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Conflict of Interest Economics and Investment Analyst Biases

H. D. Vinod^{*}

I. INTRODUCTION

This paper will review and expand upon my past discussions¹ about conflicts of interest within financial markets, specifically when investment analysts serve both lenders (buy-side) and borrowers (sell-side). In early 2003, ten Wall Street securities firms² agreed to pay \$1.4 billion in fines to settle charges arising from the production of biased research that supported their investment banking businesses while misleading ordinary investors. When conflicts of interest in analysts' reports are considered from the viewpoint of economic theory, they show that the publicly desirable Nash cooperative bargaining solution³ will not be reached. Although some market inefficiency is inevitable due to human limitations, the excess rents that the investment banking businesses earn by exploiting hidden conflicts of interest can and should be

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¹ See Hrishikesh D. Vinod, *Divest Investment Banking from Financial Institutions* (Aug. 12, 2002) [hereinafter *Divest Investment Banking*], <http://ssrn.com/abstract=323280> (last visited Oct. 26, 2004); Hrishikesh D. Vinod, *Production Studies Imply Smart Regulation Can Create Prosperous Telecoms and Prevent Bubbles* (Aug. 19, 2002) [hereinafter *Production Studies*], <http://ssrn.com/abstract=340080> (last visited Oct. 26, 2004).

² See Press Release, SEC, Ten of Nation's Top Investment Firms Settle Enforcement Actions Involving Conflicts of Interest Between Research and Investment Banking (Apr. 28, 2003), at <http://www.sec.gov/news/press/2003-54.htm> (last visited Oct. 2, 2004).

³ The Nash equilibrium is a cooperative solution in game theory. See John Nash, *Two-Person Cooperative Games*, 21 *ECONOMETRICA* 128-40 (1953) (extending the axioms from his earlier paper and presenting the optimality property of his cooperative bargaining solution).

eliminated. Regulatory solutions, however, involve costly micromanaging of the internal personnel affairs and communications within banks and brokerages employing research analysts. This paper proposes that in addition to penalties such as large fines and strict regulation, egregious violators should be divested of these dual roles and broken up into separate companies, thereby eliminating such conflicts.

This remedy has disadvantages, such as potentially causing inadequate funding of research. I distinguish between past data and future prospects research, and conclude that past data research can and should be made publicly available on the Internet. Future prospects research, on the other hand, is easy to appropriate and susceptible to the economic inefficiencies of free rider and adverse selection. In light of this problem, I propose novel ways to create high quality, publicly available future prospects research without subsidies from investment banks. Finally, I conclude that, despite these difficulties, a dramatic divestiture will help eliminate conflicts of interest without detailed and excessive regulation, while the threat of divestiture will help to prevent future abuses.

Legal practitioners readily accept the separation between prosecution and defense. Although both sides seek justice, in an adversarial legal proceeding, ethics do not allow for the same law firm to provide legal advice to both parties to a dispute. No one envisions regulating the law firm in such a way that an imaginary wall can separate lawyers for the prosecution from lawyers for the defense. This is not a matter of managing potential conflicts of interest with well-designed and stringent rules of conduct for lawyers and partners of the law firm; the distinction between the two sides is too fundamental to be managed by any such rules. Although it is possible to design rules that forbid any communication between the two groups of lawyers, no one seriously suggests such an approach.

This paper argues that, similar to a law firm, a single brokerage house advising both the demand and supply side of the securities market cannot be managed by rules. Just as we require separate law firms to represent the prosecution and the defense, we need to require separate firms to advise individual investors and investment bankers. The past approaches (based on rules and walls) are doomed to fail, because of the fundamental nature of the conflict between the buy-side and the sell-side.

The inadequacy of the current approach is clear.⁴ For example, almost all major brokerages and banks have broken rules and circumvented the walls separating their buy-side from their sell-side.⁵ In early 2003, ten Wall Street firms⁶ settled for a spectacular \$1.4 billion after admitting that they duped ordinary investors by producing biased research that supported their investment banking clients. In the Enron example, off-the-book special purpose entities were created when conflicted investment bankers gave Enron executives their blessings. It is in the wake of continuing examples such as these that I reconsider the problem from an economist's perspective, and conclude that divestiture⁷ of such firms into separate investment banking and retail brokerage/commercial banking firms is a viable solution.

The background and terminology for this paper are outlined in Parts II and III. Part IV considers the failures of securities markets and the implied cost to market efficiency.

⁴ Merrill Lynch internal e-mails reveal that the analysts viewed certain stocks as junk and yet the firm advised investors to "accumulate" shares in those companies. See Jill E. Fisch & Hillary A. Sale, *The Securities Analyst as Agent: Rethinking the Regulation of Analysts*, 88 IOWA L. REV. 1035, 1087 (2003). The SEC has also warned of analyst abuses, bias, etc. See Press Release, SEC, Statement Regarding Global Settlement Related to Analyst Conflicts of Interest (Apr. 28, 2003), <http://www.sec.gov/news/speech/spch042803com.htm> (last visited Oct. 2, 2004) ("Today the Commission announced enforcement actions against ten broker-dealers for failing to ensure that the research they provided their customers was independent and unbiased by investment banking interests.").

⁵ See generally, *Divest Investment Banking*, *supra* note 1.

⁶ The ten firms are: (1) Bear, Stearns & Co. Inc. (Bear Stearns) (2) Credit Suisse First Boston LLC (CSFB) (3) Goldman, Sachs & Co. (Goldman), (4) Lehman Brothers Inc. (Lehman), (5) J.P. Morgan Securities Inc. (J.P. Morgan), (6) Merrill Lynch, Pierce, Fenner & Smith, Incorporated (Merrill Lynch), (7) Morgan Stanley & Co. Incorporated (Morgan Stanley), (8) Citigroup Global Markets Inc. *f/k/a* Salomon Smith Barney Inc. (SSB), (9) UBS Warburg LLC (UBS) (10) U.S. Bancorp Piper Jaffray Inc. (Piper Jaffray). See Press Release, *supra* note 2. Instead of blowing the whistle, financial institutions have repeatedly facilitated massive frauds at Enron, WorldCom, Tyco, Parmalat and others. See Press Release, SEC, SEC Announces Agreement with Canadian Imperial Bank of Commerce and Two Executives to Settle Charges of Aiding and Abetting Enron Accounting Fraud (Dec. 22, 2003), at <http://www.sec.gov/news/press/2003-180.htm> (showing an agreement with Canadian Imperial Bank of Commerce and two executives to settle charges of aiding and abetting Enron accounting fraud) (last visited Oct. 26, 2004). See also Press Release, SEC, Testimony Concerning Transparent Financial Reporting for Structured Finance Transaction (Dec. 11, 2002), at <http://www.sec.gov/news/testimony/121102tsan.htm> (last visited Oct. 2, 2004).

⁷ Divesting refers to dissolving or breaking up a corporation into two or more entities with separate managements. The owners of the original corporation usually own shares in the broken up entities, but they are free to sell shares of those companies they believe to have low prospects. This remedy is common in antitrust litigation. See PHILLIP AREDA, *ANTITRUST ANALYSIS: PROBLEMS, TEXT, CASES* ¶¶ 155-56, 158(c), 223-26 (3d ed. 1981).

Part V seeks insights from economic theory and discusses recent manifestations of conflicts, as better understood through application of Axelrod's non zero sum game – the “prisoner's dilemma.”⁸ Part VI discusses why market inefficiencies persist despite attempts to remove them. Part VII discusses the advantages and challenges of divestiture as a remedy for conflicts leading to these inefficiencies and failures. In Part VIII, I draw conclusions and offer final remarks.

II. HISTORICAL BACKGROUND

The Great Depression of 1929 was deeper and longer lasting due to the bank failures that accompanied it. Subsequently, Congress decided that one way of preventing future great depressions was to prevent bank failures through regulating the use of funds deposited by bank customers. After the October 1929 crash, the stock market was seen as the most volatile and risky use of bank deposits. In response, Congress enacted laws aimed not only at preventing bankers from speculating in the stock market, but also at avoiding the conflicts of interest likely to occur when a banker's promotion of a particular investment actually benefited the bank's clients.

The first legislation to address this growing concern was the Glass-Steagall Act (GSA) of 1933, which differentiated between investment and commercial banking.⁹ Key provisions address the depression era concern that banks should not speculate with depositors' money.¹⁰ The legislative history leading up to the GSA mentioned “subtle hazards,” reflecting the fear that conflicts associated with underwriting would encourage unsound banking practices. These hazards, as discussed below, proved to be neither subtle nor benign.¹¹

It wasn't until the 1960s that the primary national bank regulator, the Office of the Comptroller of the Currency (OCC), tried to expand national bank powers into new areas.¹² In 1971, in *Investment Co. Institute v. Camp*, the U.S. Supreme Court

⁸ See Robert Axelrod, *The Evolution of Strategies in the Iterated Prisoner's Dilemma*, in GENETIC ALGORITHMS AND SIMULATED ANNEALING 32–41 (Morgan Kaufman ed., 1987).

⁹ Glass-Steagall Act of 1933, Pub. L. No. 73-66, 48 Stat. 162 (codified in scattered sections of 12 U.S.C.)

¹⁰ *Id.* at §§ 16, 20, 21, 32.

¹¹ See *Investment Co. Inst. v. Camp*, 401 U.S. 617, 630 (1971).

¹² See Joseph J. Norton, *International Banking Law on the Threshold of the Twenty-First Century*, at <http://iibf.law.smu.edu/pub/norton1a.htm> (last visited Oct. 26, 2004).

held (against the OCC) that banks should not offer mutual funds, citing the GSA, Sections 16 and 21.¹³ The Court paid particular attention to the legislative history of the GSA, and to the “subtle hazards” that Congress intended to prevent. It found that in addition to the obvious dangers of imprudent securities investments by banks, these “subtle hazards” consisted of: (i) banks speculating with depositor money by investing in securities; (ii) unsound loans made to corporations to shore up stock market prices; and (iii) bank officials pressing banking customers to buy securities underwritten by the bank.¹⁴ This decision, while an indicator of the Court’s apprehension, did not predict the extent of the abuses to come. In recent months, the exposure of insider after-hours trading and hidden commissions given to brokerage-based mutual fund promoters has uncovered hidden fees that the Court could not have imagined in 1971.

