, *Sox It To ‘Em: Using Sarbanes-Oxley As A Model For Regulating Conflicts Of Interest In The Credit Rating Industry*, 63 ALA. L. REV. 407, 425 (2012). Moody’s first graded railroad bonds and the information increased the number of people that bought them. See Partnoy, *supra* note 102. By the 1920s, Moody’s charged investors for ratings of most of the bond market. See Sinclair, *supra* note 13, at 4.

access the ratings for free.¹⁵⁵ The default of the railroad company Penn Central motivated issuers to seek ratings from the agencies, in order to reassure potential investors of their solvency.¹⁵⁶ The agencies then began to charge the issuers.¹⁵⁷

A small group of CRAs gained power but remained free of direct regulation.¹⁵⁸ In 1975, the SEC recognized the existing agencies, as official Nationally Recognized Statistical Rating Organizations (“NRSROs”).¹⁵⁹ The new status restricted entrance to the industry.¹⁶⁰ In 2001, the agencies maintained high ratings for financial products issued by Enron, even though they had identified weaknesses in the company’s financial statements.¹⁶¹ They lowered their ratings only four days before Enron entered bankruptcy.¹⁶² The SEC imposed no new rules in response to the Senate’s call for “meaningful SEC oversight,”¹⁶³ though it predicted that the “issuer-pays” model would cause the agencies to “rate issuers more liberally and temper their diligence”¹⁶⁴ In 2006, Congress reversed course and barred the SEC from regulating “the substance of the credit ratings or the procedures and methodologies” that the agencies used.¹⁶⁵

¹⁵⁵ See *Statement on Reforming the Role of the Statistical Ratings Organizations in the Securitization Process*, FINANCIAL ECONOMISTS ROUNDTABLE (The Wharton School, Philadelphia, PA), Dec. 2008, at 4, available at <http://fic.wharton.upenn.edu/fic/policy%20page/FER12%201%2008rev.pdf>.

¹⁵⁶ See Rousseau, *supra* note 93; See Arner et al., *supra* note 8, at 361, 373 (2010).

¹⁵⁷ See Darbellay & Portnoy, *supra* note 11.

¹⁵⁸ See Arner et al., *supra* note 8, at 363.

¹⁵⁹ See Hill, *supra* note 9.

¹⁶⁰ See Arner et al., *supra* note 8, at 372; See FINANCIAL ECONOMISTS ROUNDTABLE, *supra* note 155, at 6 (“From 1975 to 2002, although the SEC received numerous applications from entities in the United States and abroad, only one new general purpose NRSRO was approved.”). See FINANCIAL ECONOMISTS ROUNDTABLE, *supra* note 155, at 4, for the argument that barriers to entry existed even before the SEC established the NRSRO designation.

¹⁶¹ Hatchett, *supra* note 154, at 407–08, 416.

¹⁶² See Hill, *supra* note 9, at 13.

¹⁶³ See *Credit Rating Agencies and the Financial Crisis Hearings*, *supra* note 98, at 4.

¹⁶⁴ Hatchett, *supra* note 154, at 418–19 (quoting U.S. SEC. & EXCH. COMM’N, REPORT ON THE ROLE AND FUNCTION OF CREDIT RATING AGENCIES IN THE OPERATION OF SECURITIES MARKETS: AS REQUIRED BY SECTION 702(B) OF THE SARBANES OXLEY ACT OF 2002 (2003) (internal quotation marks omitted)).

¹⁶⁵ The Rating Agency Reform Act, enacted on Sept. 29, 2006 created a new Section 15E of the Securities Exchange Act of 1934 and provided for some new authority of the SEC, while also explicitly limiting it. See, e.g., SECURITIES AND EXCHANGE COMMISSION, *supra* note 134, at 4. To the extent that it addressed conflicts of interest, the new Act simply required the agencies to institute written codes of conduct to manage them. See, e.g., Hatchett, *supra* note 154, at 418 (quoting 15 U.S.C. § 780-7(h)(1) (2012)).

The CRAs also encountered limited regulation outside of the United States.¹⁶⁶ The Enron scandal prompted foreign officials to review their policies, but they decided to continue their reliance on self-regulation.¹⁶⁷ The International Organization of Securities Commissions ("IOSCO") drafted a voluntary code of conduct without a mechanism for enforcement.¹⁶⁸ In 2006, the Committee of European Securities Regulators ("CESR") advised the European Commission to adopt a "wait and see" approach to regulating the agencies.¹⁶⁹ The CESR monitored compliance with IOSCO's code of conduct and reported its findings annually to the Commission.¹⁷⁰ The Commission supported the rights of companies to deviate from the code, so long as they disclosed it.¹⁷¹

2. Securitization and Increased Competition

The advent of securitization seemed to exacerbate the conflicts of interest that the "issuer-pays" model produced.¹⁷² The term "securitization" refers to the process by which rights to future loan repayments were: 1) separated from the risk that the borrowers might not pay; 2) grouped together; and 3) sold to other investors in portions, or "tranches."¹⁷³ Investment banks, the "issuers," pooled the rights to repayment and divided them according to the underlying risk that the borrowers would default.¹⁷⁴

The issuers paid the CRAs for ratings when each tranche sold,¹⁷⁵ which encouraged the agencies to inflate scores to make them more marketable.¹⁷⁶ In 2008, 64,000 separate tranches of securitized debt earned triple-A ratings,

¹⁶⁶ See *infra* text accompanying notes 167–71.

¹⁶⁷ See Amadou, *supra* note 7, at 7.

¹⁶⁸ Int'l Org. of Sec. Comm'ns, *IOSCO Statement of Principles Regarding the Activities of Credit Rating Agencies* (Sept. 25, 2003), <http://www.fsa.go.jp/inter/ios/20030930/02.pdf>; see Arner et al., *supra* note 8, at 369–70.

¹⁶⁹ See Arner et al., *supra* note 8, at 368–69.

¹⁷⁰ See Coffee, *supra* note 149, at 249.

¹⁷¹ See *id.*

¹⁷² See *infra* text accompanying notes 173–96.

¹⁷³ See Steven Schwarcz, *The 2011 Diane Sanger Memorial Lecture Protecting Investors In Securitization Transactions: Does Dodd-Frank Help, Or Hurt?*, 72 LA. L. REV. 591, 594 (2012); See Int'l Org. of Sec. Comm'ns, *Code of Conduct Fundamentals for Credit Rating Agencies*, at 4 (May 2008), available at <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD270.pdf>.

¹⁷⁴ See *The Genesis of the Current Economic Crisis Hearings*, *supra* note 22, at 29, 30.

¹⁷⁵ See *id.* at 29.

¹⁷⁶ See *Wall Street and the Financial Crisis Hearings*, *supra* note 116 (statement of Raymond McDaniel); Schwarcz, *supra* note 103, at 1195.

compared to only twelve companies worldwide.¹⁷⁷ The issuers re-pooled riskier tranches with additional assets, then sought higher ratings for the new combinations.¹⁷⁸

Because the CRAs charged more to rate the securitized products than they could for traditional debt, the importance of retaining clients increased.¹⁷⁹ Agencies could earn more than \$200,000 for complex ratings.¹⁸⁰ Moody's graded 9,029 mortgage-backed securities triple-A, the equivalent of 30 products per day, while awarding the same score to only four traditional issuers.¹⁸¹ Within seven years, Moody's profits increased four-fold, and its stock price rose 600%.¹⁸² It had the highest net revenues of any company listed on one index of publicly-traded businesses for five consecutive years.¹⁸³

The source of the new revenues concentrated among only a few issuers, which increased their leverage over the CRAs.¹⁸⁴ Twelve issuers controlled nearly eighty percent of the market, and six accounted for half of it.¹⁸⁵ The complexity of the products made ratings more variable,¹⁸⁶ and the issuers appeared to shop among agencies for the highest grades.¹⁸⁷

¹⁷⁷ Lloyd C Blankfein, *Remarks By Lloyd C. Blankfein To The Council Of Institutional Investors*, GOLDMAN SACHS (Apr. 7, 2009), <http://www.goldmansachs.com/media-relations/in-the-news/archive/lcb-cii-remarks.html>.

¹⁷⁸ See *The Genesis of the Current Economic Crisis Hearings*, *supra* note 22, at 17.

¹⁷⁹ See FINANCIAL ECONOMISTS ROUNDTABLE, *supra* note 155, at 5.

¹⁸⁰ See *The Genesis of the Current Economic Crisis Hearings*, *supra* note 22, at 18.

¹⁸¹ See Phil Angelides, *Opening Remarks of Chairman Phil Angelides at the Financial Crisis Inquiry Commission Hearing on the Credibility of Credit Ratings, the Investment Decisions Made Based on Those Ratings, and the Financial Crisis*, Financial Crisis Inquiry Commission, at 1, (June 2, 2010), http://fcic-static.law.stanford.edu/cdn_media/fcic-testimony/2010-0602-Angelides.pdf.

¹⁸² See *Credit Rating Agencies and the Financial Crisis Hearings*, *supra* note 98, at 2; *id.*

¹⁸³ See *Credit Rating Agencies and the Financial Crisis Hearings*, *supra* note 98.

¹⁸⁴ SECURITIES AND EXCHANGE COMMISSION, *supra* note 134, at 32 ("The combination of the arrangers' influence in determining the choice of rating agencies and the high concentration of arrangers with this influence appear to have heightened the inherent conflicts of interest that exist in the issuer pays" compensation model.").

¹⁸⁵ See Coffee, *supra* note 149, at 238; See also SECURITIES AND EXCHANGE COMMISSION, *supra* note 134, at 38.

¹⁸⁶ See Adam J. Levitin & Susan M. Wachter, *Explaining The Housing Bubble*, 100 GEO. L.J. 1177, 1236-37 (2012).

¹⁸⁷ See *Credit Rating Agencies and the Financial Crisis Hearings*, *supra* note 98, at 21 (testimony of Jerome Fons); See European Union Committee, House of Lords, *supra* note 11, at 17 ("[E]ncouraging the issuer to go 'from one [rating agency] to another until they got the rating for the securitised product they wanted.'"); See Dallas, *supra* note 23, at 289-90.

The complexity of the products also made inaccurate ratings seem easier to conceal, and the CRAs stopped updating scores.¹⁸⁸ While public financial disclosures provided a test of the quality of traditional bond ratings, the new products had no comparable performance records.¹⁸⁹ Since revenues determined bonuses,¹⁹⁰ and legal immunity protected analysts from liability,¹⁹¹ the agencies left in place models that underestimated risks.¹⁹²

The CRAs waited more than a year to revise their ratings to reflect disturbances in the mortgage markets.¹⁹³ Though the agencies warned of problems in 2006, they continued to award triple-A ratings to mortgage-backed securities.¹⁹⁴ Eventually, Moody's downgraded eighty three percent of its triple-A scores during a six-month period,¹⁹⁵ and Standard & Poor's lowered more than two-thirds of its investment-grade ratings.¹⁹⁶

¹⁸⁸ See, e.g., SECURITIES AND EXCHANGE COMMISSION, *supra* note 134, at 32.

