Property Rights to Investment Research: The Agency Costs of Soft Dollar Brokerage

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Securities regulators and policy commentators have questioned so-called "soft dollar" arrangements, in which fund managers promise portfolio trades to participating brokers in exchange for investment research. Johnsen examines the money management and brokerage industries, focusing on the agency costs associated with soft dollar arrangements. While many argue that soft dollar brokerage leads to the unjust enrichment of fund managers at the expense of fund beneficiaries, Johnsen concludes that soft dollars are efficient. He describes them as a vehicle that allows managers and brokers to align incentives and thereby reduce agency costs to the benefit of fund investors. Thus, this Article provides a counterpoint to the current support for either increased regulation or outright prohibition of soft dollar arrangements.

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Introduction

This Article examines the law and economics of soft dollar brokerage, an arcane yet controversial practice in the United States securities industry. Soft dollar brokerage evolved from the old fixed commission system that prevailed on the New York Stock Exchange (NYSE) until 1975. Under fixed commissions, the NYSE prohibited its broker-dealers from competing for brokerage business by offering their customers lower commissions. In lieu of lower commissions, brokers offered various non-price concessions to large institutional clients, such as mutual and pension funds. One popular form of non-price concession was the research rebate, through which the broker would make its in-house research available to institutional managers free-of-charge. With the deregulation of fixed commissions in 1975, brokerage commissions became freely negotiable and the average level of commissions fell substantially. Yet, curiously, most broker-dealers, led by the many new entrants to the industry, continued to bundle the cost of research and portfolio trades into a single commission. This arrangement came to be known as soft dollar brokerage.

Certainly, poor understanding of soft dollar brokerage accounts for the controversy surrounding the practice. Soft dollars depart from the textbook norm of cash consideration between anonymous traders. Rather, they constitute a form of in-kind rebate received by the professional portfolio manager.3

3. Other types of institutional portfolios that use soft dollars include investment companies, bank trusts, insurance companies, and thrift institutions. GREENWICH ASSOCIATES, Warning: Tricky Undercurrents, GREENWICH REP. 63 (1989).
Moreover, soft dollar brokerage occurs almost exclusively in the principal-agent context of professional portfolio management. The beneficiaries of these funds hire managers as their agents to research, identify, and execute profitable portfolio trades. Having identified a likely trade, a manager uses fund assets to hire a broker to execute it. In a typical soft dollar arrangement the broker agrees to prepay the manager’s research expenses in proportion to the future brokerage commissions the manager promises to pay the broker. The manager receives research inputs up front from third-party “research originators,” whom the broker pays in cash. If all goes as planned, the manager then directs future portfolio trades to the broker, generating the promised commissions.

As in any principal-agent setting, fund beneficiaries face a collective action problem in monitoring their managers. Since the gains from monitoring are shared equally by all fund beneficiaries, no individual beneficiary has sufficient incentive to monitor the manager’s brokerage practices. Thus, the manager’s use of soft dollars is virtually invisible. Perceptions that soft dollar use is entirely surreptitious account for the widespread hostility among the financial press, academic commentators, and securities market regulators toward soft dollar brokerage.

4. Fund managers distribute their trades among traditional full-service brokers, soft dollar brokers (also known as “conduit” brokers), and occasionally, no-frills discount brokers.

5. Where the broker prepays the manager’s research expenses, the manager is said to run an account debit with the broker. That is, the broker has account receivables for future commission business from the manager. In some cases, it appears the manager actually runs an account credit, having generated commissions prior to receiving the associated research. Unless otherwise indicated, however, this Article will assume the manager runs an account debit.

6. One industry observer lists the following categories of research purchased with soft dollars: performance measurement services, third-party research, fundamental data bases, technical analysis software, portfolio modeling software, stock quote systems, political or economic analyses, and computers and terminals. **GREENWICH ASSOCIATES, New Ball Game?**, GREENWICH REP. 29 (1989). In addition, a recent empirical study lists the following categories of third-party research purchased with soft dollars in descending order of the frequency of use: fundamental research, data on expected earnings, macroeconomic services, computer software, technical research, portfolio consulting services, computer hardware, educational services, and office support activities. **Marshal E. Blume, Soft Dollars and the Brokerage Industry, FIN. ANALYSTS J., Mar.-Apr. 1993, at 37.**