In 1985, regulatory actions started to erode the GSA, culminating in its repeal in 1999. In its place, Congress passed the Gramm-Leach-Bliley Act (GLBA) or “The Financial Modernization Act” of 1999.¹⁵ The GLBA included provisions to protect consumers’ personal financial information held by financial institutions.¹⁶ It attempted a regulatory approach, forming a list of activities between commercial and investment banking that were impermissibly linked – activities referred to as “bundling” in antitrust law.¹⁷ Unfortunately, what followed was predicted by economists’ “capture theory” of regulation: sophisticated and powerful financial institutions with considerable political clout simply captured or co-opted the regulators.¹⁸ This capture theory is illustrated by certain facts

¹³ See *Camp*, 401 U.S. at 639.

¹⁴ *Id.* at 629–34. See also Norton, *supra* note 12 (arguing that the *Camp* decision had long term effects on future judicial interpretations of the Glass-Steagall Act). In effect, the U.S. Supreme Court’s “subtle hazards” analysis opened a pathway for U.S. courts and the federal banking regulators to apply a range of “safety net” factors in considering whether newly proposed activities were permissible under the Glass-Steagall Act provisions. *Id.*

¹⁵ 15 U.S.C. §§ 6801–6827 (2000).

¹⁶ *Id.* §§ 6801–6803.

¹⁷ “Bundling” refers to the practice of offering product A and product B as a single product. This practice is prohibited by antitrust law as “tying,” unless there are no feasible less restrictive alternatives. See CHRISTIAN AHLBORN ET AL., JOINT CENTER, THE ANTITRUST ECONOMICS OF TYING: A FAREWELL TO *PER SE* ILLEGALITY (Mar. 2004) 3–4, 7, available at <http://www.aei.brookings.org/admin/authorpdfs/page.php?id=243> (last visited Oct. 26, 2004).

¹⁸ See H. D. Vinod & R. R. Geddes, *Generalized Estimating Equations for Panel Data and Managerial Monitoring in Electric Utilities*, in *ADVANCES ON*

revealed over the years in various forums, including regulatory proceedings at public utility commissions, congressional testimony,¹⁹ and academic journals and newspapers. Consider the following reported examples: (i) known conflicts of interest within such institutions, with no action taken until Enron collapsed; (ii) manipulation of the minutes of boards of directors; (iii) unpaid arbitration awards won by ordinary investors; and (iv) information paucity in regard to municipal bonds. These and other abuses are well known to regulators and well documented in the financial press.²⁰

III. TERMINOLOGY

For efficiency's sake, this paper will give some common words and expressions a more expansive categorical meaning, as follows:

1) Financial instruments (securities) include various bank deposits, money market funds, stocks, bonds, shares in mutual funds, call or put options, derivatives, shares in hedge funds, and other financial assets.

2) Financial intermediaries (vendors) include the entities buying and selling securities. Vendors include banks, securities dealers, brokerage houses, mutual fund companies, and savings and loan associations.

3) The buyers of securities (investors) include individual savers ranging from wage-earners to beneficiaries such as widows and orphans, pension funds, private businesses (including large and small corporations), charities, and non-profits (including universities and churches).

4) The sellers of securities (borrowers) consist of all who want to borrow funds. This includes individuals, businesses, and many public and private entities such as governments and entrepreneurs.

5) The market for securities includes stock and bond markets both physical and electronic. The market brings

METHODOLOGICAL AND APPLIED ASPECTS OF PROBABILITY AND STATISTICS 597, 597-617 (N. Balakrishnan ed., 2000).

¹⁹ See Arthur Levitt Jr., Opening Statement, The Committee on Governmental Affairs, United States Senate (Jan. 24, 2002), http://www.senate.gov/~gov_affairs/012402levitt.htm (last visited Oct. 26, 2004) (testifying "[E]nron's collapse did not occur in a vacuum. Its backdrop is an obsessive zeal by too many American companies to project greater earnings from year to year. When I was at the SEC, I referred to this as a 'culture of gamesmanship' . . .").

²⁰ See, e.g., Susan Pulliam et al., *How Hazards for Investors Get Tolerated Year After Year*, WALL ST. J., Feb. 6, 2004, at A1.

together the diverse timing and quantity needs of investors and borrowers (buyers and sellers of securities) and sets the prices of securities that will clear the market.

6) Securities laws and regulations are enforced by regulators (regulators) including: the Federal Reserve Bank (Fed) (sets monetary policy and can influence the prices of government bonds); the Treasury Department, Office of the Comptroller of the Currency (OCC) (oversees national banks); the Securities and Exchange Commission (SEC) (ensures the proper working of stock and bond markets); all federal, state, and local regulatory and licensing bodies that control various actors in the market including banks, brokerages, analysts, accountants, auditors, and lawyers; and state attorneys general²¹ (although not formal regulators, they have been playing an increasingly important role in securities regulation).²²

7) Security research analysts (analysts) study the nature of each security and report to the community of investors. Analysts study the characteristics of individual securities, balance sheets and other relevant information, and report on the actual financial condition of borrowers – their current and future revenues and costs. As securities get more sophisticated, analysts have to predict the future profits of borrowers, the ability of investors to share in these profits, and the risk that investors will be saddled with borrowers' future debts.

IV. INEFFICIENCIES IN SECURITIES MARKETS

Economic theory, starting with Adam Smith's *Wealth of Nations*, posits certain ways in which free markets work. Smith formulated one basis for contemporary economic models with his famous "invisible hand":

Every individual necessarily labors to render the annual revenue of the society as great as he can. He generally indeed neither intends to promote the public interest, nor knows how much he is promoting it. He intends only his own gain, and he is in this, as in many other

²¹ New York Attorney General Elliot Spitzer has been particularly active in recent years.

²² Justice Louis Brandeis, in a famous 1932 dissent, declared "that a single courageous state may, if its citizens choose, serve as a laboratory[,] and try novel social and economic experiments without risk to the rest of the country." *New State Ice Co. v. Liebman*, 285 U.S. 262, 311 (1932). Hence, the reference to states as "laboratories of democracy."

cases, led by an invisible hand to promote an end which was no part of his intention. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good.²³

In the free market for securities, borrowers compete with each other for investor funds by offering attractive yields, and investor lenders compete with each other by going after the most profitable investment opportunities. This theory suggests that prices (e.g., borrowing costs to builders and investor yields) will adjust until all market participants agree that the price is right. The survival and success of the capitalist system depends on the smooth functioning of a free market for securities to allocate resources to activities most in demand by the public. The job of regulators is to make sure that the market is honest, efficient, and fair.²⁴

Economic theorists believe that free markets are an efficient way to organize commerce. However, there is no guarantee that all free markets are efficient in fact. Of all the markets, the market for securities is often considered the most efficient, in that it rapidly and completely incorporates all relevant information into asset prices. It does so because departure from efficiency creates an imbalance that allows for profit-making opportunities known as arbitrage. For example, the price of gold in London and New York does not differ much because, if a price differential does arise, arbitrageurs are ready to buy in one market and sell in another. Although arbitrage may assist in bringing market efficiency to the securities market, there are illegal activities, conflicts of interest, and other inefficiencies that are impossible for arbitrageurs to check. Furthermore, as detailed below, there are increasing instances in which arbitrage should have occurred but did not.

²³ See ADAM SMITH, AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS 456 (R.H. Campbell et al. eds., Liberty Classics 1981) (1976). See also The Library of Economics and Liberty, Biography of Adam Smith, available at <http://www.econlib.org/library/Enc/bios/Smith.html> (last visited Oct. 26, 2004).

²⁴ For an excellent survey of economists' ideas regarding fairness and justice, see James Konow, *Which is the Fairest One of All? A Positive Analysis of Justice Theories*, XLI (4) J. ECON. LITERATURE 1188, 1188–89 (2003). See also Council of Securities Regulators of the Americas (COSRA), Principles of Effective Market Oversight, pmb. (naming honesty, efficiency, and fairness as its goals), at <http://www.cvm.gov.br/ingl/inter/cosra/p-over-e.asp> (last visited Oct. 26, 2004).

Lamont and Thaler²⁵ have identified several instances where financial markets failed to follow even the very basic law of one price: that identical goods should have an identical price. They offer five examples: (i) a closed end country fund for Germany had a premium of 100% in January 1990; (ii) American depository receipts (ADRs) for a stock of an Indian company called Infosys had a premium of 136% over the Bombay price; (iii) pricing of Royal Dutch compared to Shell, with an expected ratio of 1.5, was 30% too low in 1981 and 15% too high in 1996; (iv) two classes of shares based on voting rights sometimes had wildly different market prices; and (v) the ratio of Palm and 3Com shares differed from the expected ratio of 1.5 as investors wanted to pay some 2.5 billion to buy expensive shares of Palm.²⁶ Economists have offered various explanations for these inefficiencies, founding their theories on both the limits of human rationality and the tendency towards isolated decisionmaking.

While such instances are rare, we must recognize that the market is a human invention with many imperfections. Labels (Palm versus 3Com) do matter to us; human self-interest as well as rationality is, in the words of Nobel Prize winning economist Herbert A. Simon, "bounded."²⁷ In his book *Models of My Life*, Simon points out that most people are only partly rational, and are in fact emotional/irrational in the remaining part of their actions.²⁸ He argues that boundedly rational agents experience limits in formulating and solving complex problems and in processing (receiving, storing, retrieving, transmitting) information.