¹⁸⁹ See *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience*, *supra* note 94, at 33; See *Turmoil in U.S. Credit Markets: The Role of the Credit Rating Agencies: Hearing Before S. Comm. on Banking, Housing, and Urban Affairs*, 110th Cong., 2nd Sess. 32 (2008) (testimony of John C. Coffee) [hereinafter *The Role of Credit Rating Agencies Hearings - Coffee*] available at http://www.banking.senate.gov/public/_files/OpgStmtCoffeeSenateTestimonyTurmoilintheUSCreditMarkets.pdf; See SECURITIES AND EXCHANGE COMMISSION, *supra* note 134.

¹⁹⁰ See *The Genesis of the Current Economic Crisis Hearings*, *supra* note 22, at 17.

¹⁹¹ Judicial opinions have found ratings to be "opinions" protected by the First Amendment. See, e.g., *Jefferson Cnty. Sch. Dist. No. R-1 v. Moody's Investor's Servs. Inc.*, 175 F.3d 848, 852-56 (10th Cir. 1999); *In re Enron Corp. Sec. Derivative & "ERISA" Litigation*, 511 F. Supp. 2d 742, 752 (S.D. Tex. 2005). The high pleading standards imposed by the Private Securities Litigation Reform Act of 1995 have also protected the CRAs from responsibility. See *The Role of Credit Rating Agencies Hearings - Coffee*, *supra* note 189, at 1-2.

¹⁹² See *The Role of Credit Rating Agencies Hearings - Coffee*, *supra* note 189, at 1-2. See, e.g., SECURITIES AND EXCHANGE COMMISSION, *supra* note 134, at 26 ("Another rating agency reported to the Staff that one of its foreign ratings surveillance committees had knowledge that the rating agency had issued ratings on almost a dozen securities using a model that contained an error."); *Wall Street and the Financial Crisis Hearings*, *supra* note 116 (statement of Frank Raiter) ("[T]he order came to start doing impact analysis on the effectiveness new models had on market share."); Darbellay & Portnoy, *supra* note 11, at 3.

¹⁹³ See *Credit Rating Agencies and the Financial Crisis*, *supra* note 98 (testimony of Jerome S. Fons).

¹⁹⁴ See Jules Stewart, *Subprime to the Ridiculous*, FINANCIAL DIRECTOR (Sept. 24 2007), <http://www.financialdirector.co.uk/financial-director/analysis/1744125/sub-prime-ridiculous>.

¹⁹⁵ See Darbellay & Portnoy, *supra* note 11, at 2.

¹⁹⁶ See *Credit Rating Agencies and the Financial Crisis*, *supra* note 98, at 2.

D. Blaming the CRAs: "A Watchdog Paid By the Persons They Are to Watch"¹⁹⁷

Blame for the recent financial crisis crystallized around the CRAs' "issuer-pays" model,¹⁹⁸ and not their role as financial "gatekeepers."¹⁹⁹ "There has got to be a way that the regulators are going to find to eliminate this conflict of interest," Senator Levin said when he opened the Senate investigation of the crisis.²⁰⁰ Europe and the United States supported regulations for neutralizing the conflicts, while leaving the agencies' function unchanged.²⁰¹

The EU reversed its earlier decision to rely on self-regulation and drafted new mandatory rules.²⁰² "CRAs will have to comply with exacting regulatory requirements to make sure ratings are not tainted by the conflicts of interest inherent to the ratings business," European Commissioner Charles McCreevey said.²⁰³ "The crisis has shown that self-regulation has not worked."²⁰⁴ The legislation established a European authority over the agencies²⁰⁵ and imposed several requirements.²⁰⁶ Registered agencies must now publicize their conflicts of interest and demonstrate that they have not affected ratings.²⁰⁷ Analysts may not participate in fee negotiations²⁰⁸ or earn income based on revenues.²⁰⁹ The analysts must also rotate responsibility within their agencies for rating individual issuers.²¹⁰

¹⁹⁷ *The Role of Credit Rating Agencies Hearings – Coffee*, *supra* note 189, at 2.

¹⁹⁸ See Mary Schapiro, Chairman, SEC, Address to Practising Law Institute's "SEC Speaks in 2009" Program (Feb. 6, 2009), available at <http://www.sec.gov/news/speech/2009/spchozo0609mls.htm> ("I hope to pursue as priorities: Improving the quality of credit ratings by addressing the inherent conflicts of interest credit rating agencies face as a result of their compensation models . . .").

¹⁹⁹ See Sinclair, *supra* note 13, at 4.

²⁰⁰ *Wall Street and the Financial Crisis Hearings*, *supra* note 116.

²⁰¹ See *infra* text accompanying notes 202–18.

²⁰² See Arner et al., *supra* note 8, at 379.

²⁰³ See *Consultation by the Commission Services on Credit Rating Agencies*, *supra* note 91.

²⁰⁴ *Id.*

²⁰⁵ See Regulation of the European Parliament and of the Council on Credit Rating Agencies (EC) No. 1060/2009 of 16 Sept. 2009; see Regulation of the European Parliament and of the Council (EU) No. 513/2011 of 11 May 2011 (amending Regulation (EC) No. 1060/2009 on credit rating agencies); see McVea, *supra* note 21, at 730.

²⁰⁶ See McVea, *supra* note 21, at 724.

²⁰⁷ *Id.*

²⁰⁸ *Id.* at 726.

²⁰⁹ *Id.*

²¹⁰ *Id.*

U.S. regulators restricted similar behaviors and tried, but failed, to abolish the “issuer-pays” model.²¹¹ The new SEC Rule 17g-5 opened the ratings process to greater public scrutiny and restricted analysts from a range of conflicts-producing activities.²¹² The Dodd-Frank Act,²¹³ a package of reforms drafted in response to the crisis, nearly included plans for a Credit Agency Review Board.²¹⁴ The Board would have selected agencies to rate individual products and would have limited their fees to “reasonable” amounts.²¹⁵ The proposal passed the Senate by a large majority but lost in the House.²¹⁶ The final legislation compromised by calling for the SEC to study the issue.²¹⁷ The compromise “amounts to rearranging the deck chairs on the Titanic, while ignoring the gaping hole created by the iceberg,” one law school professor remarked.²¹⁸

Could blaming the conflicts of interest, however, have diverted the regulators from addressing the more fundamental problem of their reliance on the CRAs as quasi-financial regulators?²¹⁹

III. COUNTER-NARRATIVE: HYMAN MINSKY AND THE ENDOGENEITY OF CRISES

In 2007, a member of the British Parliament that had worked as an economist at a CRA downplayed the conflicts of interest of the agencies.²²⁰ “The real problem,” he said in an interview, was not the conflicts of interest but the fact that “financial markets fall in love. They fall in love with new things, with innovations, and . . . it is very difficult to assess [their] real riskiness.”²²¹ The statement sounded like an endorsement of the theories of the late economist Hyman Minsky.

²¹¹ See *infra* text accompanying notes 211–17.

²¹² See Hill, *supra* note 9, at 18.

²¹³ 12 U.S.C. §§ 1465–5641; 15 U.S.C. §§ 77z-2a-8344; See generally Leonard Street and Deinard, Making Sense of Dodd-Frank (2010), <http://dodd-frank.com>.

²¹⁴ See Hatchett, *supra* note 154, at 425–26.

²¹⁵ See Coffee, *supra* note 149, at 256.

²¹⁶ See, e.g., Congress Drops Changes for Credit-Rating Agencies, NEW YORK TIMES DEALBOOK (June 16, 2010), available at http://dealbook.nytimes.com/2010/06/16/congress-drops-changes-for-credit-rating-agencies/?_r=0; See Hill, *supra* note 9, at 19.

²¹⁷ See Dallas, *supra* note 23, at 341.

²¹⁸ See Coffee, *supra* note 149, at 58.

²¹⁹ See, e.g., Partnoy, *supra* note 154, at 3 (“[T]hese three agencies wield immense, quasi-governmental power.”).

²²⁰ CHARLES J. WHALEN, THE LEVY ECON. INST. OF BARD COLLEGE, PUB. POLICY BRIEF NO. 92, THE U.S. CREDIT CRUNCH OF 2007: A MINSKY, MOMENT, 2007 AT 15.

²²¹ *Id.*

Minsky's ideas about the causes of financial crises did not attract attention before he died in 1996.²²² His views paralleled those of John Maynard Keynes, in advocating for government intervention in financial markets.²²³ Minsky, however, emphasized a sequence of events that he called the "financial instability hypothesis."²²⁴ He believed that episodes of "euphoria" inevitably followed periods of stability.²²⁵ The "euphoria" caused companies and consumers to acquire increasing amounts of debt.²²⁶ Over time they relied on more speculative financial instruments, until the economy became so fragile that it collapsed.²²⁷ To prevent the collapse, Minsky wrote, public institutions needed to restrict "pro-cyclical behavior" – the volatile behavior that increased naturally with economic growth.²²⁸

In the wake of the most recent crisis, Minsky's writings have resurfaced, and his financial stability hypothesis has gained notice.²²⁹ This section proposes that Minsky would have found the new restrictions on the CRAs too simplistic because they left responsibility for regulating financial markets in the hands of private "gatekeepers."²³⁰ The section first explains his theories and endeavors to predict his interpretation of the recent crisis. It then seeks to formulate an alternate response that he would have supported.

²²² See, e.g., José Gabilondo, *Dodd-Frank, Liability Structure, And Financial Instability Cycles: Neither A (Ponzi) Borrower Nor A Lender Be*, 46 WAKE FOREST L. REV. 469, 470 (2011).

²²³ See, e.g., Michael Syron Lawler, *Minsky and Keynes on Speculation and Finance*, 27 SOC. SCI J. 435, 439 & 445 (1990) (discussing the Keynes and Minsky's views on the necessity of intervention).

²²⁴ See generally, Hyman Minsky, *The Financial Instability Hypothesis* (The Levy Econ. Inst. of Bard College, Working Paper No. 74, 1992).

²²⁵ See, e.g., *The Fed Discovers Hyman Minsky*, THE ECONOMIST, Jan. 7, 2010.

²²⁶ See, e.g., Jeffrey N. Gordon & Christopher Muller, *Confronting Financial Crisis: Dodd-Frank's Dangers And The Case For A Systemic Emergency Insurance Fund*, 28 YALE J. ON REG. 151, 171 (2011).

²²⁷ See, e.g., *Id.*

²²⁸ Hyman Minsky & Piero Ferri, *Market Processes and Thwarting Systems* (The Levy Econ. Inst. of Bard College, Working Paper No. 64, 1991) at 4 ("institutions and interventions thwart the instability breeding dynamics that are natural to market economies by interrupting the endogenous process").

²²⁹ See, e.g., WHALEN, *supra* note 220, at 17.

²³⁰ Rousseau, *supra* note 93, at 627. ("CRAs wield influential power over both issuers and investors.").