7. As one commentator describes soft dollar arrangements, “[t]he usual soft dollar arithmetic is expressed in terms of a ratio. For instance, a 2-to-1 ratio means the [manager] promises to direct two dollars in trading commissions to the [broker] for each one dollar the [manager] receives in research tools.” **Maher, supra note 2 at 20.**

Some critics of the practice argue that soft dollars tempt the manager to enrich himself at the expense of fund beneficiaries and encourage him to churn his portfolio, pay excessively high commissions, and monitor brokers indifferently. Essentially, the argument is that soft dollars compromise the manager’s fiduciary duty to fund beneficiaries by bundling the costs of investment research and portfolio trades into a single brokerage commission. Other critics believe that the fund manager “pays up” for brokerage in order to compensate for the research inputs he receives at the broker’s expense. Still others claim that having received research in advance, the manager may develop a misplaced sense of obligation to continue using a broker whose execution quality falls below an acceptable level. Since the manager is unwilling to terminate the broker, he may invest inadequate time and attention monitoring the quality of the broker’s executions.

To the alarm of its critics, soft dollar use has grown considerably during the past decade, perhaps to as much as $1 billion annually in the United States alone. Calls for further regulation and even outright prohibition have mounted in response to this growth. Most importantly, the United States Securities and Exchange Commission (SEC) recently has identified soft dollars as one of the subjects it will investigate in its upcoming “Market 2000” study.

This Article examines the law and economics of soft dollar brokerage from a transaction cost perspective, focusing specifically on agency costs. Part I reviews the institutional history of securities brokerage and investment management, describes their current institutional structure, and suggests possible sources of agency costs. Part II outlines the “unjust enrichment” hypothesis,
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which I have distilled from academic commentaries, the financial press, and several administrative rulings by the SEC. Part III presents an alternative explanation for soft dollar brokerage that I characterize as the "incentive alignment" hypothesis. The incentive alignment hypothesis accounts explicitly for agency costs across multiple dimensions and asserts that soft dollars serve to subsidize profitable investment research, bond execution quality, and encourage the specialized production of securities brokerage and investment research by entirely separate firms. Part IV examines the predictive power and policy implications of the incentive alignment hypothesis.

I. The Institutional Setting

During most of the history of the United States securities industry, investment research was produced primarily by the small number of full-service brokerage firms that dominated the New York Stock Exchange (NYSE).


16. Underlying this hypothesis is the proposition that enforcing property rights to investment research is problematic, and that the extent of the firm in securities brokerage and investment management largely has been a function of the evolving solutions to the problem. For similar studies in the evolution of property rights, see D. Bruce Johnsen, Property Rights to Cartel Rents: The Socony-Vacuum Story, 34 J.L. & ECON. 177 (1991) [hereinafter Cartel Rents]; D. Bruce Johnsen, The Formation and Protection of Property Rights Among the Southern Kwakiutl Indians, 15 J. LEGAL STUD. 41 (1986).

17. The securities industry performs a number of conceptually distinct functions, the most obvious of which is ownership, or risk bearing. One important attribute of ownership is the right to transfer. Many securities trades are motivated by investors' beliefs that the current price of a security is an inaccurate reflection of its future price. However prescient, these judgments are not without cost; an investor must spend resources gathering information to identify mispriced securities. I refer to this information gathering as the investment research function.

Another important function is brokerage, the process of searching for better prices and executing trades. In the broadest sense, securities "brokerage" refers to any trading through specialized intermediaries. In a narrower sense, however, the intermediary function can be performed by either a broker or a dealer, and many intermediaries routinely act in both capacities. A broker is an agent who acts on behalf of his principal in performing "agency" trades, while a dealer buys and sells out of his own account in performing "principal" trades. A broker earns a per share commission and bears little or no capital risk, while a dealer earns a mark-up or mark-down, often taking ownership and bearing the associated capital risk in the process of performing a trade.