Even if some notion of fairness²⁹ is implicit in economic decisionmaking, investors tend to think through their choices in isolation (choice bracketing), subject to the law of "small numbers." This term, coined by Kahneman and Tversky,³⁰ signifies the human tendency to rely on small samples and jump to unreliable, unscientific conclusions. For example, from a small amount of data, many on Wall Street assume a very rosy picture about a corporation. The herd instinct among

²⁵ See Owen A. Lamont & Richard H. Thaler, *Anomalies: The Law of One Price in Financial Markets*, 17(4) J. ECON. PERSP. 191, 193 (2003).

²⁶ *Id.* at 194–98.

²⁷ HERBERT A. SIMON, *MODELS OF MY LIFE* 87–88 (MIT Press 1996) (1991).

²⁸ Albert Einstein illustrates this point in Simon's argument. See *id.* at 375–78.

²⁹ See Konow, *supra* note 24.

³⁰ See Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47(2) *ECONOMETRICA* 263, 263–91 (1979).

traders then leads to self-fulfilling prophesies of market volatilities and other imperfections.

Although we admit that some imperfections, such as those mentioned above, are inevitable, this paper focuses on some of the *avoidable* imperfections in the activities of analysts and vendors. Economic theory suggests that regulation of securities markets should seek to remove avoidable imperfections, while ensuring honest and fair treatment of all parties. We should acknowledge the cost of these regulations, and encourage regulators to strive to make markets efficient at a minimum cost to society.³¹

The public policy of promoting greater transparency for public companies is an important step towards achieving efficient markets. Moreover, as the Enron example revealed, such transparency cannot be limited to domestic operations of public companies, but must extend to all jurisdictions. Some Caribbean and other tax haven countries including Switzerland³² have banking privacy laws, which do not permit their banking and other corporations to reveal even basic information about deposits. These laws are mainly designed for tax avoidance, and may seem otherwise benign from the viewpoint of investors. Since the Enron bankruptcy demonstrated that off-balance sheet special purpose entities registered in tax haven countries can also be used to mislead investors, they are clearly not benign. These abuses of tax havens cannot be permitted in the future.

Although we acknowledge these unavoidable sources of market inefficiency and note the jurisdictional shortfalls of current regulations, proposed regulatory solutions fail to

³¹ For a discussion of market efficiency in the context of downside risk and how investors can minimize such risk, see HRISHIKESH D. VINOD & DERRICK REAGLE, *PREPARING FOR THE WORST: INCORPORATING DOWNSIDE RISK IN STOCK MARKET INVESTMENTS* (Wiley Publishers 2004) [hereinafter *PREPARING FOR THE WORST*]. Downside risk arises from losses to investors who make wrong choices, as reflected by the prices of their investments going down. Both losses and gains are an integral part of a well functioning market. An efficient market provides accurate price signals to investors with as little delay as possible with the current state of knowledge. New tools for investors, which allow for departures from expected utility theory, are explained in Chapter (X). These tools were developed using the methods advanced by Lamont and Thaler, proponents of prospect theory as outlined in part IV *supra*. *PREPARING FOR THE WORST* also includes numerous pages of discussion relevant to conflicts analysis.

³² Holden Lewis, *Swiss Bank Accounts: Myth vs. Reality* (Feb. 27, 2001), at <http://www.bankrate.com/brm/news/bank/20010227a.asp> (last visited Oct. 26, 2004) (noting that “[S]wiss law prohibits the bank not only from revealing your balance, but from acknowledging that you’re a customer or revealing when you made your last transaction. Bankers can go to jail for violating Swiss privacy laws.”).

address our primary concern with conflicts of interest within financial institutions. The next Part of this paper seeks insights from economic theory regarding conflicts of interest, and explores recent evidence on market inefficiencies.

V. THEORIES OF CONFLICT AND RECENT EVIDENCE

George J. Stigler³³ appears to be the first economist to study conflicts of interest. According to Stigler, “[c]onflicts of interest arise whenever one man is an agent for another; [and] the agent does not bear the full consequences of his actions.”³⁴ In his view, the question is quantitative, and does not permit a “nice” answer.³⁵ Since 1967, economists, using game theory to sharpen their ideas of the so-called principal-agent problem, have contended that conflicts arise primarily from the fact that the agent has more information than the principal. For our purposes, we will confine conflicts of interest to those arising when the agent’s financial interests interfere, or appear to interfere, with his obligation to act in the best interest of the principal (or his client). We will not address those conflicts that arise out of improper bias, and we will further limit the application of conflicts of interest to various players in financial markets.

A new way to think about the conflict in our context is as a game played between divisions of vendors. In this two-person game, Investor Lender Services (ILS) division includes all activities serving investors or lenders, and Investment Banking and Borrower Services (IBBS) division includes all activities serving sellers of securities or borrowers. If, then, the account manager for a large investor guides the investment dollars to the vendor’s investment banking clients, the payoff is 10 for the account manager and 8 for the investment banker (see Table 1, top left figure). Although the numbers chosen are hypothetical, the tabulated payoffs are calculated according to the conventions of game theory.³⁶ Since the vendor owns and controls both divisions, the overall payoff to the vendor is the sum total of the payoffs from each division.

³³ See George J. Stigler, *The Economics of Conflict of Interest*, 75 J. POL. ECON. 100, 100–01 (1967).

³⁴ *Id.* at 101.

³⁵ *Id.* at 100.

³⁶ In Table 1, the two payoff numbers separated by a comma refer to the row’s payoff and the column’s payoff, respectively.

This game resembles the well known “prisoner’s dilemma,” with an additional twist that encourages the prisoners to cooperate. If, by analogy to the vendors’ situation, both prisoners were employed by a drug cartel, there would be no dilemma. In either situation, the cooperative solution is socially optimal. Moreover, as essentially the same game will be played repeatedly during the entire time the employees work for the employer, subtle kickback schemes will not be hard to invent. It is highly likely, therefore, that the cooperative equilibrium solution (10, 8) will prevail, despite any Chinese Wall or rules by regulators.

Although the overall payoff to society is not quantifiable, it is qualitatively highest when there is no conflict of interest and both divisions are objective in making recommendations to their respective clients. Returning to Table 1, the hypothetical numbers in parentheses measure society’s payoff. This number will be in the negative when the externality from conflicts of interest hurts society through misallocation of resources, and lower returns to investors and higher costs to borrower businesses create irrational exuberance or pessimism. The preponderance of buy orders leads to overbuilding and waste.³⁷

Table 1: Hypothetical payoffs for two divisions

	Division IBBS favors vendor’s clients	Division IBBS remains objective
Division ILS favors vendor’s securities	<i>10*</i> , 8, (-7)**	<i>10</i> , 4, (-3)
Division ILS remains objective	7, 8, (-4)	7, 4, (0)

* The numbers in italics represent the payoff to the row (lenders).

** The numbers in parentheses are the payoff to society, i.e. the advantage from efficient allocation of resources minus the externality arising from a better deal to the ordinary investor and to the honest business borrower.

The payoff to the vendor is the highest in the top left figure, whereas society is best off with zero (bottom right figure). The incentives of the owners of the two divisions will ultimately force the game to be resolved according to the top

³⁷ For example, conflicts of interest not only failed to stop the fraud at WorldCom, they encouraged overcapacity in telecommunications, and gave several incorrect market signals leading to huge losses. See Editorial, *Flawed Financial Giant*, BUS. WK., Sept. 9, 2002, at 156.

left calculation. It is theoretically possible to “adjust” the game for “fairness” to the respective clients by adjusting the payoffs.³⁸ Various rules and regulations imposed on the players may be viewed as such adjustments. This paper argues, however, that enforcing the adjusted payoffs can be costly, and may create other distortions, if the players bend over backwards to appear to be objective and shun meritorious securities simply because they are vendor-sponsored. The incentives are too overwhelming for mere regulation to work in this game.

The game allows us to illustrate the notion of excess rents by subtracting the bottom right numbers (7, 4) from the top left numbers (10, 8), to yield (3, 4). This yield equals the hypothetical excess rents earned by vendors using biased analysts to mislead investors away from the efficient solution (7, 4). The use of game theory to demonstrate the inefficiencies created by such conflicts strengthens the argument against funding biased research.

The agency model is concerned with inefficiency caused by asymmetric information between the principal (employer) and agent (employee). Fisch and Sale³⁹ use a comprehensive quasi-agency model to understand the work of analysts, who have obligations towards: (i) their own employer; (ii) the investing public; and (iii) the corporation as principal when the analyst possesses market-sensitive corporate information. It should be noted that our divestiture proposal will likely result in the analyst either working for the ILS division, or as a freelancer serving the interests of investors only, thereby avoiding the obligations described in the third prong of the Fisch and Sale model. Standard prohibitions against inappropriate release of corporate information are all that will be needed to solve the problems arising from the analysts’ obligations to corporate employers.

Having discussed a few old and new insights offered by economic theory, let us now turn to recent evidence of market inefficiencies. As a general matter, market efficiency demands that investors sell shares in money-losing companies from time to time, and redirect their investments toward better outlets. Clients should be encouraged to sell as well as buy securities. In practice, however, this is rarely the case. In 1998, less than

³⁸ See Colin Camerer & R. H. Thaler, *In Honor of Matthew Rabin: Winner of the John Bates Clark Medal*, 17(3) *J. ECON. PERSP.* 159, 159–64 (2003).

³⁹ See Fisch & Sale, *supra* note 4, at 1039–40.

2% of analysts recommended selling a security.⁴⁰ This paucity of sell recommendations continued during recent meltdowns of some stock prices.⁴¹ The analyst has no incentive to make sell recommendations, since they tend to annoy the managers of (downgraded) companies, and can dry up investment banking business for the vendor employing the analyst. The \$1.4 billion settlement with ten Wall Street firms mentioned earlier will force firm analysts to generate a greater number of sell recommendations. That being said, any across the board requirement for all firms to issue sell recommendations would amount to needless micromanaging.