A. Minsky's Theories: The Economy "Generates a Financial Structure Susceptible to Financial Crises"²³¹

Minsky theorized that economic crises resulted from volatility that was intrinsic to financial markets.²³² He viewed public regulation as necessary to contain the markets' susceptibility to bouts of speculation.²³³ In the absence of robust regulation, he believed, collapse would punctuate finite periods of economic stability.²³⁴

The chain of events that he described began with excessive borrowing.²³⁵ Stability would breed its own destruction by encouraging too much risk-taking.²³⁶ Specifically, he predicted that profitable companies would seek new loans in order to grow.²³⁷ Initially, the investments would increase the profits that they earned.²³⁸

Next, Minsky expected that reports of the profits would fuel more widespread participation.²³⁹ Additional companies would demand loans.²⁴⁰ While the expansionary period lasted, the companies with the highest leverage would reap the biggest rewards.²⁴¹

Subsequently, Minsky predicted, the political system would adapt to validate the behavior.²⁴² Profitable borrowers would donate to sympathetic politicians, or engage lobbyists to promote their interests.²⁴³ The public would

²³¹ Hyman Minsky, *The Financial Instability Hypothesis: An Interpretation of Keynes and an Alternative to 'Standard' Theory*, CHALLENGE MAGAZINE, Mar.-Apr. 1977, at 25.

²³² See, e.g., Lahart, *supra* note 15.

²³³ See, e.g., Minsky & Ferri, *supra* note 228, at 4. ("in a world where the internal dynamics imply instability, a semblance of stability can be achieved or sustained by introducing conventions, constraints, and interventions into the environment.").

²³⁴ See, e.g., Jan Kregel, *Regulating The Financial System In A Minskyian Perspective*, remarks prepared for the conference "Financial Stability and Growth," Phase 3 of the Ford Foundation project: "Growth with Financial Stability and New Developmentalism" organised by the Centre for Structuralist Development Macroeconomics of the São Paulo School of Economics of Getulio Vargas Foundation, São Paulo, Mar. 22-23, 2012 at 1, available at http://cemacro.fgv.br/sites/cemacro.fgv.br/files/Panel%204%20-%20Jan%20Kregel_o.pdf.

²³⁵ See, e.g., Dallas, *supra* note 23, at 294.

²³⁶ See, e.g., Lahart, *supra* note 15.

²³⁷ See, e.g. Victor A. Beker, *Rethinking Macroeconomics In The Light Of The Financial Crisis*, Oct. 20, 2011 at 7, available at <http://ssrn.com/abstract=1946867>.

²³⁸ See, e.g., *Id.*

²³⁹ See, e.g., Lawler, *supra* note 223, at 439, 445.

²⁴⁰ See, e.g., *Id.*

²⁴¹ See, e.g., Dallas, *supra* note 23, at 294.

²⁴² See, e.g., Gordon & Muller, *supra* note 226, at 178.

²⁴³ *Id.*

interpret profitability as evidence of expertise and vote for deregulation.²⁴⁴ As support for growth permeated the public discourse, few would question the instability that was building.²⁴⁵

In the following stage, the economy would grow more fragile as a rising “euphoria”²⁴⁶ drove more companies and households to borrow.²⁴⁷ Banks and other financial intermediaries would create speculative financial products in order to satisfy the demand.²⁴⁸ “The introduction of additional layering of finance, together with the invention of new instruments . . . is evidence . . . of the increased fragility of the system,” Minsky wrote.²⁴⁹

Eventually, the amount of outstanding debt would push the system towards collapse. Those intent on maximizing their leverage would not save enough money to repay the loans.²⁵⁰ “A reduction in the margins of safety means that much more debt than before can be carried by an expected cash flow,” Minsky explained.²⁵¹ The companies and households would raise money to cover payments due on their debts through additional borrowing.²⁵² They would “increase [their] outstanding debt in order to meet [their] financial obligations,” he wrote.²⁵³

In the end, the sequence of meeting obligations with new debt would break down.²⁵⁴ “After an initial interval, the basic disequalibrating tendencies of capitalist finance will once again push the financial structure to the brink of fragility,” Minsky wrote.²⁵⁵ Ultimately, it would become apparent that some of

²⁴⁴ *Id.*

²⁴⁵ *Id.*

²⁴⁶ See, e.g., Hyman Minsky, *STABILIZING AN UNSTABLE ECONOMY* xxi (1986); Louis Uchitelle, H. P. Minsky, 77, *Economist Who Decoded Lending Trends*, N.Y. TIMES, Oct. 26, 1996.

²⁴⁷ See, e.g., Jan Kregel, *The Natural Instability of Financial Markets* 3 (The Ideas Working Paper Series, Working Paper No. 04/2009, 2009), available at http://www.networkideas.org/working/jun2009/04_2009.pdf; See also John Cassidy, *The Minsky Moment*, THE NEW YORKER, Feb. 4, 2008 (“As boom leads to euphoria, Minsky said, banks and other commercial lenders extend credit to ever more dubious borrowers, often creating new financial instruments to do the job.”).

²⁴⁸ See, e.g., Dallas, *supra* note 23, at 294.

²⁴⁹ See Minsky, *supra* note 246.

²⁵⁰ See, e.g., Beker, *supra* note 237.

²⁵¹ Hyman Minsky, *The Evolution of Financial Institutions and the Performance of the Economy*, 20 J. ECON. ISSUES 345, 350 (1986).

²⁵² See, e.g., Beker, *supra* note 237.

²⁵³ Hyman Minsky, *Banking and a Fragile Financial Environment*, Paper prepared for the American Economics Association Meetings, Sept. 16, 1976 at 5.

²⁵⁴ See *infra* text accompanying notes 255–257.

²⁵⁵ Minsky, *supra* note 246, at 370.

the borrowers had overextended themselves.²⁵⁶ Lenders would cease offering them credit, and they would have to sell assets to raise money to pay back their outstanding loans.²⁵⁷

The cycle would then progress to a crisis.²⁵⁸ As more borrowers had to sell assets, too many assets would flood the market, and the oversupply would depress prices.²⁵⁹ As Minsky explained, “units with cash flow shortfalls will be forced to try to make position by selling out position. This is likely to lead to a collapse of asset values.”²⁶⁰ In time, the assets would not be worth enough to pay back the loans, and the central bank would have to decide whether to intervene on behalf of the lenders.²⁶¹

B. Predicting Minsky’s Reaction to Regulating Credit Rating Agencies: “No Simple Answer to the Problems of our Capitalism”²⁶²

Minsky’s theories offered an alternate explanation for the crisis.²⁶³ The “financial instability hypothesis” seemed to suggest that focusing on a discrete shortcoming of the CRAs failed to address the systemic tendency towards collapse.²⁶⁴ Eliminating conflicts of interest may have achieved accuracy in ratings.²⁶⁵ It would not, however, prevent volatility, because it left the agencies in charge of regulating the markets.²⁶⁶ This part extrapolates from his writings a possible interpretation of recent events.

Viewed through the lens of Minsky’s hypothesis, the CRAs did not have the capacity to prevent the crisis.²⁶⁷ Their failings appeared to be symptomatic

²⁵⁶ See, e.g., Charles J. Whalen, *Rethinking Economics For A New Era Of Financial Regulation: The Political Economy Of Hyman Minsky*, 15 CHAP. L. REV. 149, 154 (2011).

²⁵⁷ See, e.g., *Id.*

²⁵⁸ See, e.g., Lahart, *supra* note 15.

²⁵⁹ See, e.g., *Id.*

²⁶⁰ Minsky, *supra* note 224 at 8.

²⁶¹ See, e.g., Lahart, *supra* note 15.

²⁶² Quoted in Steven Mihm, *Why Capitalism Fails*, BOSTON GLOBE, Sept. 13, 2009.

²⁶³ See rest of Part III.B.

²⁶⁴ See, e.g., Gabilondo, *supra* note 222, at 483 (“If we believe, as did Minsky, that capitalist market systems could be enhanced by mitigating leverage cycles, then we judge the [Dodd Frank] Act by whether it does so.”).

²⁶⁵ See, e.g., Sinclair, *supra* note 13.

²⁶⁶ See, e.g., Zachary Gubler, *Regulating In The Shadows: Systemic Moral Hazard And The Problem Of The Twenty-First Century Bank Run*, 63 ALA. L. REV. 221, 260 (2012).

²⁶⁷ See, e.g., Kregel, *supra* note 18, at 2 (“The fact that the subprime crisis was able to spread to the rest of the financial system and set off a full-scale bout of systemic instability and debt deflation is, however, the result of a Minsky process of sustained and increasing financial fragility in the rest of the financial system.”).

of deeper problems.²⁶⁸ “The tendency to transform doing well into a speculative investment boom is the basic instability in a capitalist economy,” he wrote.²⁶⁹ A period of growth that resembled the “euphoric” phase in his cycle seemed to infect the CRAs, along with the other participants in the system.²⁷⁰ The agencies applied the same principles they had used to rate traditional corporate debt and graded the new products highly.²⁷¹ Because the new securities did not trade on transparent markets and had no similar precursors, the agencies sustained an impression that they were worth more than their constituent parts.²⁷² The agencies’ “gatekeeping” function broke down.²⁷³

Minsky appealed to policymakers to empower market regulators that could address the causes of fragility, and to reject “exogenous” responses such as tinkering with the incentives of the CRAs.²⁷⁴ “We need a theory that makes instability a normal result in our economy and gives us handles to control it,” he wrote.²⁷⁵ “Unless we understand what it is that leads to economic and financial instability, we cannot . . . eliminate it.”²⁷⁶

Minsky’s conception of economic cycles bore a resemblance to the recent crisis.²⁷⁷ A period of stability seemed to generate increases in the accumulation of debt and the use of speculative financial instruments.²⁷⁸ In the early 2000s, the Federal Reserve lowered interest rates to one percent and set in motion a

²⁶⁸ See, e.g., Nicholas Dorn, *The Governance Of Securities*, 50 BRIT. J. CRIMINOLOGY 23, 30–31 (2010) (“blaming’ the ratings agencies is merited insofar as it points to a conflict of interest; however, such blaming could also function as a diversion – like blaming a servant for carrying out one’s instructions. If the subprime phenomenon was driven from above (by the capital markets), then it is hardly surprising that there was immense pressure upon a gatekeeper in the connecting chain.”).

²⁶⁹ Minsky, *supra* note 231, at 24.

²⁷⁰ See, e.g., Amadou, *supra* note 7 (“ratings increased systemic risk and may be procyclical, helping fuel investments in ‘good times’”).

²⁷¹ See, e.g., Kregel, *supra* note 247.

²⁷² See, e.g., Anastasia Nesvetailova, *The Crisis Of Invented Money: Liquidity Illusion And The Global Credit Meltdown*, 11 THEORETICAL INQUIRIES L. 125, 144 (2010).

²⁷³ See *id.* at 136–37.

²⁷⁴ See, e.g., Minsky & Ferri., *supra* note 228, at 4. (“in a world where the internal dynamics imply instability, a semblance of stability can be achieved or sustained by introducing conventions, constraints, and interventions into the environment.”).

²⁷⁵ Minsky, *supra* note 249, at 111.

²⁷⁶ *Id.*

²⁷⁷ See *infra* text accompanying notes 278–280.