18. In addition to calling into question the propriety of soft dollar brokerage, many commentators have questioned whether investment research, in its entirety, has any redeeming social value. The conclusion that it does not was supported early on by several empirical studies finding that risk-adjusted returns on actively managed mutual funds did not differ significantly from those of a passively managed market index such as the Dow-Jones Industrial Average. For an excellent review of the literature on this subject, see Richard A. Ippolito, On Studies of Mutual Fund Performance, 49 FIN. ANALYSTS J. 42 (1993). If these studies are correct, all investment research represents pure waste, and the conclusion is inescapable that soft dollars necessarily make fund beneficiaries worse off. Recent empirical work contradicts these findings, however, increasingly converging toward a consensus that actively-managed funds earn risk-adjusted returns at least sufficient to cover the added research and management costs. See id.; Richard A. Ippolito, Efficiency with Costly Information: A Study of Mutual Fund Performance, 1965-1984, 114 Q. J. ECON. 1 (1989) [hereinafter Mutual Fund Performance]. This conclusion supports the view that some amount of investment research does indeed have redeeming social value and that soft dollar brokerage may well make fund beneficiaries better off on net balance.
These firms bundled the costs of investment research and brokerage together into a single, regulated commission. It was not until the late 1960s, with the rise of professional portfolio management, that investment research and portfolio brokerage began to be vertically disintegrated and the dominance of the full-service brokerage houses over securities trading began to wane. Brokerage commissions on the NYSE were entirely deregulated in May 1975, and vertical disintegration began to occur in earnest with the rise of soft dollar brokerage and third-party research. The deregulation of fixed commissions, therefore, marks an important turning point in the organization of the securities industry.

A. A Brief Institutional History

Formal restrictions on securities trading began in the United States in 1792 with the formation of the Buttonwood Agreement, an association of stockbrokers that eventually developed into the New York Stock Exchange. Several commentators have noted that this agreement, which survived largely intact until 1975, functioned very much like a naked price-fixing agreement, providing explicitly for minimum commissions and preference to NYSE members in all transactions. Any doubt about the compatibility of NYSE minimum commissions with the antitrust laws was laid to rest by the passage of the Securities Act of 1933, the Securities Exchange Act of 1934, and the creation of the SEC shortly after the stock market crash of 1929. Through these acts, Congress placed supervision of the NYSE and other self-regulatory organizations (SROs) in the hands of the SEC. Within the decade, Congress had provided for creation of the National Association of Securities Dealers (NASD) to conduct over-the-counter (OTC) trading. The SEC came to supervise the NASD and the OTC dealer market just as it had supervised other SROs. By the end of the decade, Congress had passed the Investment Advisors Act of 1940 and the Investment Company Act of 1940 to regulate professional portfolio management.

Throughout the early history of the industry, most securities were held and traded by private investors through individual brokerage-house accounts. With

22. It was not until the eve of deregulation that the U.S. Supreme Court finally ruled that fixed commissions were immune from the antitrust laws. Gordon v. New York Stock Exch., 422 U.S. 659 (1975).
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passage of the Investment Company Act, securities ownership by “open-end” investment companies, generally known simply as “mutual funds,” grew considerably.26 Between 1940 and 1975, open-end funds grew in total dollar value from approximately $448 million to approximately $49 billion.27 Pension funds experienced similar growth, increasing in total dollar value from approximately $18 billion in 1950 to nearly $400 billion in 1975.28 Moreover, the share of outstanding U.S. corporate common stock held by these institutions increased from about 23% in 1955 to over 33% in 1980.29 No doubt the growth of institutional ownership was made possible, in part, by emerging opportunities in investment research brought on by the ever accelerating “electronics revolution.”30 Possibly due to scale economies in trading, institutional portfolio managers tended to trade in relatively large blocks, for which per share execution costs are believed to have been substantially lower than average.31 By the late 1960s, large block trading by investment institutions began to transform the industry. As Greg A. Jarrell notes, “[B]efore 1960, less than 2% of NYSE volume resulted from block trades (transactions involving more than 10,000 shares). By 1980 block trading accounted for about 27% of NYSE share volume.”32

The trend toward institutional ownership was instrumental in the deregulation of fixed commissions. As institutional managers became less dependent on Wall Street’s full-service firms for in-house investment research, brokers increasingly turned to alternative nonprice competition as a response to fixed minimum commissions. Indeed, in the fifteen years preceding deregulation, nonprice competition by NYSE brokers in the form of “give-ups” and “reciprocals” (including various types of research rebate) proliferated. This activity accounted for roughly “60 percent of commissions on institutional-sized orders.”33 In addition, many institutions simply bypassed the NYSE altogether, either by trading NYSE-listed securities on various regional exchanges through