Direct evidence of market inefficiencies can be found through an examination of the median growth rate of earnings for publicly traded companies. In their study, Chan and his coauthors discovered that the median growth rate of publicly traded companies between 1951 and 1988 was only about 6% per year.⁴² Those few companies that did consistently exceed the modest 6% benchmark over a period of five years were rarely the ones predicted by research analysts.⁴³ The findings of Chan and his colleagues demonstrate that very high P/ E ratios for some “hot” stocks often seen in stock markets are very rarely justified.

Further evidence of market inefficiencies can be found in Wall Street “consensus forecasts” of earnings by research analysts in 2004.⁴⁴ For example, more than 100 companies are expected to grow at a whopping annual rate of over 40% for the next five years.⁴⁵ Past data shows that this tremendous growth rate has never been achieved, and relying completely on consensus forecasts will inevitably lead to disappointing

⁴⁰ Jeffrey M. Laderman, *Who Can You Trust? Wall Street's Spin Game*, BUS. WK., Oct. 5, 1998, at 148 (stating, in 1998, that “today, a mere 1.4% of all analyst recommendations on some 6,000 companies are sells, vs. 67.5% buys and 31.1% holds, according to Zacks Investment Research. It hasn't always been this way.”)

⁴¹ Barton G. Malkiel, *Remaking The Market: The Great Wall Street?*, WALL ST. J., Oct. 14, 2002, at A16.

⁴² See Louis K.C. Chan et al., *The Level and Persistence of Growth Rates*, 58 J. FIN. 643, 681 (2003).

⁴³ *Id.* at 683.

⁴⁴ See, e.g., Reuters, Stock Research and Reports, at <http://www.investor.reuters.com/ResearchEntry.aspx?target=%2fresearch> (last visited Oct. 26, 2004).

⁴⁵ See *id.* (referring to weekly earnings estimates of S&P companies from late January 2004). See also Harrison Hong et al., *Security Analysts' Career Concerns and Herding of Earnings Forecasts*, 31 RAND J. ECON. 121, 121–24 (2000) (confirming theories suggesting the presence of herd behavior in these forecasts), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=142895#paperdownload (last visited Oct. 24, 2004).

losses.⁴⁶ Our game theory analysis suggests that the herd behavior of analysts in forecasting toward the cooperative equilibrium is similar to a stampede of 7000 cows (the current number of brokers regulated by the SEC), which cannot be stopped by regulatory lions.

Both economic theory and direct evidence shows that the market for initial public offerings (IPOs) remains inefficient and prone to abuses, hurting the creation of new enterprises. Unfortunately, regulators cannot hope to prevent all such abuses, since there is a great deal of judgment involved in forecasting the future profitability of any IPO that cannot be codified. The example provided by using a game theory model to assess excess rents, as well as the analysis of different economic models and individual approaches employed by economists in analyzing disparate economic returns, creates a comprehensive view of the inefficiencies caused by conflicts in the securities market. The next Part will discuss additional issues that tend to compound the problems raised by such conflicts, and why many of the proposed solutions currently under consideration have failed.

VI. PERSISTENCE OF INEFFICIENCIES DESPITE ATTEMPTED SOLUTIONS

Notwithstanding the newer insights from economic theory discussed in the preceding Part, the GSA of 1933 and the GLBA of 1999⁴⁷ indicate that the presence of market inefficiencies has long been recognized. This Part attempts to explain why the regulatory and legislative solutions offered thus far have not worked. Sections A and B offer two examples of how conflicts of interest create incentives that can lead to inequitable, and often unethical, manipulation of both the general public and individual analysts. Section C discusses rules promulgated by various industry associations. While some industry associations have proposed more exacting rules to counter these corollary concerns, as well as to address the primary conflicts that create them, this type of solution can create additional opportunities for conflict. Strict enforcement of some of the proposed rules leads to micromanagement of

⁴⁶ See Mark Hulbert, *Strategies: That Five-Year Forecast Looks Great, or Does It?*, N.Y. TIMES, Jan. 25, 2004, at 6.

⁴⁷ See *supra* Part II.

entities that are more efficiently controlled by structural reorganization and realignment of underlying incentives.

A. *Political Favoritism*

Excess rents create a huge special interest in the political arena in favor of vendors who use their economic and political muscle to force analysts to provide favorable opinions. Vendors then sugarcoat conflicts of interest as synergies for the benefit of customers. These vendors argue that excess rents leading to a profitable banking sector permit lower fees for customers and are crucial to economic growth. Economists routinely reject such arguments.

The situation is reminiscent of the statement of Charles Erwin Wilson, former Chairman of General Motors, at the U.S. Senate Armed Services Committee hearings in 1952: "What is good for the country is good for General Motors, and vice versa."⁴⁸ According to a recent book by Joseph Stiglitz, while Clinton's Secretary of the Treasury Robert Rubin was in office, "[t]he new mantra was what is good for Goldman Sachs, or Wall Street, is good for America and the world."⁴⁹ After all, Rubin used to work for Goldman Sachs, but apparently failed to foresee the conflicts of interest that would arise when he accepted the Treasury appointment.

Excess rents created in part through political influence have increasingly led to misallocation of capital. The political muscle of high rent vendors has hurt market efficiency since the 1980s, and ultimately led to the weakening and subsequent repeal of the GSA. Again, economists unequivocally reject such rents in any economic activity. In light of recent scandals, one would have expected a moratorium on mergers and acquisitions involving investment bankers. Not so. The \$58 billion June 15, 2004 merger of J.P. Morgan Chase & Co. (focused on investment banking) and Bank One Corp. (focused on retail banking) shows that inattention to conflicts of interest permits high rents in banking and brokerage businesses. In other words, the smart money financing this merger is betting that the merged giant will never have to break up, as the

⁴⁸ See *Nominations: Hearings on Nominee Designates Before the Senate Committee on Armed Services*, 83rd Cong. 1040-2 (1953) (statement of Charles E. Wilson, Nominee Designate for Secretary of Defense).

⁴⁹ See JOSEPH E. STIGLITZ, *THE ROARING NINETIES: A NEW HISTORY OF THE WORLD'S MOST PROSPEROUS DECADE* 275 (2003).

political leverage of the two merged entities will prevent such an occurrence. Thus, in this instance and in similar mergers, the persistence of inefficiencies can be blamed, at least in part, on the political muscle of large brokerages and money center banks.

B. Penalties Imposed for Unwelcome Analyst Opinions

While the market fails if some borrowers have a monopoly on investor funds, the market also fails if analysts do not have the basic freedom to express their opinions. In prior discussions, I have cited several instances where vendors, including BNP Paribas, UBS Paine Webber, and Merrill Lynch, intimidated and fired analysts for writing unfavorable research reports about major clients of their investment banking divisions.⁵⁰ In addition to corrupting the market, the subsidy from investment banking to research departments is exploited by rogue CEOs to co-opt vendors and hide their misdeeds. The SEC and Eliot Spitzer have proven that vendors collect fees from mutual fund companies in exchange for touting those same funds to retail clients.⁵¹

In a competitive environment, reports by research analysts would be judged on the basis of the analyst's skills at carefully studying balance sheets and uncovering any hidden secrets materially affecting the securities. Analysts are expected to be objective, truthful, and honest in their representations of available information. However, in a conflicted market, they can be punished for performing in accordance with these expectations. A French court recently imposed a \$38 million fine on Morgan Stanley, simply because analyst Claire Kent noted that the LVMH management, a corporate manager, had "destroyed value."⁵² Such litigation, forcing analysts to not openly criticize corporate managers, is chilling and hurts market efficiency, apart from infringing on the individual analyst's freedom of speech. This is another reason why current solutions to market inefficiency, which focus on regulating the individual analyst, have not worked.

⁵⁰ See *Divest Investment Banking*, *supra* note 1, at 3.

⁵¹ Lynn O'Shaughnessy, *A 401(k) Picks a Mutual Fund. Who Gets a Perk?*, N.Y. TIMES, Feb. 15, 2004, § 3, at 5.

⁵² Floyd Norris, *Using Courts to Silence Analysts Who Criticize Rather than Praise*, N.Y. TIMES, Jan. 16, 2004, at C1.

C. *Micromanagement by Committee or with Association Rules*

In Part III, we included state attorneys general among those regulators who influence rules of behavior. The 2002 settlement with Merrill Lynch reached by the New York Attorney General provides an excellent example of unworkable micromanagement, if such an approach were to be used on a system-wide basis. It asks Merrill Lynch to create a committee to monitor bankers' and analysts' electronic communications, to ensure vague goals of "objectivity, integrity, and a rigorous analytical framework."⁵³ This settlement seemingly operates as an invitation to future rogue vendors to skirt conflicts of interest rules by preemptively creating a "committee" with vague, yet lofty-sounding, mandates. If the rogue vendor is caught, the committee can be blamed and some of its members fired. In practice, there is nothing to prevent the committee from focusing most of its energy on avoiding culpable e-mails and not getting caught, so as to benefit from large potential profits.

In May 2002, after massive media exposure of recent abuses, the National Association of Securities Dealers (NASD), a self-regulatory body, adopted some tough talk⁵⁴ and the

⁵³ A summary of the Merrill Lynch settlement agreement was issued by White & Case, LLP. See Memorandum from the Worldwide Securities Practice Group, New Research Analyst Conflict of Interest Rules, (May 24, 2002), at http://www.whitecase.com/memo_conflict_of_interest.pdf (last visited Oct. 14, 2002). White & Case explained the principal actions required by the agreement as follows:

On May 21, 2002, the Attorney General of the State of New York reached an agreement with Merrill Lynch settling its investigation into Merrill Lynch's research practices. Under the settlement, Merrill Lynch is required to take certain specific actions to reform its research practices. The actions mandated under the settlement are consistent with the changes to the NASD's and NYSE's conflict of interest rules. . . .

Merrill Lynch must create a Research Recommendations Committee (the 'RRC') to monitor the performance of and supervise recommendations for objectivity, integrity, and a rigorous analytical framework in the development of all recommendations. Merrill Lynch must also create a system to monitor investment bankers' and analysts' electronic communications.