²⁷⁸ See, e.g., Whalen, *supra* note 256, at 164.

boom in the housing market.²⁷⁹ The market relied on increasingly unstable sources of credit.²⁸⁰

From Minsky's perspective, the cycle began as consumers acquired more debt. Low interest rates made mortgages cheaper, and more people sought loans to buy homes.²⁸¹ As demand increased, property values rose, and the buyers had to obtain larger loans.²⁸² "The fundamental instability of a capitalist system is upwards," Minsky wrote.²⁸³

The expansion he predicted seemed to continue as the increase in prices made selling property more profitable.²⁸⁴ Other consumers entered the housing market and sought additional loans.²⁸⁵ The lucrative home sales they observed appeared to justify the size of the mortgages they required.²⁸⁶ Lenders worried less about the potential for default and demanded less security from borrowers.²⁸⁷ In 2004, for example, forty two percent of first-time home buyers paid no down payment.²⁸⁸

Lenders seemed to engage in risky practices free from regulatory constraints.²⁸⁹ As Minsky anticipated, finance was the main driver of wealth creation, and political policies supported innovation.²⁹⁰ "In a world of

²⁷⁹ See, e.g., Gabilondo, *supra* note 222, at 473-74.

²⁸⁰ See, e.g., Philip Arestis & Elias Karakitsos, *Subprime Mortgage Market and the Current Crisis* (Cambridge Centre for Economic and Public Policy, Working Paper No. 08-09, 2009) at 6.

²⁸¹ See, e.g., Antony Davies & James R. Harrigan, *Why the Education Bubble Will Be Worse Than the Housing Bubble*, U.S. NEWS, (Jun. 12, 2012), available at <http://www.usnews.com/opinion/blogs/economic-intelligence/2012/06/12/the-government-shouldnt-subsidize-higher-education>.

²⁸² See, e.g., *Id.*

²⁸³ Minsky, *supra* note 231, at 24.

²⁸⁴ See, e.g., Arestis & Karakitsos, *supra* note 280, at 6.

²⁸⁵ See, e.g., William Lang & Julapa Jagtiani, *The Mortgage and Financial Crises: The Role of Credit Risk Management and Corporate Governance*, 38 ATLANTIC ECON. J., 123, 127 (2010).

²⁸⁶ See, e.g., L. Randall Wray, *Money Manager Capitalism and the Global Financial Crisis* (Levy Econ. Inst., Working Paper No. 578, 2009) at 8-9.

²⁸⁷ See, e.g., Lang & Jagtiani, *supra* note 285, at 127-28.

²⁸⁸ Whalen, *supra* note 256, at 153.

²⁸⁹ See, e.g., *The Genesis of the Current Economic Crisis Hearings*, *supra* note 22, (testimony of Hon. Eugene A. Ludwig) ("The paradigm of the last decade has been the conviction that un- or under-regulated financial services sectors would produce more wealth").

²⁹⁰ See, e.g., Jane Kelsey, *The Conundrum Of Shifting Orthodoxies: FTAs And Korea's Currency Controls*, 14 J. INT'L ECON. L. 845, 848 (2011).

businessmen and financial intermediaries who aggressively seek profit," he wrote, the "innovators will always outpace regulators."²⁹¹

In time, the lenders realized that they could earn more money through leveraging their loans than they could in fees from originating mortgages.²⁹² Financial institutions began to purchase and pool the mortgages, then sell individual tranches to downstream investors.²⁹³ "Innovations in financial practice are a feature of our economy," Minsky wrote.²⁹⁴

The growing demand for new mortgages to securitize increased instability in the economy.²⁹⁵ "That which can be securitized, will be securitized," Minsky wrote.²⁹⁶ Lenders offered nonconforming mortgages and rolled back qualification standards.²⁹⁷

Soon, the system depended on a continuous supply of new home buyers.²⁹⁸ The new buyers' demand for houses kept prices high, and the rising property values justified the acquisition of large mortgages.²⁹⁹ The large mortgages provided raw materials to securitize, and the strong performance of the housing market validated the high ratings that the CRAs awarded to the securitized products.³⁰⁰ The high ratings also made trading in the products more profitable.³⁰¹

Eventually, the chain broke, and the crisis started.³⁰² Two Bear Stearns hedge funds that had invested heavily in mortgage-backed securities failed.³⁰³ As lenders became aware of the potential for widespread defaults,³⁰⁴ they

²⁹¹ Minsky, *supra* note 249, at 281.

²⁹² See, e.g., Kregel, *supra* note 18, at 6.

²⁹³ See, e.g., Wray, *supra* note 286, at 7.

²⁹⁴ Minsky, *supra* note 231, at 24.

²⁹⁵ See, e.g., Arestis & Karakitsos, *supra* note 280, at 7–8.

²⁹⁶ Hyman Minsky, *Securitization 2* (The Levy Econ. Inst. of Bard College, Policy Note No. 2008/2) (quoting participants of a conference of the Chicago Federal Reserve Bank in May, 1987); See also, Hyman Minsky, *Securitization Outline*, (The Levy Econ. Inst. of Bard College, Hyman P. Minsky Archive Paper 188, 1987) available at http://digitalcommons.bard.edu/hm_archive/188.

²⁹⁷ See, e.g., Kregel, *supra* note 247, at 17–18.

²⁹⁸ See, e.g., Kregel, *supra* note 247, at 18.

²⁹⁹ See, e.g., *The Fed Discovers Hyman Minsky*, *supra* note 225.

³⁰⁰ See, e.g., Amadou, *supra* note 7, at 3.

³⁰¹ See, e.g., Kregel, *supra* note 247, at 18.

³⁰² See *infra* text accompanying notes 304–307.

³⁰³ Barbara Kiviat, *Bear Stearns Is Gone; Now Comes The Trial*, TIME, Sept. 15, 2009, available at http://www.time.com/time/specials/packages/article/0,28804,1923203_1923201_1923189,00.html#ixzz23c7P5pDy.

stopped extending short-term credit, and housing prices began to fall.³⁰⁵ In the first quarter of 2008, the American economy contracted more than six percent, and eight million jobs disappeared.³⁰⁶

C. Minsky's Vision of the Crisis: "Financial Regulation is Both Indispensable and Imperfect"³⁰⁷

What solution would Minsky have proposed? He advocated for public institutions to impose limits on credit and financial innovation in order to break financial cycles.³⁰⁸ "The problem of finance that will emerge," he wrote, "is whether the . . . institutions of national government can contain . . . financial fragility."³⁰⁹ Three basic characteristics and two more specific warnings emerge from his writings.³¹⁰ This part proposes the elements of a resolution that he might have supported.

First, Minsky called for robust public regulation, not reliance on private "gatekeepers."³¹¹ "Apt intervention and institutional structures are necessary for market economies to be successful," he wrote.³¹² Regulators had to "constrain the impact of uncertainty."³¹³

Second, Minsky believed that the regulators needed to strive continuously to restrict financial innovation.³¹⁴ Regulators, he wrote, should guide "the evolution of financial practices . . . to reduce the likelihood that fragile

³⁰⁴ See, e.g., Mark Pittman, *Bear Stearns Fund Collapse Sends Shock Through CDOs (Update2)*, BLOOMBERG, June 21, 2007, available at <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=ahWfhEJ7dra4>.

³⁰⁵ See, e.g., Dallas, *supra* note 23, at 295.

³⁰⁶ Gadbar, *supra* note 14, at 556.

³⁰⁷ James K. Galbraith, Keynote Lecture to the 5th Annual Dijon Conference on Post-Keynesian Economics at the Roskilde University, Denmark (May 13, 2011) audio available at <http://utip.gov.utexas.edu/> (describing Minsky's beliefs).

³⁰⁸ See, e.g., Hyman Minsky, *Longer Waves in Financial Relations: Financial Factors in the More Severe Depressions II*, 29 J. ECON. ISSUES 83, 93 (1995).

³⁰⁹ *Id.*

³¹⁰ See Part III.C.

³¹¹ See *infra* text accompanying notes 313-314.

³¹² Ferri & Minsky, *supra* note 228, at 24.

³¹³ Hyman Minsky, *Uncertainty and the Institutional Structure of Capitalist Economies: Remarks upon Receiving the Veblen-Commons Award*, 30 J. ECON. ISSUES 357, 359 (1996).

³¹⁴ See *infra* text accompanying notes 316-317.

situations conducive to financial instability will develop.”³¹⁵ As new instruments entered the markets, they had to keep their rules up to date.³¹⁶

Third, Minsky wanted the regulators to impose countercyclical measures, in order to limit speculation and maintain stability.³¹⁷ “Institutions can act as the equivalent of circuit breakers,” he wrote.³¹⁸ They could halt the inevitability of “euphoric” expansion.³¹⁹

More specifically, Minsky called for banks to act solely as lenders, rather than participate in “capital development.”³²⁰ “If the authorities constrain banks and are aware of the activities of fringe banks and other financial institutions,” he wrote, then “they are in a better position to attenuate the disruptive expansionary tendencies of our economy.”³²¹ He proposed that regulators should require “narrow banking,”³²² and promote an economy of small banks financing small, local deals.³²³

Finally, Minsky also advocated the restriction of financial trading to tangible assets.³²⁴ He emphasized the dangers of securitization in 1992, before the practice became prevalent. “The instrument originators and the security underwriters did not hazard any of their wealth on the longer term viability of the underlying projects,” he wrote.³²⁵ “All that was required for the originators to earn their stipend was skill avoiding obvious fraud. . . .”³²⁶

³¹⁵ Minsky, *supra* note 249, at 322.

³¹⁶ See, e.g., Randall Wray, *Minsky Crisis 2* (The Levy Econ. Inst., Working Paper Series No. 659, 2011).

³¹⁷ See, e.g., Gabilondo, *supra* note 222, at 489.

³¹⁸ Hyman Minsky, Domenico Delli Gatti, and Mauro Gallegati, *Financial Institutions, Economic Policy, and the Dynamic Behavior of the Economy 2* (The Levy Econ. Inst. of Bard College, Working Paper No. 126, 1994).

³¹⁹ See, e.g., Cassidy, *supra* note 247 (the “way to break this pattern was for the government to step in and regulate the money men.”).

³²⁰ Hyman Minsky, *Financial Instability and the Decline (?) of Banking: Public Policy Implications 13* (The Levy Econ. Inst. of Bard College, Hyman Minsky Archive, Paper 88, 1994), available at http://digitalcommons.bard.edu/cgi/viewcontent.cgi?article=1087&context=hm_archive.

³²¹ Minsky, *supra* note 249, at 281.

³²² Minsky, *supra* note 320, at 13.

³²³ Hyman P. Minsky, Dimitri B. Papadimitriou, Ronnie J. Phillips, & L. Randall Wray, *Community Development Banking: A Proposal to Establish a Nationwide System of Community Development Banking 9* (The Levy Econ. Inst. of Bard College, Working Paper No. 3, 1993).

³²⁴ See *infra* text accompanying notes 326–327.

³²⁵ Hyman Minsky, *The Capital Development Of The Economy And The Structure Of Financial Institutions 22* (The Levy Econ. Inst. of Bard College, Working Paper No. 72, 1992).