26. Open-end funds stand ready at all times to redeem their shares at net asset value, a value calculated according to generally accepted accounting principles, and they are free to create an unlimited number of shares.
27. WIESEMBERGER INVESTMENT COMPANIES SERVICE, INVESTMENT COMPANIES 12 (1988) (hereinafter WIESEMBERGER (1988)). In most cases, mutual funds belong to a complex of funds operating under a central investment advisor, which is often a publicly traded corporation. Unless otherwise indicated, this Article ignores the distinction between the fund advisor and the fund manager and between the fund complex and the individual fund.
29. Id. at Table 9.
30. Macey & Haddock, supra note 19, at 319, 321.
32. Jarrell, supra note 2, at 277. Data on the volume of block trades underestimates the market effects of institutional trading because institutions often purposely accumulate or sell large blocks in piecemeal fashion.
33. Id. at 279 n.14.
what is known as the Third Market or by arranging direct trades with other institutions through proprietary trading systems on what is known as the Fourth Market.34

In 1968, at the behest of the SEC, the NYSE responded to the loss of trading volume by allowing a 7% discount "on orders exceeding 1000 shares."35 At the same time, however, the NYSE prohibited its members from providing give-ups or engaging in off-board trading in NYSE-listed stocks. The response by many mutual funds was to integrate vertically into brokerage by acquiring exchange memberships or member affiliates in an effort to capture the full benefits of block trading. The trend toward vertical integration further eroded the NYSE's grip on the industry and resulted in a series of SEC rulings prescribing negotiated commissions on the portion of an order above a set minimum dollar value. Over the years the SEC successively lowered this minimum until commissions were made entirely negotiable in May 1975 as part of the Securities Acts Amendments to the Securities Exchange Act of 1934.36 The result was a dramatic drop in the level of brokerage commissions and a surge in trading volume.37 While the unfixing of commissions slowed the trend toward vertical integration by institutions, this trend was further retarded by the inclusion of section 11(a) in the Securities Acts Amendments. Section 11(a) prohibits anyone who exercises "investment discretion" over a managed account from "effecting" trades on the NYSE or any other exchange.38

In addition to providing for negotiated commissions, the 1975 amendments also added section 28(e), the so-called "paying up" amendment, to the Exchange Act.39 Section 28(e) was designed to allay widespread concern by investment managers that their common law and statutory duties of best execution would limit them to paying only the lowest available commissions for

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34. Macey & Haddock, supra note 19, at 340; JENNINGS ET AL., supra note 31, at 559.
35. Jarrell, supra note 2, at 280-84.
37. Jarrell, supra note 2, at 280-84; JENNINGS ET AL., supra note 31, at 556.
portfolio brokerage regardless of execution quality or the value of any research services they received.\textsuperscript{40} Part (1) of section 28(e) provides, in relevant part:

No person [who exercises] investment discretion with respect to an account shall be deemed to have . . . breached a fiduciary duty . . . solely by reason of having caused the account to pay a member of an exchange, broker, or dealer an amount of commission . . . in excess of the amount of commission another member of an exchange . . . would have charged . . . if such person determined in good faith that [it] was reasonable in relation to the value of the brokerage and research services provided . . . .\textsuperscript{41}

Although section 28(e) mandates fairly broad protection to fund managers in allocating brokerage, any formal contractual commitment to patronize a particular broker necessarily falls outside its safe harbor. Exclusive dealing contracts are surely prohibited; but even in the absence of a formal agreement, any fund manager found to have placed an excessive share of his trades with a single broker risks legal action by the SEC and fund shareholders.\textsuperscript{42} The exact scope of section 28(e) protection has evolved over the years with a number of SEC letter rulings, cases, and administrative releases. This evolution has had substantial influence on the current institutional structure of securities brokerage and investment management.

B. Current Institutional Structure

With deregulation, Wall Street suffered a sobering shake-out. Commissions declined considerably, from perhaps forty cents per share to between five and ten cents per share.\textsuperscript{43} NYSE seat prices declined in value by roughly 50\% in spite of a tremendous increase in trading volume.\textsuperscript{44} The brokerage industry experienced an alarming merger wave, although by any reasonable standard industrial concentration remains fairly low.\textsuperscript{45} The full-service houses began to diversify away from the “equity agency business”—the brokering of common stock.\textsuperscript{46} Among those hardest hit by deregulation were the medium-sized firms that had specialized in providing in-house research to institutional clients.\textsuperscript{47}