Id.

⁵⁴ See NASD Notice to Members, SEC Approves Rule Governing Research Analysts' Conflicts of Interest, at <http://www.nasdr.com/pdf-text/0239ntm.txt> (last visited Oct. 26, 2004). The NASD stated as follows:

Rule 2711 is intended to restore investor confidence in a process that is critical to the equities markets. The rule reflects a self-policing approach consistent with *strong* self-regulation. Members and research analysts *must take all measures* that are necessary to ensure that all research reports reflect an analyst's honest views and that any opinion or recommendation is

following rules:⁵⁵ (i) a prohibition on offering favorable research to induce investment banking business; (ii) structural reforms to increase analyst independence, including a prohibition on investment banking personnel supervising analysts or approving research reports; (iii) a prohibition on tying analyst compensation to a specific investment banking services transaction; (iv) increased disclosures of conflicts of interest in research reports and public appearances by analysts; (v) restrictions on personal trading by analysts; and (vi) disclosure in research reports of data and price charts showing the firms' ratings track record.

The NASD rules are admittedly important, but I suggest that we should minimize the need for their active enforcement. Note that these six rules do not explicitly prohibit investment bankers from influencing the hiring of security analysts. In August 1999, Dennis Kozlowski, the CEO of Tyco, asked Merrill to hire Phua K. Young, a pro-Tyco research analyst at Lehman Brothers, apparently in exchange for Merrill receiving a lead role in Tyco's \$2.1 billion bond offering.⁵⁶ E-mails reveal that the Merrill-Tyco deal was arranged by Samuel Chapin, Merrill's "relationship manager" for Tyco.⁵⁷ It is likely that following Tyco, a vendor's procurer or "relationship manager" will still aim to please clients by promising favorable "equity research coverage," yet he or she

not influenced by conflicts of interest. If a member issues a report or a research analyst renders an opinion that is inconsistent with the analyst's actual views regarding a subject company, NASD considers such action to constitute a *fraudulent act* and conduct inconsistent with just and equitable principles of trade.

Id. (emphasis added).

⁵⁵ See NASD, Rules of the Association, §§ 2711 (b), (e), (g), (h)(2), (j), at http://cchwallstreet.com/nasd/nasdviewer.asp?SelectedNode=4&FileName=/nasd/nasd_rules/RulesoftheAssociation_mg.xml#chp_1_4_190 (last visited Oct. 26, 2004). See also SEC, NASD and NYSE Rulemaking (July 29, 2003), at <http://www.sec.gov/rules/sro/34-48252.htm> (last visited Oct. 26, 2004); Memorandum, *supra* note 53 (giving details involving: (i) relationships and communications, (ii) compensation of analysts, (iii) compensation of securities firms, (iv) promises of favorable research, (v) quiet periods, (vi) disclosure of financial interest in recommended companies, (vii) restriction on personal trading by analysts, (viii) disclosures during analyst's public appearances, (ix) disclosure regarding firm's ratings in research reports, and (x) prominence of disclosures).

⁵⁶ See Edgar Snyder & Assocs., *NASD Charges Phua K. Young, Former Merrill Lynch Analyst Covering Tyco International* (May 2003), at http://www.edgarsnyder.com/securities_fraud/young_phua.html (last visited Oct. 26, 2004) (reporting that Merrill's Phua Young was charged with misleading investors). See also Bloomberg News, *Big Investor in Tyco Gives Testimony at Trial*, N.Y. TIMES, Feb. 3, 2004, at C6.

⁵⁷ Christopher Bowe & Gary Silverman, *Merrill Rewarded After Hiring Analyst Tyco Favoured*, FIN. TIMES, Feb. 3, 2004, at 1.

will not retain e-mail records. To prevent this, we ultimately need separation of ownership, competitive markets, and other devices to correctly align incentives so that these rules are not only obeyed, but also rendered (mostly) unnecessary.

Additionally, it appears that small-scale securities dealers have been very slow in obeying the NASD rules. For example, Justin Hughes, a former research analyst at Jefferies Group, received the following phone message in the Summer of 2002: "If you truly believe that your compensation has nothing to do with [investment] banking revenue, then you are way out of whack. . . . You get paid based on banking revenue."⁵⁸ This message reveals that in cases involving conflicts of interest, micromanaging with rules is ineffective and unenforceable.

In May 2004, the Bond Market Association (BMA) issued "guiding principles" similar to the NASD rules. The principles include: (i) required disclosure of payments received; (ii) a ban on promises of favorable research to investment banking clients; (iii) a ban on retaliation against analysts who publish negative research; (iv) a prohibition on trading by trading desks ahead of research reports; and (v) a prohibition on investment bankers' opportunity to review, pressure, or control researchers.⁵⁹ As with the NASD rules, the incentive to break such rules, necessary as they may be, will persist. In sum, association rules are not sufficiently effective in curbing market inefficiencies, as they can themselves create further conflicts, and their enforcement requires costly micro-management.

The last two Parts of this paper have demonstrated that market inefficiencies are both serious and persistent. Current solutions now on the table are at best inadequate for the task at hand, and at worst counterproductive. The next Part proposes that we should break up the IBBS and ILS divisions of any future offending vendor. We should not ignore the power of the threat of "break-up" as a low-cost enforcer of conflict of

⁵⁸ Susanne Craig, *Research Rules Trickle Down to Small Firms*, WALL ST. J., Jan. 19, 2004, at C1.

⁵⁹ See The Bond Market Association, *Guiding Principles to Promote the Integrity of Fixed Income Research* (May 19, 2004), http://www.bondmarkets.com/assets/files/Guiding_Principles_for_Research.pdf (last visited Oct. 26, 2004). See also Press Release, Bond Market Association, *The Bond Market Association Issues Final Guiding Principles to Promote Integrity of Fixed Income Research; Principles Apply Globally After Extensive International Review* (May 19, 2004), <http://bondmarkets.com/story.asp?id=1096> (last visited Oct. 26, 2004).

interest rules, one far superior to the micromanagement currently used by industry associations and other regulators.

VII. DIVESTITURE OF VENDORS CAN SOLVE CONFLICTS OF INTEREST

This part discusses divestiture of offending vendors into two divisions: (a) investor lender services (ILS) and (b) investment banking and borrower services (IBBS). Although the threat of divestiture is not currently considered as a remedy for egregious behavior by vendors, I contend that this threat will serve as a low-cost enforcer of conflict of interest rules.⁶⁰

Where does the remedy of divestiture come from? The disadvantages to the fair and effective operation of the securities market created by both general inefficiencies and the more specific conflicts of interest, including the detrimental corollary effects of such conflicts, are similar to concerns raised in antitrust law, and it is from that area that we take our proposed solution.⁶¹ Antitrust laws are designed to save capitalism from the anticompetitive behavior and excess rents enjoyed by large monopolies. The key remedies against monopolistic abuses in antitrust law are divestiture, the threat of divestiture,⁶² and treble damages awarded to private litigants.⁶³ The antitrust remedy of treble damages might be useful in our context, as a large fine imposed for violations of securities laws (e.g., \$100 million for Merrill Lynch), might simply be viewed by Merrill as the cost of doing business, written off against large excess rents earned by skirting conflict of interest rules. In the antitrust context, treble damages are an essential component of an effective deterrent program, as the public benefit of imposing such damages outweighs the potentially negative consequence of reducing entrepreneurial risk-taking. In the private sector, however, the opposite is true. The reduced entrepreneurial risk-taking resulting from the threat of costly private litigation by victims of conflict of interest abuses is unacceptable.⁶⁴ Instead, vendors

⁶⁰ For further discussion, see *Divest Investment Banking*, *supra* note 1, at 1.

⁶¹ See AREEDA, *supra* note 7, at ¶¶ 155–56, 158(c), 223–26.

⁶² See *id.*

⁶³ See *id.*

⁶⁴ See David Besanko & Daniel F. Spulber, *Are Treble Damages Neutral? Sequential Equilibrium and Private Antitrust Enforcement*, 80 AM. ECON. REV. 870, 875–80, 885–87 (1990) (referring to literature arguing that private antitrust

shown to be practicing anticompetitive behavior and collecting excess rents should be limited with the threat of divestiture.⁶⁵

A. *Benefits from Divesting Conflicted Entities*

Divestiture will benefit specific stakeholders in financial markets for the following reasons:

(i) The ILS, IBBS separation will create direct and exclusive accountability within each division, as the division serving the borrowers will only be judged on how well it does that job, irrespective of how it impacts other divisions owned by the same conglomerate. Its profitability will solely depend on how well it performs in the interest of its clients. For example, if the ILS division tries to skirt the interest of lenders and carries favor with the investment banking clients of an affiliated division, the lenders themselves will punish it for failing to obtain the highest possible yield. This will function as a natural incentive against biased research. Similarly, if the investment banking division favors particular lenders by giving them favorable treatment resulting in higher yields, borrowers themselves will punish it for not lowering their borrowing cost.

(ii) The stockholders of vendors will likely see the value of their shares increase. There are many examples, such as the creation of Baby Bells, where the sum value of parts exceeds the value of the whole.⁶⁶ The ILS and IBBS divisions, serving lenders and borrowers, respectively, will receive appropriate stock market price signals. For example, when Citibank (the vendor) served Parmalat (the borrower) in a complex 1999 deal, the IBBS division earned some fees, but the ILS division lost its reputation and more, since Citibank was exposed as a \$689 million lender to Parmalat.⁶⁷ This example shows that the value

enforcement is “neutral” in its effect on deterrence, and arguing that probability of conviction has to be high enough for the deterrence to kick in). Accordingly, the fine has to be large and fairly certain to have significant deterrent effect.

⁶⁵ Upon divestiture, the current shareholders of vendors will receive an appropriate number of shares in each division. The market will quote separate prices for the two divisions, whose fortunes will no longer be linked. Since there will only be two divisions, this approach would be easier than the 1984 creation of seven local Bell telephone companies along with AT&T. See *Production Studies*, *supra* note 1, at 2.