³²⁶ *Id.*

The measures Minsky suggested appear more difficult to implement than moderating conflicts of interest among the CRAs.³²⁷ Public regulation that limits tendencies towards economic expansion and the dynamics that introduce instability would demand the resolution of other complex questions.³²⁸ Regulators would have to address, for example: 1) how to compensate the financial sector to attract talent but discourage excessive risk taking; 2) how to direct credit to prudent borrowers while preventing irresponsible lending; and 3) how to cultivate community values that would reject the natural inclination to maximize profit.³²⁹

Minsky, however, stressed the stakes: In the absence of policy that “assures that the economic prerequisites for sustaining the civil and civilized standards of an open liberal society exist,”³³⁰ he wrote, market behavior that creates “uncertainty and extremes in income maldistribution and social inequalities [will] attenuate the economic underpinnings of democracy.”³³¹

IV. SPOTLIGHT INDIA: CONFLICTED RATING AGENCIES AND DELIBERATE DEREGULATION

India provides additional insights into ways to resolve the conflict in the West.³³² The country developed local CRAs that used the “issuer-pays” model.³³³ The Indian economy, meanwhile, transformed in patterns similar to those that Minsky predicted.³³⁴ The government deregulated and expanded the debt markets and fostered growth in securitization.³³⁵ Will the agencies succeed in stabilizing the Indian economy, because differences in their supervision mitigated their conflicts of interest? Or, have speculation and financial innovation been the critical concern, and will economic fragility increase without countercyclical interventions? This section first introduces the Indian CRAs and compares them to their Western counterparts. Second, it

³²⁷ See, e.g., Gabilondo, *supra* note 222, at 470 (“the idea that the government should actively intervene in the financial market faces renewed political opposition”).

³²⁸ See, e.g., Cassidy, *supra* note 247.

³²⁹ *Id.*

³³⁰ Minsky, *supra* note 313, at 15.

³³¹ *Id.*

³³² See rest of Part IV below.

³³³ Ministry of Finance, Capital Markets Division, *Report of the Committee on Comprehensive Regulation for Credit Rating Agencies*, Dec. 2009 [hereinafter *Report of the Ministry of Finance*] at 13, available at http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/CCRAo30310_R2.pdf

³³⁴ See *infra* Part IV.B.

³³⁵ See, e.g. Shroff, *supra* note 38, at 96; Timothy Massad, *Doing Business in India 2009: Critical Legal Issues for U.S. Companies*, 1720 PLI/Corp 33, 42 (2009).

investigates parallels between recent changes in the Indian economy and Minsky's financial instability hypothesis.

A. More Conflicts of Interest: Credit Rating Agencies in India

CRA's in India resemble agencies in the West but have significant differences.³³⁶ They have profited from charging issuers for ratings,³³⁷ an arrangement that would suggest conflicted interests.³³⁸ Since 1999, however, public regulators have overseen them.³³⁹ New activities have also diversified their revenue sources.³⁴⁰

1. Soaring Market Values

Six CRA's operate in India.³⁴¹ CRISIL opened first, in 1987, and now leads the market.³⁴² In 1991, a consortium of Indian financial institutions launched a second agency, ICRA.³⁴³ Three Indian banks own another agency, CARE.³⁴⁴ In

³³⁶ See rest of Part IV below.

³³⁷ See Report of the Ministry of Finance, *supra* note 333 at 13.

³³⁸ See, e.g., *Turmoil in U.S. Credit Markets: The Role of the Credit Rating Agencies: Hearing Before S. Comm. on Banking, Housing, and Urban Affairs*, 110th Cong., 2nd Sess. 32 (2008) (testimony of Arturo Cifuentes) [hereinafter *The Role of Credit Rating Agencies Hearings - Cifuentes*] available at http://www.banking.senate.gov/public/index.cfm?fuseAction=Hearings&Testimony&Hearing_ID=709b68d2-6e2b-4048-bf86-19fdcoecec3&Witness_ID=62f46506-891d-45a7-9c3c-68683ecb5163 ("One could make the case that that whenever a rating analyst is supervised by a manager whose compensation is determined by market share or revenue growth (rather than ratings accuracy) the objectivity of ratings is compromised."). For a discussion of a study finding a positive correlation between the "issuer-pays" model and high ratings and more downgrades, see Dallas, *supra* note 23, at 265, 341.

³³⁹ See *infra* Part IV.A.2.

³⁴⁰ See *infra* Part IV.A.3.

³⁴¹ See text accompanying notes 342-345. Also, the fifth agency rates only small issuers and the sixth is the subsidiary of a foreign company.

³⁴² See Report of the Ministry of Finance, *supra* note 333. Standard & Poor purchased a controlling stake in 2005, see *id.*

³⁴³ ICRA, *Profile*, available at <http://www.icra.in/67654323.aspx?ck=pXKT5F8Dloyo9YcCTjHl5ZoyuA4irn1XMUvRbEmAkRBQKECplVZmNCoJ3VCiLt2Xfnxc5w2uaDrqRYouEKC oCw==>. In 2001, Moody's purchased a 29% stake in ICRA, see *Moody's in India*, available at <http://www.moody.co.in/>.

³⁴⁴ Stephen Wells & Lotte Schou-Zibell, *India's Bond Market - Developments and Challenges Ahead*, Asian Development Bank Working Paper Series on Regional Economic Integration No. 22, Dec. 2008 at 24, available at http://aric.adb.org/pdf/workingpaper/WP22_India%27s_Bond_Market.pdf.

2007, former bankers and regulators in Bangalore incorporated the newest agency, Brickwork.³⁴⁵

The CRAs acquired a “gatekeeping” role in the financial markets.³⁴⁶ Indian law mandated that at least one agency must evaluate every financial product.³⁴⁷ The rule increased ratings volumes, and CRISIL, for example, has graded more than 30,000 issuers.³⁴⁸ In most other countries, including the United States, the United Kingdom, and Australia, ratings have been voluntary.³⁴⁹

All six CRAs have performed successfully.³⁵⁰ CRISIL’s net profits increased by twenty percent between January and March 2012,³⁵¹ and it attained a market value of \$1.3 billion in May.³⁵² ICRA acquired subsidiary companies, and operates in Kuwait, the Philippines, and Indonesia, among other countries.³⁵³ In 2011, a shareholder deal valued CARE at \$400 million dollars, and the agency has plans for a public offering.³⁵⁴

2. Conflicts of Interest

The CRAs adopted the same “issuer-pays” model that Western governments blamed for producing conflicts;³⁵⁵ however, Indian regulators started supervising the agencies early and aggressively.³⁵⁶ The Securities and Exchange Board of India (“SEBI”)³⁵⁷ has overseen the agencies’ evaluations of

³⁴⁵ See *History*, <http://www.brickworkratings.com/history.html>.

³⁴⁶ See, e.g., M. T. Raju, Upasana Bhutáni, Anubhuti Sahay, *Corporate Debt market in India: Key Issues and Policy Recommendations*, SEBI Working Paper Series No. 9, July 2004 at 17 (The agencies are “well . . . regarded,” and their ratings “carry confidence in the market.”).

³⁴⁷ See Jain & Sharma, *supra* note 6, at 106.

³⁴⁸ CRISIL, *Credit Rating List*, available at <http://crisil.com/ratings/credit-ratings-list.jsp>.

³⁴⁹ Jain & Sharma, *supra* note 6, at 106.

³⁵⁰ See, e.g., *India’s Ratings Agencies Are Thriving*, THE ECONOMIST, Mar. 17, 2012.

³⁵¹ *Crisil Net Up 20% in First Quarter*; THE HINDU BUSINESS LINE, Apr. 16, 2012.

³⁵² See, e.g., Moneycontrol, India Financial Portal, available at <http://www.moneycontrol.com/india/stockpricequote/miscellaneous/crisil/CRI>.

³⁵³ See *ICRA Over the Years: A Chronicle*, available at <http://www.icra.in/67654323.aspx?ck=fQoV5tzY6LgysX63y6bYI/G4iLXpEzOjvrL4hRRftR6erTJmmiLvW74oWKBgqhO2V orElRiEJ8kCWPcbftqMdg==>.

³⁵⁴ See *India’s Ratings Agencies Are Thriving*, *supra* note 350.

³⁵⁵ See Report of the Ministry of Finance, *supra* note 333, at 13.

³⁵⁶ See rest of Part IV.A.2.

³⁵⁷ Raju, Bhutáni & Sahay, *supra* note 346, at 7.

most financial products since 1999.³⁵⁸ In the United States, by comparison, the SEC began actively monitoring the CRAs in 2007.³⁵⁹ The EU recently drafted its first mandatory provisions.³⁶⁰

SEBI has exercised greater power than Western regulators. Since 1999, it has required the Indian CRAs to seek its authorization to conduct business.³⁶¹ The agencies must renew the licenses every three years.³⁶² The SEC, by contrast, grants permanent recognition.³⁶³ SEBI can also subpoena the agencies' records and employees and conduct examinations under oath.³⁶⁴

Additional institutions complement SEBI's oversight.³⁶⁵ The central bank, the Reserve Bank of India ("RBI"), supervises ratings of securitized products³⁶⁶ and must consent before agencies can grade bank loans.³⁶⁷ Other public entities, such as the Ministry of Petroleum and the Directorate General of Shipping, also regulate the agencies' activities.³⁶⁸

In 1999, SEBI set out mandatory rules that specifically addressed conflicts of interest,³⁶⁹ and it updated them in response to the global financial crisis.³⁷⁰ "Clause 11" instituted an enforceable code of conduct that restricted the CRAs from the "unfair practice of diverting the clients of other agencies on assurance of higher ratings."³⁷¹ It also required the agencies to "maintain an arm's length relationship between . . . credit rating . . . and any other activity" and to "refrain from creating a false market."³⁷² In the wake of the global crisis,

³⁵⁸ Anuradha Guru, *Concerns on the Role of Credit Rating Agencies in the Evolving Financial Regime: A Policy Perspective*, NSE NEWS, Sept. 2008, at 7, available at <http://ssrn.com/abstract=1439659>; see Report of the Ministry of Finance, *supra* note 333, at 12, 24.

³⁵⁹ Himanshu Bhushan, *Credit Rating Agencies in India: Have We Done Enough* 11 (Jan. 31, 2012), available at <http://ssrn.com/abstract=1999886>.

³⁶⁰ Report of the Ministry of Finance, *supra* note 333, at 24.

³⁶¹ Bhushan, *supra* note 359, at 2, 12.

³⁶² Jain & Sharma, *supra* note 6, at 104.

³⁶³ Report of the Ministry of Finance, *supra* note 333.

³⁶⁴ See Bhushan, *supra* note 359, at 15-16; Jain & Sharma, *supra* note 6, at 3; Guru, *supra* note 358, at 7.

³⁶⁵ Bhushan, *supra* note 359, at 10.

³⁶⁶ *Id.*

³⁶⁷ Report of the Ministry of Finance, *supra* note 333, at 27.

³⁶⁸ *Id.* at 10.

³⁶⁹ Guru, *supra* note 358, at 7.

³⁷⁰ See *infra* text accompanying notes 371-374.

³⁷¹ Report of the Ministry of Finance, *supra* note 333, at 24; Jain & Sharma, *supra* note 6, at 104-105.