\begin{itemize}
\item \textsuperscript{40} Senate Comm. on Banking, Housing and Urban Affairs, Securities Acts Amendments of 1975, S. REP. No. 75, 94th Cong., 1st Sess. 69-71 (1975) [hereinafter Senate Report].
\item \textsuperscript{41} 15 U.S.C. § 78bb(e) (1988) (as amended).
\item \textsuperscript{42} For an example of how someone placed a disproportionate share of fund portfolio transactions with a single broker, see Investors Research Corporation, supra note 8.
\item \textsuperscript{43} Maher, supra note 2, at 19; see also Jarrell, supra note 2, at 277.
\item \textsuperscript{44} Jarrell, supra note 2, at 294-97.
\item \textsuperscript{45} Id. at 302-03.
\item \textsuperscript{46} Id. at 302.
\item \textsuperscript{47} Id. at 303.
\end{itemize}
As Jarrell observes, "the reduction in the demand for [in-house] research services that accompanied deregulation caused the demise of these research firms." Leading the move toward lower commissions was a proliferation of no-frills discount brokers, who provide little or no research with their executions. Over the next few years, discount brokers' market share increased from less than 0.5% to roughly 6%. Additionally, protected from fiduciary suits by section 28(e)'s safe harbor, mutual and pension fund managers began to use soft dollar brokerage to acquire third-party research on a significant scale.

In contrast to the brokerage industry, the investment management industry flourished following deregulation. Total pension fund assets rose to nearly $2.5 trillion by 1990, while total investment company assets grew to more than $1 trillion. Institutional holdings of corporate common stock surpassed 50%. The decline in commissions not only brought a predictable increase in trading volume and asset holdings by institutional investors, it also triggered a dramatic rise in portfolio turnover, which more than tripled between 1975 and 1984.

The available evidence indicates that with higher turnover came further growth in soft dollar use. Several commentators have estimated that by 1990 between 30% and 50% of all trades on the NYSE involved the provision of third-party research pursuant to some form of soft dollar arrangement, with 1989 annual soft dollar brokerage commissions thought to be in excess of $1 billion. The steady rise in soft dollar use and the associated decline in commissions were correlated with an increase in the ratio of research to brokerage included in soft dollar commissions.

One of the SEC's first post-deregulation rulings under section 28(e) was a 1976 interpretive release finding that the safe harbor does not apply to research products that are "readily and customarily available... to the general public on a commercial basis." Although the SEC has since amended this

48. Id.
49. JENNINGS ET AL., supra note 31, at 560 n.17; see also Jarrell, supra note 2, at 311.
50. According to § 28(e)(1), the safe harbor is exclusive and plenary, overriding state common law and state and federal statutory law as it existed at the time of § 28(e)'s passage. SENATE REPORT, supra note 40, at 70.
51. Data for pension funds are taken from Brancato & Gaughan, supra note 28, at Table 8, while data for investment companies are taken from WIESENBERGER INVESTMENT COMPANIES SERVICE, INVESTMENT COMPANIES 12 (1992).
52. Brancato & Gaughan, supra note 28, at Table 21.
53. Berkowitz & Logue, supra note 8, at 40.
55. Jeffrey M. Laderman & Tim Smart, Wall Street Falls in Love with 'Soft Dollars', BUS. WK., Apr. 24, 1989, at 127; see also Maher, supra note 2, at 20; Rohrer, supra note 12, at 51.
56. Ratios as high as one dollar of research for every $1.20 in commissions have recently been reported. Maher, supra note 2, at 20.
interpretation, for many years the ruling prohibited managers from receiving basic research tools such as Quotron machines, computer hardware, some forms of computer software and databases, and other items necessary for effective portfolio management. By its terms, the interpretation would appear to have excluded most generic research products sold in the market by third-party research generators.