⁶⁶ See *id.* at 1–4.

⁶⁷ See Mitchell Pacelle & Jo Wrighton, *Citigroup Wipes up Spilled Milk*, WALL ST. J., Jan. 21, 2004, at C1. Citigroup said it took a \$242 million charge for credit and trading losses connected to the collapse of Parmalat SpA. Citigroup said the charge to fourth quarter earnings stemmed from \$689 million of total exposure to Parmalat. Citigroup said its \$689 million pretax exposure to Parmalat consisted of about \$400 million of credit secured by third-party receivables, another \$255 million of unsecured

shareholders attribute to a vendor may be directly lost due to a conflicted combination of two divisions within one vendor, and indirectly lost due to a damaged reputation. Indeed, in banking and investor services, reputation is often the most important component of shareholder value.

Of course, the reduction in excess rents will make vendors less profitable. As a result, they will have to generate greater efficiencies to retain profit margins, rendering them more competitive in the global marketplace.

(iii) Employees of financial institutions will benefit, since their missions will be more clearly defined as representing the borrower or lender, and they will no longer be subject to impractical and unenforceable regulations regarding who they can talk to and how they are compensated. In the past, vendors made many researchers scapegoats for doing conflicted jobs. In a divested firm, scapegoats would not be necessary. For example, had Merrill employee Phua Young been exclusively representing Merrill's ILS division for lenders, he might have been suspicious when Tyco's CEO paid for a background check on Mr. Young's fiancée.⁶⁸ Similarly, had Mr. Young been exclusively representing Merrill's IBBS division to boost borrowers like Tyco, his research reports would have had little credibility, since Merrill was underwriting \$2.1 billion of Tyco bonds under false pretenses.⁶⁹ Whatever favors Tyco did for Mr. Young would have no effect on anyone from the ILS division; there would be no penalty on the IBBS division and there would be no need for a scapegoat.

(iv) Stockholders of borrower corporations will receive efficient investment banking services and proper investment advice regarding the viability of their expansion plans. The advice might be explicit, from experts who are interested in long term rewards, not merely focused on deal commissions. The stockholder benefits might be indirect, implicitly reflected

credit and about \$36 million of trading exposure. *Id.* See also Henny Sender, *Citigroup Is Sued over Notes Linked to Enron's Credit Status*, WALL ST. J., August 26, 2004, at C4. The Bank of New York Co. has filed suit against Citigroup over the sale of financial instruments linked to Enron Corp. The suit could involve as much as \$2.5 billion in liability for Citigroup. *Id.*

⁶⁸ See Laura Italiano, *Tyco Honcho's 20G Gift 'Eye'*, N.Y. POST, Jan. 21, 2004, at 26; Brad McGee, *Ex-Tyco Official Says Company Paid for Private Inquiry*, N.Y. TIMES, Jan. 21, 2004, at C2.

⁶⁹ Jeanne King, *Tyco Trial Focuses on Merrill Analyst*, REUTERS, Feb. 2, 2004, available at http://www.yourlawyer.com/practice/news.htm?story_id=7513&topic=Tyco%20%20Stock%20Fraud (last visited Oct. 26, 2004).

in the borrowing costs charged by the lenders in an efficient market free of conflicts.

(v) The management of borrower corporations, without the ability to arm-twist the lender, will benefit from focused investment banking (borrowing) advice without conflicts. All projects will be judged on their merits, otherwise the IBBS division will not earn its keep.

(vi) The management of vendor corporations will benefit from a more focused mission that does not carry the danger of criminal prosecution for conflicts of interest. In addition, the ILS and IBBS divisions will create twice the number of top management positions through divestiture.

(vii) Investors and the general public will benefit from superior allocation of savings to higher yielding activities, leading in turn to increased living standards, greater trade, and more profitable investments. The general public will also benefit from reduced costs of regulation of financial institutions. Finally, if Adam Smith is right, there will be greater due diligence by those in charge of other people's money due to the "invisible hand" of competitive market forces.

Although it has desirable aspects, I am not suggesting across the board divestiture of all vendors. I would hope that vendors will voluntarily create ILS and IBBS divisions as a preventative measure and, in the alternative, I propose a step-by-step approach to avoid unintended consequences. The threat of breakup will enable regulators to check if: (i) analyst forecasts are generally accurate or are too rosy; (ii) there are enough sell recommendations; and (iii) investment banking clients are rewarded with favorable research. If violations are discovered, the vendors should be divested into two divisions.

Divestiture of violators will be cleaner, simpler, cheaper, and more effective. It will give teeth to procedures for monitoring violations of the Chinese Wall or other self-regulations. Divestiture will remove a basic conflict of interest embedded in the structure and the business model of violator firms pretending to serve both buy and sell sides of securities markets, and remove a harmful synergy that encourages what Arthur Levitt, the former chairman of the SEC, called "a culture of gamesmanship."⁷⁰ If the breakup of violators is swift,

⁷⁰ See Levitt, *supra* note 19, discussing this as a culture where: [I]t's okay to bend the rules, tweak the numbers, and let obvious and important discrepancies slide [C]ompanies bend to the desires and pressures of Wall Street analysts rather than to the reality of numbers

it will let the regulators focus on their original jobs by enforcing honest and full disclosure, while simultaneously preventing fraud, and exposing and punishing the perpetrators of fraud. The divestiture will eliminate the need to micromanage the internal operations of offending vendors, such as reading millions of e-mails, tracking weekend contacts, examining all hiring, salary and promotion decisions, and prevent stealth compensations and sweetheart deals to analysts supporting investment banking clients.

Divestiture removes the incentive for ILS divisions to promote a particular investment over another, except to find the best yield given the risk tolerance and asset size of the client. Schwab does not have an IBBS division, and it is able to prosper.⁷¹ After divestiture, the ILS division of a violator can similarly survive and prosper, without regulation of internal personnel practices. Under the threat of divestiture, a future Henry Blodgett will have to admit that he represents the investment bankers, and his rosy forecasts of telecommunications companies will be treated like advertisements. During the recent bubble years, such disclosures might have saved telecommunications billions in excess capacity building, fueled by Mr. Blodgett's commercials paraded by Merrill and other vendors as independent research.

B. Arguments against Divestiture and Proposed Solutions

Having outlined the benefits of divestiture or the threat of divestiture, it is important to consider, and take the opportunity to answer, some arguments against divesting firms. The first argument is best demonstrated through the Bell Labs example. The 1984 breakup and divestiture of Bell Systems confirmed a very short-term outlook for many

[A]nalytsts more often overlook dubious accounting practices and too often are selling potential investment banking deals . . . [A]uditors are more occupied with selling other services and making clients happy than detecting potential problems . . . and . . . directors are more concerned about not offending management than with protecting shareholders.

Id. Note that *ex post* awards of reimbursements and prizes to research outfits will create incentives to expose companies and leaders who are followers of gamesmanship. Good research will produce correct earnings estimates after subtracting the costs of management spin and shenanigans and provide a valuable service to the investing public.

⁷¹ See THE CHARLES SCHWAB CORPORATION, CORPORATE OVERVIEW 20–27 (Mar. 2004), available at <http://ir.thomsonfn.com/InvestorRelations/IRFiles/5184/presentations/CorpOverview0304.ppt> (last visited Oct. 26, 2004).

American corporations.⁷² Bell Labs' (now Lucent) share price plummeted from nearly \$90 in 2000 to under \$1 in some periods of 2002.⁷³ Of necessity, therefore, Lucent nearly gutted its research budget for fundamental innovations.⁷⁴ From 1925 to the breakup in 1984, Bell Labs was a premier U.S. institution, conducting fundamental research in physics, chemistry, and telecommunications engineering. It invented the transistor, color TV, cell phones, and thousands of useful products. The reduced funding for Bell Labs research caused by the divestiture hurt the company's capacity for such innovation.

In our particular context, the argument against divestiture is that research analysts perform the vital functions of information evaluation and dissemination, and that this work is not viable without a subsidy from the investment banking division. Let us review the research landscape to see if the argument can justify the high rents earned to the detriment of the investing public.

The first players on the landscape are news organizations such as Dow Jones, Bloomberg, Reuters, etc., who devote resources to business news in the public interest, yet are primarily interested in selling news to the public and special reports to investors. Their focus is on news-worthiness, and is sometimes motivated by a desire to scoop competing news organizations rather than to provide quality research for the benefit of the investor. The second set of players are rating agencies such as S&P and Moody's, who sell their detailed research while providing broad ratings to the general public.⁷⁵ Both had encouraged investment in Enron by calling Enron's debt "investment grade" in the weeks close to its bankruptcy.⁷⁶

⁷² See Michelle Kessler, *Many Companies Cut Research Budgets*, USA TODAY, Feb. 23, 2003 (stating that research budgets are being cut by 9% in major U.S. corporations), available at http://www.usatoday.com/money/industries/technology/2003-02-23-research_x.htm (last visited Oct. 26, 2004).

⁷³ Ticker symbol for Lucent LU can be used to find historical prices, splits, etc. See CNN/Money, *Lucent Falls to \$1* (Sept. 17, 2002), at <http://money.cnn.com/2002/09/17/technology/lucent> (last visited Oct. 26, 2004).

⁷⁴ Kessler, *supra* note 72 (pointing out that Lucent had trimmed research spending by one billion dollars since 2001).

⁷⁵ See Standard & Poor's, *What is Standard & Poor's?*, at <http://www2.standardandpoors.com/NASApp/cs/ContentServer?pagename=sp/Page/AboutUsMainPg&r=1&l=EN&b=8> (last visited Oct. 26, 2004); Moody's, *Moody's Role in the Global Capital Markets*, at <http://www.moody.com/moodys/cust/staticcontent/2000200000265777.asp?section=about&topic=intro> (last visited Oct. 26, 2004).