³⁷² Bhushan, *supra* note 359, at 23.

various governmental committees reviewed the “issuer-pays” model and concluded that it did not threaten the economy.³⁷³ SEBI tightened some provisions on disclosure and imposed new prohibitions on analyst participation in marketing, business development, and share ownership in rated companies.³⁷⁴

3. Diversification

The Indian CRAs have broadened their sources of revenue, potentially blunting some of the conflicts of interest that the “issuer-pays” model might generate.³⁷⁵ Most agencies in India have rated a diverse range of financial products and institutions, and have also provided additional services.³⁷⁶ Their enlarged pool of clients has made retaining individual customers less critical to their profits.

CRISIL, for example, has earned half of its revenues from abroad by conducting a variety of ratings and undertaking several other tasks.³⁷⁷ In addition to rating standard financial products, it has assessed bank loans and real estate, and has evaluated more than 14,000 small businesses.³⁷⁸ It has developed risk-management models for banks and provided research and analysis to insurance companies.³⁷⁹ It has also advised the Indian government on reforms to improve public institutions and infrastructure development.³⁸⁰

Other CRAs have pursued similar profiles.³⁸¹ The managing director of ICRA has estimated that less than sixty percent of its revenues derive from credit ratings.³⁸² It started rating business and engineering schools,³⁸³ and the newest agency, Brickwork, has graded hospitals and diagnostic labs.³⁸⁴

³⁷³ Shroff, *supra* note 38, at 127.

³⁷⁴ Bhushan, *supra* note 359, at 18; Shroff, *supra* note 38, at 127.

³⁷⁵ See rest of Part IV.A.3.

³⁷⁶ See, e.g., Report of the Ministry of Finance, *supra* note 333, at 18.

³⁷⁷ Angel Broking, *CRISIL*, 2, 10 (Jan. 10, 2010), available at http://smartinvestor.business-standard.com/BSCMS/PDF/crisil_12011_01.pdf.

³⁷⁸ *Id.*

³⁷⁹ *Id.*

³⁸⁰ *Id.*

³⁸¹ See *infra* text accompanying notes 383–385.

³⁸² See *India's Ratings Agencies Are Thriving*, *supra* note 350.

³⁸³ See, e.g., Prashant K. Nanda, *Now Crisil, Icra to Rate Engineering, B-Schools*, *LIVEMINT.COM* and *WALL ST. J.*, May 8, 2012, available at <http://www.livemint.com/2012/05/08223213/Now-Crisil-Icra-to-rate-engin.html>.

³⁸⁴ See, e.g., *Brickwork Careers*, <http://www.brickworkratings.com/careers.html>.

Regulators have directed the CRAs to offer additional services.³⁸⁵ State energy utilities have called on the agencies to rate their performance.³⁸⁶ SEBI requires companies that list on public stock exchanges to hire the agencies to rate their shares, in order to help investors evaluate them.³⁸⁷

B. Adherence to Minskyian Paradigms: Indian Market Development

The Indian CRAs, though regulated and diversified,³⁸⁸ have operated in evolving financial markets that have appeared to reflect tendencies towards “euphoria,” as Minsky forecast.³⁸⁹ In 1991, India abandoned a statist economic system, characterized by government control of industry and slow growth, and began to implement a program of economic liberalization.³⁹⁰ It actively developed its debt markets.³⁹¹ It also deliberately fostered trading in securitized financial instruments,³⁹² including the mortgage-backed securities at the center of the recent global financial crisis.³⁹³ This part observes India’s economic development through the framework of Minsky’s financial instability hypothesis.

1. Market Liberalization and Increased Cash Flow: Minsky Phase 1?

The period after 1992, in which the state began to reduce its role in the Indian economy has borne some resemblance to the initial growth phase of Minsky’s financial instability hypothesis.³⁹⁴ Upon independence in 1949, India grew slowly.³⁹⁵ The country rejected the colonial experience for the Soviet

³⁸⁵ See *infra* text accompanying notes 387–388.

³⁸⁶ Deeptha Mathavan, *From Dabhol to Ratnagiri: The Electricity Act of 2003 and Reform of India’s Power Sector*, 47 Colum. J. Transnat’l L. 387, 415–16 (2009).

³⁸⁷ Massad, *supra* note 335, at 44–45; Jain & Sharma, *supra* note 6, at 106.

³⁸⁸ See *supra* Part IV.A.

³⁸⁹ See rest of Part IV.B.

³⁹⁰ See, e.g., Afsharipour, *supra* note 26; Bala N. Balasubramanian, Bernard S. Black & Vikramaditya S. Khanna, *Firm-Level Corporate Governance in Emerging Markets: A Case Study of India*, U. Michigan Law & Economics, Olin Working Paper 08-011, July 2, 2008 at 5.

³⁹¹ See, e.g., Raju, Bhutáni & Sahay, *supra* note 346; Rajesh Chakrabarti, *Bond Markets in India 2* (June 21, 2008), available at <http://ssrn.com/abstract=1149322>.

³⁹² See *infra* Part IV.B.3.

³⁹³ See, e.g., Schwarcz, *supra* note 103, at 1165, 1178.

³⁹⁴ See rest of Part IV.B.1.

³⁹⁵ See, e.g., Afsharipour, *supra* note 26, at 1029, 1053; Franklin Allen, Rajesh Chakrabarti, and Sankar De, *India’s Financial System 2*, Nomura Occasional Series on

model of state intervention.³⁹⁶ Until the early 1980s, the economy expanded by an average of only 3.5%, a situation referred to as the “Hindu rate of growth.”³⁹⁷ The new leaders suppressed private competition through strict licensing requirements.³⁹⁸ High tariffs isolated the country from the rest of the world, and restrictions on exports suppressed corporate profits.³⁹⁹

Government nationalization of the banks limited access to investment capital.⁴⁰⁰ The RBI controlled interest rates and became the primary source of credit.⁴⁰¹ Investors turned to government-sponsored financial institutions for finance rather than to the debt and equity markets.⁴⁰² The state barred investors from trading bonds among themselves and taxed bonds purchased directly from issuers heavily.⁴⁰³ It forbade private firms from issuing new shares.⁴⁰⁴

In 1992, declines in the value of the rupee made liberalization necessary, and a period of economic growth began.⁴⁰⁵ Over the course of one summer, the country transitioned to a market-based system.⁴⁰⁶ The finance minister abolished licensing requirements, opened the economy to foreign investment,

Contemporary Capital Markets, Oct. 27, 2007, available at <http://ssrn.com/abstract=1261244>.

³⁹⁶ Balasubramanian, Black, & Khanna, *supra* note 390, at 5.

³⁹⁷ John Armour & Priya Lele, *Law, Finance, And Politics: The Case Of India*, 43 Law & Soc’y Rev. 491, 496 (2009).

³⁹⁸ Afsharipour, *supra* note 26, at 1053.

³⁹⁹ *Id.*; Viswanathan, *supra* note 34, at 46–47.

⁴⁰⁰ Amelia Ames, *Foreign Institutional Investment In India: What A Portfolio Manager Needs To Know About The Past, Present, And Potential Future Of India*, 4 B.Y.U. Int’l L. & Mgmt. Rev. 143, 152 (2008).

⁴⁰¹ Armour & Lele, *supra* note 397, at 491, 518.

⁴⁰² Suchismita Bose and Dipankor Coondoo, *A Study of the Indian Corporate Bond Market*, 2 Money & Finance 25, 30 (2003); R.H. Patil, *Broadbasing and Deepening the Bond Market in India 2* (Wharton Financial Institutions Center Working Paper Series 01-32), available at <http://fic.wharton.upenn.edu/fic/papers/01/0132.pdf>. In response to nationalization of the banking system, many individuals turned to commercial chit funds, which exploited a legal loophole to compete with government banks, see Jan Eeckhout and Kaivan Munshi, *Mitigating Regulatory Inefficiency: The Non-market Response to Financial Regulation in India*, Selected Working Papers, University of Pennsylvania and Brown University, June 2005 at 947–48.

⁴⁰³ See, e.g., Patil, *id.*

⁴⁰⁴ Balasubramanian, Black & Khanna, *supra* note 390, at 5.

⁴⁰⁵ Allen, Chakrabarti & De, *supra* note 395.

⁴⁰⁶ *One More Push*, THE ECONOMIST, July 23, 2011.

and reduced state intervention in the private sector.⁴⁰⁷ Banks privatized and tariffs and other trade barriers fell.⁴⁰⁸

The capital markets became energized but succumbed to a series of scandals.⁴⁰⁹ Companies sold shares and used the proceeds to expand.⁴¹⁰ Foreign institutional investors, overseas companies, and non-resident Indians invested.⁴¹¹ The markets grew lawless: First, the broker Ketan Parekh and other businessmen created a stock bubble that collapsed in 2001, causing the SENSEX index of the Bombay Stock Exchange to fall by 176 points.⁴¹² In subsequent “vanishing companies” scandals, rogue companies took advantage of optimistic investors and lax enforcement by selling shares to the public, then disappearing.⁴¹³ Substantial irregularities emerged in the financial statements of the Tata Finance company, an affiliate of the Tata Group, one of India’s largest and most prominent businesses.⁴¹⁴

Regulators enforced rules leniently.⁴¹⁵ Some market observers promoted an Indian Sarbanes Oxley Act, akin to the American legislation that followed the Enron scandal,⁴¹⁶ but the plan did not succeed.⁴¹⁷ When SEBI adopted a new listing rule mandating independent directors on corporate boards, connected directors redesignated themselves as independent directors to appear to meet the requirements.⁴¹⁸ SEBI never delisted a company for flouting the rule, and it dropped the few enforcement actions it tried to pursue.⁴¹⁹

⁴⁰⁷ Balasubramanian, Black & Khanna, *supra* note 390, at 5.

⁴⁰⁸ *Id.*

⁴⁰⁹ See *infra* text accompanying notes 410–414.

⁴¹⁰ Mohanty, *supra* note 43, at 236; Balasubramanian, Black & Khanna, *supra* note 390, at 5.

⁴¹¹ Armour & Lele, *supra* note 397, at 503.

⁴¹² See, generally, collection of articles published in the India Times, available at <http://articles.economictimes.indiatimes.com/keyword/ketan-parekh/recent/3>.

⁴¹³ Mohanty, *supra* note 43, at 239 (2006).

⁴¹⁴ *Id.*

⁴¹⁵ See *infra* text accompanying notes 416–419.

⁴¹⁶ Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, § 206, 116 Stat. 745, 774 (15 U.S.C. § 78j-1 (2006)).

⁴¹⁷ Mohanty, *supra* note 43, at 232, 250; Balasubramanian, Black & Khanna, *supra* note 390, at 5.

⁴¹⁸ Afra Afsharipour, *Directors As Trustees Of The Nation? India’s Corporate Governance And Corporate Social Responsibility Reform Efforts*, 34 Seattle U.L. Rev. 995, 1005 (2011).

⁴¹⁹ Afra Afsharipour, *The Promise and Challenges of India’s Corporate Governance Reforms*, 1 INDIAN J.L. & ECON. 33, 64–67 (2010).