The SEC's next important ruling considered section 28(e)'s limitation to those who exercise "investment discretion" on behalf of a managed account. In Foley & Lardner,58 the SEC staff ruled that a corporate pension plan sponsor (the corporation itself) receives no safe harbor protection when it directs its investment managers to send portfolio brokerage to a specific soft dollar broker in exchange for research services to be received by the plan sponsor. The SEC reached this decision because the plan sponsor was found to have exercised no investment discretion over pension assets.59

Shortly after this decision, the SEC clarified the meaning of the phrase "provides research and brokerage" in section 28(e), settling lingering uncertainty over whether the broker must produce the research in-house. According to the SEC, it is necessary only that the broker retain the "legal obligation to a third-party producer to pay for the research (regardless of whether the research is then sent directly to the broker's fiduciary customer by the third party or instead is sent to the broker who then sends it to its customer)."60

It was not until 1986 that the SEC amended its "readily and customarily available" standard for the eligibility of safe harbor research. In response to the "changing array of research products and the impact of new technology on brokerage practices," the SEC relaxed the definition of research to include anything that "provides lawful and appropriate assistance to the money manager in the performance of his investment decision-making responsibilities."61 This ruling clearly allowed generic research products to be included in the safe

59. 15 U.S.C. § 78c(a)(35) (1988). This section defines the term "investment discretion" as it is used throughout the Act. Subsection (c) specifically allows the SEC to extend the operation of the section to anyone who exercises sufficient influence over a managed account. Since the plan sponsor is responsible for monitoring its investment managers, and since it retains the right to terminate them for poor performance, including the plan sponsor in safe harbor protection would seem like a reasonable interpretation. This view is especially compelling where the research services sought by the plan sponsor consisted of software designed to allow the sponsor to monitor the investment performance of its managers.
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harbor and was followed by considerable expansion in soft dollar brokerage and third-party research, largely at the expense of the full-service houses.\textsuperscript{62}

The most significant recent SEC decision under section 28(e)'s safe harbor was a 1990 letter ruling in response to an inquiry from the Department of Labor (DOL).\textsuperscript{63} Before taking enforcement action in several pending cases under the Employee Retirement Income Security Act (ERISA),\textsuperscript{64} the DOL requested the SEC's opinion on whether the safe harbor applies to OTC stocks and fixed income securities, which are traded primarily by dealers on a principal basis. By its text, section 28(e) covers trades sent by the manager to a "broker or dealer," but in reference to the trader's compensation it mentions only "commission[s]," not mark-ups or mark-downs. In the narrow sense of the term, only brokers earn commissions, while dealers, as principals, earn mark-ups and mark-downs. Since Congress passed section 28(e) to mitigate problems due specifically to the unfixing of commissions, the SEC found that the safe harbor does not apply to dealer transactions. This decision brought the burgeoning use of soft dollars in fixed income and OTC equity transactions to a grinding halt.\textsuperscript{65}

These rulings under section 28(e) define a limited refuge for those interested in using soft dollars to bundle brokerage and third-party research together into a single commission. Prior to deregulation, this kind of bundling was a predictable response to fixed minimum commissions. The question is then: "Why bundle? Why not price and transact brokerage and research separately?" As then Commissioner Joseph Grundfest asked during a 1989 SEC Roundtable discussion on soft dollars, "Why is it that in this situation, the folding green stuff most of us are familiar with appears not to work?"\textsuperscript{66}

C. Agency Costs

The widespread criticism of soft dollars relies implicitly on what the law and economics and finance literatures describe as an agency cost problem. The problem arises because an agent, such as a mutual or pension fund manager, has only a partial stake in the profitability of the principal's enterprise, while the costs to the principal of monitoring the agent's activity are high, or even prohibitive. As a result, the agent may shirk or consume too many of the principal's resources in the form of perquisites, and the parties' joint wealth will fall short of what it would be otherwise.

\textsuperscript{62} See Memorandum from the Division of Market Regulation to the Securities Exchange Commission C3, C9-10 (June 6, 1990) (on file with author) [hereinafter SEC Action Memorandum].
\textsuperscript{63} See Ketchum letter, supra note 8.
\textsuperscript{65} Philip Maher, Principal Soft Dollar Trades in Disarray after SEC Ruling, 56 Investment Dealers' Dig., May 6, 1990, at 7.
\textsuperscript{66} Maher, supra note 2, at 21; SEC Action Memorandum, supra note 62, at C5.
As with all agency arrangements, agency costs limit the advantages of professional portfolio management and reduce the wealth of fund beneficiaries. Whenever agency costs exist, however, the parties can increase their joint wealth by structuring their relationship more efficiently. Excessive or careless trading by a fund manager surely constitutes one source of agency costs, but there are other sources as well. Virtually all agency arrangements create value on a variety of interrelated dimensions; price, quality, and timeliness are just a few of the dimensions that are normally subject to an agent’s discretion. An agent who pays a higher-than-average price on behalf of his principal may also receive higher quality or more timely performance. Conduct that appears to be a source of agency costs when evaluated on one dimension might actually reduce aggregate agency costs when its effects are summed across all dimensions. Indeed, I argue that soft dollars constitute just such a solution to the agency problem in professional portfolio management. Accordingly, further regulation is likely to injure fund beneficiaries rather than help them.