⁷⁶ See Kreag Danvers & B. Anthony Billings, *Is the SEC Going Soft on Credit Rating Agencies?*, CPA J., <http://www.nysscpa.org/printversions/cpaj/2004/504/print>

The third set consists of vendors who, with their own research departments, provide specific (strong buy, buy, hold, and sell) recommendations to their clients. The fourth set includes some Internet sites (earnings.nasdaq.com) providing similar services regarding the “consensus earnings” forecasts made by professional analysts to the general public.⁷⁷

In considering the impact of divestiture on a vendor convicted of conflict of interest abuses, I find it likely that research budgets will be cut. However, this may not be all bad. Returning to the players on our landscape, it is fair to say that there is no well-respected premier American institution researching the market for securities for the public good. Furthermore, the current research subsidized by investment banking revenues is mostly proprietary, not public. Finally, according to our game theory, the research conducted by the convicted vendor would have been biased. These examples of biased and faulty research informing the securities market did not produce a public good comparable to the invention of the transistor at Bell Labs. In fact, it was biased research that led to the huge losses at Enron, WorldCom, Tyco, Parmalat, and others.⁷⁸

While the research budget will likely be reduced, some research funds can be raised through a pro-rata assessment on borrowers, i.e., all corporations who issue securities or bonds, consistent with the accepted economic principle that the seller pays for marketing. However, since such an assessment is not a cost to market particular securities to investors, it is best viewed as a tax. Choi and Fisch have suggested a novel way of disbursing these hypothetical taxes by using a voucher

version6.htm (last visited Oct. 26, 2004). See also Mark Gilbert, *Credit Rating Regulation Is Coming, Ready or Not*, BLOOMBERG.COM (Aug. 12, 2004), at http://quote.bloomberg.com/apps/news?pid=email_us&refer=columnist_gilbert&sid=aKqblwztCcPg (last visited Oct. 26, 2004), commenting:

Parmalat was rated BBB – by S&P, the lowest level on the investment-grade scale, until Dec. 9, two weeks before the dairy company filed for Italy’s biggest bankruptcy. In November 2001, Moody’s was poised to cut Enron’s rating by two levels, dropping what was then the world’s biggest energy trader out of investment grade. After lobbying by the company’s bankers, the rating fell just one level to Baa3. The following month, Enron filed for bankruptcy protection owing \$67 billion.

Id.

⁷⁷ See Hong et al., *supra* note 45 (finding herd behavior as a result of such forecasts).

⁷⁸ See Hrishikesh D. Vinod, *Winners and Losers in Multiple Failures at Enron and Some Policy Changes* (Apr. 9, 2002) (discussing winners and losers in the Enron saga), at <http://ssrn.com/abstract=300542> (last visited Oct. 26, 2004).

system.⁷⁹ Then again, if a tax is paying for securities research, why keep it with investment bankers? Why not temporarily subsidize independent analysts who produce high quality research reports that stand the test of time? As long as subsidized sales of conflicted research by investment bankers is paraded as independent research, the market for truly independent research lacks a level playing field. To clarify my position, let us again return to the securities research landscape, and divide it into two components: past data and future prospects. The funding methods for the two components need not be identical; in fact, I propose two distinct low-cost funding methods for the two kinds of research.

1. Past Data Research

There are several regulators who require public corporations to follow numerous accounting rules and file facts relating to balance sheet items including assets, liabilities, revenues, costs, payments, salaries and benefits paid to top executives, etc.⁸⁰ Past data research evaluates all such information, plus all relevant stock and bond market prices. The data is often presented in the form of a few dozen indicators familiar to Wall Street traders, including price earnings ratio (P/E), earnings per share (EPS), and cash flow analysis. Considerable information is already available on public sites such as Yahoo.⁸¹ Under my proposal, it will be the responsibility of regulators to make past data research promptly, reliably, and publicly available on the Internet at minimal cost, if any. Regulators can easily require each borrower to file a form on the Internet, certifying the accuracy of the few dozen commonly used indicators.⁸² In the process of certifying the basic facts such as earnings and assets, this requirement may uncover, and even prevent, some fraud.

⁷⁹ See Stephen J. Choi & Jill E. Fisch, *How to Fix Wall Street: A Voucher Financing Proposal for Securities Intermediaries*, 113 *YALE L. J.* 269, 276–77 (2003).

⁸⁰ See SEC, *The Investor's Advocate: How the SEC Protects Investors and Maintains Market Integrity* (observing that although the SEC is the primary regulator, other regulators include "Congress, other federal departments and agencies, the self-regulatory organizations (e.g. the stock exchanges), state securities regulators, and various private organizations."), at <http://www.sec.gov/about/whatwedo.shtml> (last visited Oct. 26, 2004).

⁸¹ See e.g., Yahoo! Finance Homepage, at <http://finance.yahoo.com> (last visited Oct. 26, 2004). If you know the ticker symbol, you can access considerable information about the security represented by that symbol at this and similar sites.

⁸² The Sarbanes-Oxley Act already has such requirements aimed at preventing future Enrons. See 15 U.S.C.A. § 7213(a) (2004).

Research involving an analysis of past and current data, however, should go beyond publishing pro-forma earnings and reported cash flows. David Bianco of UBS, with an apparently small team of accountants, has analyzed S&P 500 companies for quality of earnings, and has provided adjusted pro-forma earnings for so-called one-time charges, stock options, and rosy pension assumptions.⁸³ Large institutional investors, such as pension plans and mutual funds, undoubtedly have the resources to fund similar past data research in their own interest. Perhaps, following some delay, they could be encouraged to share this information with the investing public. A divested company serving only the lender investors will reward high caliber past data analysis. Such rewards will incentivize analysts to discount and expose aggressive uses of accounting loopholes, tax havens, and options markets to convert future earnings into current cash flows.

As an additional incentive to expose fraud, I propose offering a small percentage of the funds recovered from fraud as a “bounty” (perhaps with an upper limit of \$1 million) to anyone exposing *material* fraud in the management-certified indicators filed by public corporations on the Internet. These bounties can serve as a check on conflicted auditors, and may expose big fraud faster and at a lower cost to the investing community.

In addition to such incentive programs, the IBBS division should be prohibited from influencing past data research. The need for such a prohibition is exemplified by the Parmalat scandal. In September 2002, Italian satirist Beppe Grillo said that Parmalat had 13 billion euros in assets and 13 billion in debt. “[I]n a normal country, (unlike Italy) it would collapse, bankrupt.”⁸⁴ If a satirist could see the problem clearly visible in Parmalat’s past data a year before its bankruptcy, why didn’t regulators and professional analysts? A Merrill Lynch analyst cited “inefficient balance sheet management”

⁸³ See Sharon Epperson, *Smarter Earnings: The Quality of Profits Matters as Much as the Amount. Here's How to Judge*, TIME, Mar. 8, 2004, available at <http://www.time.com/time/insidebiz/printout/0,8816,1101040308-596152,00.html> (last visited Oct. 26, 2004). See also Elizabeth MacDonald, *Pension Pangs: Some Big Companies are in for an Earnings Jolt When They Own up to the Reality of Rotten Pension Fund Performance*, FORBES, Jun. 9, 2003, available at http://www.forbes.com/free_forbes/2003/0609/140.html (last visited Oct. 26, 2004) (noting that eventually, unrealistic earnings assumptions catch up with sponsors).

⁸⁴ Daniel J. Wakin, *There Were Earlier Signs of Trouble at Parmalat*, N.Y. TIMES, Jan. 14, 2004, at C1.

when Parmalat started borrowing in the bond market while alleging large cash reserves.⁸⁵ Despite these reservations, Merrill participated in Parmalat's complex financial dealings, since Merrill made significant short-term profits from such participation. Perhaps Merrill made the correct business decision: short-term profits from participation were worth more than potential losses shared among thousands of Parmalat investors at an unknown future date. Compared to Parmalat, the Enron story had a more blatant conflict of interest,⁸⁶ since some Merrill executives were making significant personal⁸⁷ profits.

Thus, following divestiture, the ILS division will need to search for appropriate "sell" recommendations. What better way to select companies for sell recommendations than to turn to those using aggressive accounting? A clear focus on past data research, with watchful regulation, can and should improve the quality and availability of such research after the breakup of vendors convicted of abusive behavior.

2. Future prospects research

As the name indicates, this research involves evaluation of the future prospects (FP) of the various goods and services sold by a borrower. It often requires sophisticated models, market research, detective work, interviews with competitors and customers, and extensive study of international trends in related products. For example, an FP research firm will be expected to (reasonably) correctly predict, in 2000, the demand for cell phones produced by Motorola Inc. during the first

⁸⁵ "Prosecutors investigating the collapse of Parmalat, the Italian milk group, have ordered a search of the Milan offices of UBS, the Swiss bank. International banks have come under regulatory scrutiny for helping Parmalat to place bonds and for extending it credit." Caroline Merrell, *Parmalat Investigators Raid UBS in Paper Chase*, *TIMES*, Feb. 7, 2004, at 56, available at <http://business.timesonline.co.uk/article/0,,9065-995169,00.html> (last visited Oct. 26, 2004).

⁸⁶ See Press Release, SEC, SEC Charges Merrill Lynch, Four Merrill Lynch Executives with Aiding and Abetting Enron Accounting Fraud (Mar. 17, 2003) (reporting that the SEC charged Merrill Lynch and four Merrill Lynch executives with aiding and abetting Enron accounting fraud, and that Merrill Lynch simultaneously agreed to the entry of a permanent anti-fraud injunction and to pay \$80 million in disgorgement, penalties and interest), <http://www.sec.gov/news/press/2003-32.htm> (last visited Oct. 26, 2004).