2. Deregulation and Debt Accumulation: Minsky Phase 2?

The program of market liberalization ended credit rationing,⁴²⁰ and more consumers and companies assumed higher levels of debt, as Minsky predicted.⁴²¹ Between 1994 and 2010, Indian bond markets grew by 2,000%.⁴²² The increased access to credit enabled consumption and investment,⁴²³ but it also amplified sensitivity to variations in interest rates.⁴²⁴ Market participants became more exposed to external shocks, the more debt that they acquired.⁴²⁵

The Indian government actively supported the revitalization of the bond markets.⁴²⁶ SEBI pushed to remove regulations on pricing and limits on foreign buyers, despite recognizing the potential for instability.⁴²⁷ "In India, . . . if money starts coming in all mutual funds will get in [sic] large quantities and if it starts going out it will go in huge quantities thus creating storms in the markets," it noted in a working paper.⁴²⁸ The Ministry of Finance established a High Level Expert Committee on Corporate Bonds to plan how to enlarge the markets.⁴²⁹

Regulators took deliberate steps to expand participation.⁴³⁰ The Ministry of Finance, for example, allowed the introduction of exchange-traded corporate bonds.⁴³¹ Exchange-trading enabled investors to purchase the bonds

⁴²⁰ See *supra* Part IV.B.1.

⁴²¹ See *infra* text accompanying notes 422–425.

⁴²² Anupam Rastogi and Vivek Rao, *Product Innovations for Financing Infrastructure: A Study of India's Debt Markets* 8, South Asia Working Paper Series No. 6, Oct. 2011, available at <http://www.iadb.org/intal/inalcdi/PE/2012/09645.pdf>. CRISIL predicts that credit demand will grow at a faster rate than GDP. See Chakrabarti, *supra* note 391, at 2.

⁴²³ See, e.g., Rakesh Mohan, *Recent Trends in the Indian Debt Market and Current Initiatives*, available at <http://www.dnb.co.in/FESConfTool/Uploads/Downloads/77/Debt%20Markets%20RM.pdf>; Raju, Bhutáni, and Sahay, *supra* note 346, at 11.

⁴²⁴ See, e.g., Guy Debelle, *Household Debt and the Macroeconomy*, BIS Quarterly Review, March 24, 2004 at 51.

⁴²⁵ *Id.* at 57, 62; see also Raju, Bhutáni, & Sahay, *supra* note 346, at 21.

⁴²⁶ See *infra* text accompanying notes 427–429.

⁴²⁷ SEBI, *Developments in the Corporate Bonds and Securitization Market, An Update*, Feb. 24, 2012 at 1, available at http://www.sebi.gov.in/cms/sebi_data/attachdocs/1330492152558.pdf.

⁴²⁸ See, e.g., Raju, Bhutáni, & Sahay, *supra* note 346, at 22–23.

⁴²⁹ Rahul Saraogi, *Rule of Law Determines Depth of Debt Market* (India Knowledge Wharton Series, Aug. 18, 2011), available at <http://knowledge.wharton.upenn.edu/india/article.cfm?articleid=4642>; *Improving Indian Securitization Markets*, *supra* note 467, at 1.

⁴³⁰ See *infra* text accompanying notes 431–434.

⁴³¹ See, e.g., SEBI, *Developments in the Corporate Bonds and Securitization Market, An Update*, Feb. 24, 2012 at 6, available at http://www.sebi.gov.in/cms/sebi_data/attachdocs/1330492152558.pdf. New rules also enabled institutional investors and long-

from other investors on a formal platform, rather than buying them only from the original issuers.⁴³² To attract individual consumers, the Ministry also reduced the minimum size of trades⁴³³ and lowered income taxes on interest payments.⁴³⁴

The central bank introduced increasingly speculative products.⁴³⁵ In 2010, it reported: "There were some legal, regulatory and institutional bottlenecks impeding the development of the corporate bond market in India, many of which have been addressed in recent years."⁴³⁶ Zero-coupon corporate bonds, for example, allowed investors to buy bonds at a discount, then receive the full value plus interest on maturity.⁴³⁷ Prices of zero-coupon bonds tend towards more volatility than those that pay out interest continuously.⁴³⁸

SEBI relaxed numerous regulations that controlled risk.⁴³⁹ In 2007, it eased issuers' mandatory disclosures to potential investors and requirements to obtain ratings.⁴⁴⁰ It also reversed rules that restricted public bonds issues to investment-grade debt, and higher-risk bonds proliferated.⁴⁴¹ The proportion of single A-graded debt rose from 9.4% in 2005 to 20.7% in 2009.⁴⁴² Triple-B

term investors such as pension and provident funds to increase their participation in the bond markets, see Reserve Bank of India, *Financial Stability Report*, March 25, 2010 at 4.32, available at <http://rbi.org.in/scripts/PublicationReportDetails.aspx?UrlPage=&ID=586>.

⁴³² See, e.g., *Plan for a Unified Exchange Traded Corporate Bond Market: A Report of the Internal Committee of SEBI*, available at http://www.sebi.gov.in/commreport/corporate_bond_market.html.

⁴³³ See *Financial Stability Report*, *supra* note 431.

⁴³⁴ Patil, *supra* note 402; *Securitisation in India: The Story So Far and the Way Forward*, available at <http://www.dnb.co.in/Arcil2008/Securitisation%20in%20India.asp>; Wells & Schou-Zibell, *supra* note 344, at 24.

⁴³⁵ See *infra* text accompanying notes 436–438.

⁴³⁶ See *Financial Stability Report*, *supra* note 431 at 4.31.

⁴³⁷ Lakshmi Iyer, *Dip Into the Debt Market*, ENTREPRENEUR, June 2010, available at <http://entrepreneurindia.in/dip-into-the-debt-market/4088>.

⁴³⁸ Mark Gergen and Paula Schmitz, *The Influence Of Tax Law On Securities Innovation In The United States: 1981-1997*, 52 Tax L. Rev. 119, 131 (1997).

⁴³⁹ See *infra* text accompanying notes 442–445.

⁴⁴⁰ SEBI, *Developments in the Corporate Bonds and Securitization Market, An Update*, Feb. 24, 2012 at 9, available at http://www.sebi.gov.in/cms/sebi_data/attachdocs/1330492152558.pdf ("SEBI put in place the simplified listing agreement for debt securities . . . issuers with listed equity who are already subject to detailed disclosure requirements, now have to make minimal disclosures."); Chakrabarti, *supra* note 391, at 10 ("the mandatory number of credit ratings for a bond issue has been reduced from two to one").

⁴⁴¹ Wells & Schou-Zibell, *supra* note 344, at 24, 28.

⁴⁴² *Id.* at 29.

ratings rose from 4.4% to 23.1% over the same time frame, and non-investment grade bonds rose from 0.8% to 9%.⁴⁴³

More liberal regulation unleashed financial innovation.⁴⁴⁴ In 2008, the Ministry of Finance introduced a new type of bond to broaden international investment.⁴⁴⁵ The Foreign Currency Exchangeable Bond could be issued in foreign currencies and pay interest in them, as well. The Ministry also agreed with SEBI to allow repurchase agreements, or “repos,” among individual investors.⁴⁴⁶ In a “repo” transaction, one investor sells a bond to another, on the condition that the seller will repurchase the bond at an agreed price on a specific day.⁴⁴⁷ Although “repos” do not always increase risk, if one party in a sequence of “repo” transactions becomes unable to buy back the bond, the failure spreads through the chain of investors.⁴⁴⁸ This occurred in the United States in 2005, for example, in the wake of the collapse of the financial services company Refco.⁴⁴⁹ Investors have also accused bankers of using “repos” to hide the worsening financial condition of Lehman Brothers investment bank.⁴⁵⁰

3. Speculative Euphoria and Fragility: Minsky Phase 3?

The deliberate process of expanding the Indian debt markets shifted from encouraging trade in traditional corporate bonds⁴⁵¹ to encouraging securitization.⁴⁵² Securitization increases the availability of credit,⁴⁵³ but it also

⁴⁴³ *Id.*

⁴⁴⁴ See *infra* text accompanying notes 447–452.

⁴⁴⁵ See, e.g., Singh & Associates, *Foreign Currency Exchangeable Bonds*, Apr. 2008, available at <http://www.asialaw.com/Article/1988861/Channel/16958/Foreign-Currency-Exchangeable-Bonds.html>.

⁴⁴⁶ See Chakrabarti, *supra* note 391, at 12.

⁴⁴⁷ See, generally, Randall J. Pozdena, *Risk in the Repo Market*, FRBSF Weekly Letter Sept. 13, 1985.

⁴⁴⁸ See, e.g., Michael Mackenzie and Henny Sender, *Fed Seeks to Curb Repo Market Risk*, Financial Times, Dec. 28, 2011.

⁴⁴⁹ Aaron Pressman, *What About the Rest of Refco?*, Bloomberg BusinessWeek, October 17, 2005.

⁴⁵⁰ See, e.g., Michael J. de la Merced & Julia Werdigier, *The Origins of Lehman's 'Repo 105'*, N.Y. Times DealBook, Mar. 12, 2010, available at <http://dealbook.nytimes.com/2010/03/12/the-british-origins-of-lehmans-accountinggimmick/>; further *In re Lehman Bros. Sec. & ERISA Litig.*, 799 F. Supp. 2d 258, 264 (S.D.N.Y. 2011).

⁴⁵¹ See *supra* Part IV.B.2.

⁴⁵² See rest of Part IV.B.3.

⁴⁵³ For a discussion of securitization lowering interest rates, see Schwarcz, *supra* note 103, at 1165, 1171.

introduces instability, as Minsky predicted.⁴⁵⁴ The practice of securitizing debt severs the direct relationship between investors and issuers, which increases risk in several ways.⁴⁵⁵ First, securitization causes investors to lower their lending standards and extend more credit.⁴⁵⁶ Investors typically decide to lend to issuers based on their evaluations of the likelihood that the issuers will default, but securitization transfers the risk of default from investors to third parties.⁴⁵⁷ Because they will no longer bear the loss if issuers default, investors become less careful in their lending decisions.⁴⁵⁸ Second, securitization causes underestimation of risk.⁴⁵⁹ The downstream investors who take on the risk of default have less information than the original investors.⁴⁶⁰ They may misjudge the likelihood of default, particularly as products grow more complex.⁴⁶¹ Third, securitization makes market regulation more difficult.⁴⁶² As the distance between issuers and downstream investors grows, markets become more interconnected and opaque.⁴⁶³

In spite of these risks, the Indian government fostered trade in securitized products.⁴⁶⁴ In 2007, SEBI amended the definition of “securities” to include “securitized debt instruments,” in order to allow securitized debt to be listed and traded on Indian stock exchanges.⁴⁶⁵ Trade volumes doubled within the

⁴⁵⁴ See, e.g., Hyun Song Shin, *Securitisations And Financial Stability*, 119 *The Economic Journal*, 309, 312 (2009).

⁴⁵⁵ See, e.g., Kregel, *supra* note 18, at 5.

⁴⁵⁶ Schwarcz, *supra* note 103, at 1178. (“Because lenders to subprime borrowers did not have to live with the credit consequences of their loans, the argument goes, their loan underwriting standards fell.”).

⁴⁵⁷ *Id.*

⁴⁵⁸ Willem H. Buiter, *Lecture on Lessons From the Global Financial Crisis for Regulators and Supervisors* (June 13, 2009), available at http://eprints.lse.ac.uk/29048/1/Lessons_from_the_global_financial_crisis.pdf (“What was not well recognized was that securitization, by breaking the link between, on the one hand, the originator of the loan and the party responsible for monitoring the loan over its life-time, and, on the other hand, the principal in the investing relationship – the owner of the securitized loan – weakens the incentives for collecting information and misplaces whatever information is collected.”).

⁴⁵⁹ See, e.g., Geithner, *supra* note 470, at 9.

⁴⁶⁰ *Id.*

⁴⁶¹ *Id.*

⁴⁶² See, e.g., Nesvetailova, *supra* note 272, at 125, 133.

⁴⁶³ *Id.*

⁴⁶⁴ See *infra* text accompanying notes 465–468.

⁴⁶⁵ See, e.g., Varun Vaish, *Regulations Surrounding the Listing of Securitized Debt Instruments*, National Academy of Legal Studies and Research University of Law, Aug. 17, 2011 at 3–4, available at <http://ssrn.com/abstract=2071238>.

year.⁴⁶⁶ In 2009, representatives from SEBI, RBI, and the Ministry of Finance attended a securitization summit in Mumbai with private market participants, in order to discuss how to eliminate obstacles to growth of the securities markets.⁴⁶⁷ In 2010, the Supreme Court endorsed trading in securitized debt by ruling that banks could legally transfer credit risk.⁴⁶⁸

As Minsky wrote, "anything that can be securitized will be securitized,"⁴⁶⁹ and the program to increase securitization included the packaging of residential mortgages, the same financial products involved in the global financial crisis.⁴⁷⁰ The volume of mortgage-backed securities in India increased sixty one percent between 2009 and 2010, and the value traded rose fifty three percent between 2011 and 2012.⁴⁷¹ The National Housing Bank, the regulator of the Indian housing finance sector, pioneered their introduction in 2001 to expand property ownership through cheaper credit.⁴⁷² The Indian government instituted a "Five-Year Economic Plan" that estimated the money to be earned from mortgage securitization.⁴⁷³ As the growing market demanded new

⁴⁶⁶ See Chakrabarti, *supra* note 391, at 13.

⁴⁶⁷ National Institute of Securities Markets, *Improving Indian Securitization Markets 2* (Nov. 2009), available at <http://www.iperitus.com/docs/IndiaSecuritizationSummit2009-WhitePaper.PDF>.

⁴⁶⁸ Kalpesh Gada & Remika Agarwal, *ICRA, Update on Indian Securitisation Market 7* (May 2012), available at <http://www.icra.in/Files/Articles/Indian%20Securitisation.pdf>.

⁴⁶⁹ Hyman Minsky, *Securitization*, The Levy Economics Institute of Bard College, Policy Note, 2008/2 at 2, quoting participants of a conference of the Chicago Federal Reserve Bank in May, 1987; further Hyman Minsky, *Securitization Outline* (1987), Hyman P. Minsky Archive. Paper 188, available at http://digitalcommons.bard.edu/hm_archive/188.

⁴⁷⁰ See, e.g., Timothy Geithner, *Macroeconomic Effects of Risk Retention Requirements* 10 (Jan. 2011), available at <http://www.treasury.gov/initiatives/wsr/Documents/Section%20946%20Risk%20Retention%20Study%20%20%2028FINAL%29.pdf>; Douglas W. Diamond and Raghuram Rajan, *The Credit Crisis: Conjectures About Causes and Remedies* 4 (National Bureau of Economic Research, Working Paper No. 14739, Feb. 2009).

⁴⁷¹ *Securitisation Markets in India – a Post-Crisis Perspective*, Inaugural address by Ms Shyamala Gopinath, Deputy Governor of the Bank of India, at the India Securitisation Summit 2010 hosted by the National Institute of Securities Markets (NISM), Mumbai, Aug. 10 2010 at 3; Gada & Agarwal, *supra* note 468, at 5.

⁴⁷² See, e.g., K.C. Iyer & G.C. Tripathi, *Prepayment Analysis of Residential Mortgage Backed Securities For Indian Securitization Market* (Feb. 3, 2008), available at <http://ssrn.com/abstract=1090013>; National Housing Bank, *Credit Enhancement to Residential Mortgage Backed Securities (RMBS) of Primary Lending Institutions by way of NHB Guarantee*, available at http://www.nhb.org.in/Financial/Guarantee_NHB_website.PHP; National Housing Bank, *NHB supports 1st MBS of BOB Housing Finance Limited*, Press Release, Apr. 23, 2003, available at <http://www.nhb.org.in/Press%20Release/April28.php>.

⁴⁷³ Reserve Bank of India, Report, available at <http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/10793.pdf> ("The five-year Plan documents have repeatedly

mortgages to securitize, non-conforming mortgages with low introductory rates emerged, as they had in the West.⁴⁷⁴

In time, India embraced collateralized debt obligations ("CDOs"), a more complicated variety of security.⁴⁷⁵ CDOs reference underlying securitized products, such as mortgage-backed securities.⁴⁷⁶ When they do, the mortgage assets can change over time, unlike typical mortgage-backed securities which remain static.⁴⁷⁷ Investors purchase specific tranches that entitle them to different rates of return and priority of payment, so long as the holders of the original mortgages avoid default.⁴⁷⁸

Regulators encouraged investment in other new financial products, such as derivatives.⁴⁷⁹ In 1996, SEBI supported legalization of derivatives trading and self-regulation by derivatives exchanges.⁴⁸⁰ A derivative involves a contract between two parties that specifies payments based on the changes in the value of a designated variable.⁴⁸¹ While investors can use derivatives to hedge against risk, they can also acquire risk by using them to speculate on future market movements.⁴⁸² The complexity of derivatives trades may also make it more difficult for regulators to anticipate how the financial system will react to economic shocks.⁴⁸³ Interest rate swaps, in which investors bet on

emphasised the need for developing a secondary mortgage market (SMM) for bridging the resource constraint confronting the housing sector. The Ninth Five-Year Plan has strongly recommended securitisation as an important source of funds for the housing sector and has envisaged Rs. 2500 crore to come by way of securitisation.").

⁴⁷⁴ See *Financial Stability Report*, *supra* note 431 at 5.25 ("Some concerns have emerged . . . in respect of "teaser" rates for home loans offered by banks. These 'teaser' home loans initially have a low fixed interest rate, which in later years increases to higher levels.").

⁴⁷⁵ *Securitisation in India: The Story So Far and the Way Forward*, available at <http://www.dnb.co.in/Arcil2008/Securitisation%20in%20India.asp>.

⁴⁷⁶ SECURITIES AND EXCHANGE COMMISSION, *supra* note 134 at 7.

⁴⁷⁷ *Id.* at 9.

⁴⁷⁸ *Id.* at 7, 31.

⁴⁷⁹ See *infra* text accompanying notes 482–488.

⁴⁸⁰ Dayanand Arora & Francis Xavier Rathinam, *OTC Derivatives Market in India: Recent Regulatory Initiatives and Open Issues for Market Stability and Development*, Indian Council for Research on International Economic Relations Working Paper No. 248, Apr. 2010 at 8, 20.

⁴⁸¹ Erik F. Gerding, *Credit Derivatives, Leverage, And Financial Regulation's Missing Macroeconomic Dimension*, 8 *Berkeley Bus. L.J.* at 29–31 (2011).

⁴⁸² *Id.* at 37–38.

⁴⁸³ See, e.g., Richard Beales & Gillian Tett, *Greenspan Warns on Credit Derivatives*, *FINANCIAL TIMES*, May 5, 2005 ("Rapid growth in the credit derivatives market has created considerable uncertainty about how the global financial system might react to any new economic shocks," Alan Greenspan, Chairman of the Federal Reserve warned on Thursday. "The sheer complexity of derivatives instruments, in particular, coupled

changes in variable interest rates, gained popularity in India.⁴⁸⁴ By 2006, the country had become the third largest market for derivatives tied to the value of gold.⁴⁸⁵ Since then, it has grown into the largest market for derivatives tied to the value of single stocks.⁴⁸⁶

CONCLUSION

The lessons that the future of India holds for the West should not be exaggerated. Indian and Western regulators and CRAs are embedded in different environments.⁴⁸⁷ What would be suitable for a less-developed economy may not be adaptable to diverse, developed economies.⁴⁸⁸

Nevertheless, watching India offers new evidence for evaluating the role that public institutions should play in regulating financial markets. To avoid instability, must they intervene to restrict increases in consumer credit and trade in speculative instruments? Can they instead delegate to private “gatekeepers,” so long as they first align the “gatekeepers’” incentives?

The stakes for the Indian CRAs will rise. As the credit markets energize, they will have to make faster, more complicated judgments. Pressures on their integrity will intensify.

If their performance remains strong, and if the economy improves, it would provide some indication that the agencies can assume governance functions and keep evolving financial markets in check. That would imply that it is prudent for Western regulators to focus on “exogenous” regulatory changes to mitigate the CRAs’ conflicts of interest.

If the future does not go well - if the agencies are unwilling to downgrade a powerful Indian bank, or expose a fraud in a securitized tranche⁴⁸⁹ - then perhaps it confirms that private entities should not be given responsibility for financial stability. Instead, it might suggest that deeper, more meaningful structural changes are necessary to counter increasing fragility, as Minsky believed.

Substantial efforts have been expended to reform the regulation of the Western CRAs. A robust campaign tried, and failed, to eliminate the “issuer-

with the consolidation in the financial industry, made it increasingly hard for regulators and bankers to assess levels of risk,’ he said.”).

⁴⁸⁴ Arora & Rathinam, *supra* note 480, at 9.

⁴⁸⁵ Wells & Schou-Zibell, *supra* note 344, at 4.

⁴⁸⁶ *Id.*

⁴⁸⁷ For a discussion of rule embeddedness, see Danielsen, *supra* note 24, at 23, 37-38.

⁴⁸⁸ See, e.g., *Id.*

⁴⁸⁹ For a discussion of the politics involved in ratings, see, e.g., Coffee, *supra* note 91, at 55.

pays” model in the American Dodd-Frank Act.⁴⁹⁰ If the efforts have not been focused correctly, it is important to redirect them towards a more effective response.⁴⁹¹ India provides a reference for how intensively financial markets should be regulated, and by whom.

⁴⁹⁰ On the Franken Amendment, see, e.g., Daniel Indiviglio, *Franken Amendment Would Bring Real Rating Agency Reform*, THE ATLANTIC, May 6, 2010.

⁴⁹¹ For a discussion of the difficulties investors and shareholders have in securing reforms, see John C. Coffee, *The Political Economy of Dodd-Frank: Why Financial Reform Tends to be Frustrated and Systemic Risk Perpetuated*, COLUMBIA LAW AND ECONOMICS WORKING PAPER NO. 414, Jan. 2012 at 3–4 (2012).