⁸⁷ See John R. Emshwiller & Kara Scannell, *First Enron Trial Begins Monday*, *WALL ST. J.*, Sept. 17, 2004, at C1 (asking whether Merrill's purchase was a sham; naming six Merrill executives including a one-time head of investment banking, Daniel Bayly, as defendants charged with illegally manipulating Enron's books for personal gain).

quarter of 2004. FP research, therefore, is associated with forecasting future demand for unseen goods using future technologies at unknown prices in a world subject to unknown natural or man-made disasters. Since whimsical human reactions are involved, FP research is obviously more difficult to conduct than weather forecasting, yet it is equally vital. Errors in FP research cause large losses to individual investors and misallocation of scarce national resources.

Clearly, high quality FP research for the benefit of the general public is what economists call a public good. Some of the \$1.4 billion in fines mentioned above should help finance a Bell Labs style non-governmental public domain entity for FP research,⁸⁸ which could provide public information regarding basic long-term trends in demography and technology and help reduce the costs of private FP researchers. However, public goods are subject to two problems known in economic theory as “free rider” and “adverse selection.” These concepts are used here to derive valuable insights for the funding of FP research.

a. Free Rider and Adverse Selection

A free rider acquires the benefits of FP research without paying for it. In any securities market, when an informed player places orders to buy or sell securities, these orders are recorded, and transparency rules force public entities to disclose their trades within a prescribed time interval. The Wall Street ticker tape for the New York Stock Exchange tracks quantities of all buy and sell orders as they occur, for anyone to see. It is possible to copy the buy or sell orders made by reputed research-backed outfits without paying for the FP research reports on which those orders are based. The profit potential from buying a research report, therefore, is limited to a small window during which the buyer has an advantage in executing her buy (or sell) order before the price rises (or falls), at which time the imitators and free riders jump in. Since the creator or buyer of an FP research report cannot appropriate its full benefits to himself, small investors cannot afford to buy them.⁸⁹ However, if we can somehow pay for FP research,

⁸⁸ As a past employee of Bell Labs with considerable interest in finance, I can help organize such an entity.

⁸⁹ Patent protection is granted to pharmaceuticals because the innovators themselves cannot fully appropriate the benefits of the innovation. They also use advertising and “detailing” (i.e. wining and dining) to supplement patent protection. See H.D. Vinod & P.M. Rao, *Asymmetric Complementarity and Dynamic Optimization*

imitation is vital to the market's success in allocating adequate resources towards things that the public wants, and denying resources to things that the public does not.

FP research is also subject to a great deal of *ex ante* uncertainty. It is human nature to seek comfort in numbers, when faced with uncertainty. Adverse selection means that such *ex ante* uncertainty encourages irrational herd behavior,⁹⁰ leading investors to choose wrong investments and misallocate capital resources.

Different public goods carry different weights of importance in regard to the problems of free rider and adverse selection. For example, national defense is subject to a heavy free ridership; if the nation is safe from foreign aggression for one person, it is safe for all. Most countries, therefore, have a governmental department of defense. The patent system aims to encourage production of advanced medicines and technology by prohibiting free riders (copycats) from supplying patented technology without paying for the research and development creating that technology. On the other hand, since promotion of arts and basic science is less severely affected by free riders or adverse selection, these public goods are commonly funded indirectly by tax deductions or with direct government spending on a Science Foundation and an Arts Endowment, not by establishing an independent government agency.

b. Privatization and Taxpayer Endowment

Besides being severely affected by both free rider and adverse selection problems, FP research is also subject to two unique features: (i) a potential for political corruption, and (ii) an intrinsic difficulty in assessing its quality, except *ex post*. Any investment project named by FP research, especially if it sways the consensus forecast, will attract large investment from both public and private entities. This investment in turn will create jobs and wealth in one particular (congressional) district rather than another. It is likely, therefore, that if a government department provides FP research, it will be subject to political pressures and corruption, resulting in tainted research. Tainted research will quickly lose its credibility.

in Pharmaceuticals, 2(2) J. QUANT. ECON. 149, 149–60 (2004). Although FP researchers would be allowed to spend modest sums on advertising, similar asymmetric complementarity is likely to appear in FP research.

⁹⁰ See Hong et al., *supra* note 45.

Accordingly, we do not want a government department in charge of FP research. Not only will the protection against free ridership that an agency or department can provide (as in the patent example) be too slow for instantly moving worldwide financial markets, but the credibility of the department's research will always be at issue. In light of these disadvantages, I suggest limiting public funding to (i) financing watchdog activities to keep FP research honest; (ii) providing standards; (iii) providing data on long-term trends in science and technology; and (iv) supporting activities to reduce the costs of FP research to private providers.

Despite divestiture, FP research should remain primarily private. Private funding is currently provided by the research departments of brokerages, money center banks and other vendors, financial media companies, rating companies like Morningstar, S&P or Moody's, and institutional investors such as large pension plans, large mutual funds like Fidelity's Magellan and Warren Buffet's fund, and a few independent outfits.⁹¹ Much of the privately funded FP research is done exclusively for the private use of the members of the group paying the bills.

Usually, independent FP researchers sell reports on a specific borrower corporation or on a particular security. The price of the report will be sensitive to the reputation of the person or entity producing it. The market for FP research reports is open to freelancers, non-governmental organizations (NGOs), universities, current and former employees of corporations, and their auditors. The market price of FP reports will function well in balancing demand and supply, provided we keep markets competitive. If divestiture leads to a zero contribution by the IBBS division to fund the FP research, the ILS division should be able to buy the needed research reports or conduct some FP research in-house, similar to Schwab, Inc.

The second unique feature of FP research is that its quality is impossible to judge at the time that it is produced, and it remains generally unknown for some years. Were taxpayers to pay for FP research which proves to be wrong,

⁹¹ For example, Investor Responsibility Research Center (IRRC) is an independent research firm that tries to provide information on corporate governance and social responsibility issues affecting investors and corporations since 1972, especially to large institutional investors. See IRRC Homepage, at <http://www.irrc.org/> (last visited Oct. 26, 2004).

they would be hit with a double whammy, since by then such research will already have penalized society through investor losses, misallocated resources, and wasted time and effort. I suggest that any taxpayer support should be in the form of prizes to researchers who correctly predict FP *ex post*, as determined with 20-20 hindsight. Since, by its uncertain nature, FP researchers will be wrong one in three times (hypothetically), the prize monies must exceed three times the cost of research. Otherwise, the prizes will amount to bragging rights, but will fail to incentivize on-going, high quality FP research. If these proposals are implemented in tandem, future prospects research should not suffer.

VIII. CONCLUSION

This paper began with the premise that a single money center bank or brokerage, i.e. vendor, cannot properly serve both the buy and sell sides in financial markets without conflicts of interest any more than one law firm can serve both the prosecution and defense. Following a brief discussion of the historical background of market inefficiencies and attempts to correct them, I focus on the serious problems created by conflicts of interest in the operation of vendors. Using defined terms, I approach the problem from the viewpoint of economic theory, concluding that our ultimate aim should be to facilitate socially productive allocation of resources by market participants through an efficiently working market for securities.

I use a game theory payoff matrix to illustrate how conflicts of interest are intrinsic to the structure of vendor institutions, causing losses to society and opportunities for subtle kickback schemes in the absence of incentives for achieving a socially desirable Nash cooperative bargaining solution. This matrix reveals the excess rents that entrenched and conflicted vendors enjoy in the current corporate structure, rents that directly hurt ordinary investors and indirectly cause market inefficiencies. Recent examples indicate that what we have is an inequitable, and often unethical, manipulation of both the general public and individual analysts, which is likely to persist under current regulations and similar micromanagement solutions.

I make a case for divestiture of any vendor found guilty of conflict of interest abuses into two separate companies: X-ILS Inc. serving the savers and investors, and X-IBBS Inc.,

mainly serving business borrowers. As reputation is an extremely important (if not the most important) asset in financial services entities, when vendor X is found guilty, loss of reputation already means considerable loss of shareholder value. Since shareholders of X will get equal shares in both X-ILS and X-IBBS, each part will have an opportunity to rebuild its reputation, absent any conflicts of interest. The general public will gain from improved resource allocation and reduced conflicts, while X's employees and executives need not lose.

One potential disadvantage to this remedy is the loss of funding for research, currently provided by the IBBS division. I distinguish between past data research and the more difficult and speculative future prospects research. The former should be made available to all investors on the Internet, published and financed by the regulators, and supplemented by compilation costs to borrowers and a modest fee to individual users. Corporations are already being asked by regulators to file accounting details well beyond the pro forma earnings, and many such details are already being collected under the Sarbanes-Oxley Act and revised FASB⁹² accounting standards. Such information should promptly be published on the Internet. Companies who engage in fraudulent gamesmanship⁹³ in their publicly filed earnings should be fined, with a portion of the fine serving as a bounty.

The 1984 divestiture of the Bell System telephone monopoly resulted in the decimation of research and innovation. While a similar claim (that FP research might suffer upon divestiture) is a valid concern, it is less plausible, as FP research by a convicted vendor is most likely biased and conflicted. Furthermore, FP research is subject to problems of free ridership, adverse selection, and political influence. I suggest limiting public funding to selected activities that reduce the cost of private FP research, and turning to sources of private funds for FP research. First, I encourage the participation of independent providers to strengthen the market for research reports. Second, I suggest that taxpayers or private foundations reimburse high quality (*ex post* accurate) FP research.

⁹² *Id.* "New [FASB-induced] developments are expected to capture egregious SPEs, and provide users of financial statement with clearer information." *Id.*

⁹³ See Levitt, *supra* note 19.

There are fundamental reasons why regulating or micromanaging internal operations of vendors will not work, whereas the threat of divestiture can. If we permit violators to continue as a single company, capital market misallocations and inefficiencies will continue, producing more costly Enrons. Now that the harm from this conflict of interest is identified, the threat of a breakup should be used to deal with it quickly and effectively. A few dramatic divestitures of violators can eliminate the need for detailed rule enforcing, excess regulation, and micromanaging. After all, excess regulation might well undermine the freedom and flexibility needed by entrepreneurs, whose risk-taking alone helps create and sustain our enormous national wealth.