Most managers’ compensation is based on a percentage of the net market value of their portfolio—normally between 20 and 200 basis points. Thus, even the highest-paid fund managers receive just a small share of any wealth increase they generate for the fund. If they were required to pay the entire research bill out of their own pocket they would have too little incentive to do well-researched trades. This problem constitutes a second source of agency costs. One way for fund beneficiaries to reduce the attendant losses is to subsidize the manager’s use of research. By bundling the costs of research and execution into a single trading commission paid by fund beneficiaries, soft dollars may provide the ideal solution. They not only increase the manager’s incentive to trade, but they also provide him with the research necessary to identify profitable trades.

Of course, profitable trading requires that the manager monitor his brokers—who are also agents of fund beneficiaries—to ensure that they provide the best execution possible and that their search activity has a minimum adverse impact on the price of the security. But execution quality, and especially “price impact,” are notoriously difficult to assess in the short run. An inept, indolent, or opportunistic broker could cheat the manager (and fund beneficiaries) by doing a shoddy job of execution, thereby saving the added costs of properly working the trade. This monitoring problem is a third source of agency costs. Again, soft dollars may provide the ideal solution. Having already received research at the soft dollar broker’s expense, the commissions a manager “owes” the broker bond the quality of the broker’s executions. Since the manager’s promise to use the broker’s services is legally unenforceable, the broker risks being terminated with his account balance unpaid if he cheats the manager. Rather than diluting execution quality, soft dollars may therefore guarantee it, much to the advantage of fund beneficiaries.
II. The Unjust Enrichment Hypothesis

The unjust enrichment hypothesis is based on the normative assertion that the fund manager should bear all of the costs of investment research out of his own pocket, paying for it in cash. The assumption is that the manager’s advisory fee provides him with full compensation for the costs of investment research. His ability to use soft dollars covertly to transfer these costs to the fund therefore compromises his duty of loyalty to fund beneficiaries. Proponents of the unjust enrichment hypothesis claim that a fund manager faces a conflict of interest when he uses soft dollars to pay for investment research. The conflict can manifest itself in a number of different ways. First, the manager might treat the research products purchased with soft dollars as a free good and overuse them. Second, the manager might churn the account or agree to excessively high brokerage commissions to pay the research bill he instead should have paid out of his own pocket. Finally, the manager might direct trades to soft dollar brokers to whom he is indebted for research, even though these brokers may provide poor execution quality.

There is a general consensus among financial market commentators that many of the research products managers receive through soft dollar arrangements are virtually worthless. This is the view expressed by Dennis Logue, who, in discussing transaction costs as a pressing issue in pension fund management, observes that:

[Soft dollars] make buying a lot of wild and useless analysis very nearly painless, because the true value of the service is masked. Given that the commissions are going to be generated anyway, the purchaser may treat what is purchased as essentially free, so that the product or service does not pass a cost-benefit standard on its own.

Logue emphasizes that “commissions are only one part of transaction costs.” “Market impact costs,” he correctly points out, must also be included in the calculus. The failure of a pension plan sponsor or fund manager to account for these costs can have a substantial effect on total transaction costs and ultimately on fund performance. According to Logue:

The costs of extremely poor trade executions can far exceed the cash value of the research service. Thus in many instances it is likely true that paying cash for what is truly needed and systematically selecting

68. LOGUE, supra note 8, at 270.
69. Id.
the broker likely to produce the lowest total transaction cost may be far less costly than the soft-dollar arrangements that may push a sponsor [or manager] to deal with a brokerage firm which has very high market impact costs.\textsuperscript{70}

Others would no doubt take issue with Logue's assumption that "the commissions are going to be generated anyway." A number of commentators have insisted that soft dollars give the manager an incentive to churn the portfolio to generate additional brokerage commissions and the soft dollar rebates that go with them. According to Robert Pozen, writing shortly after the deregulation of brokerage commissions, "money managers have an incentive to make an excessive number of trades for their clients' accounts under soft dollar payments... [and to] maximize the flow of securities research at their clients' expense."\textsuperscript{71} More recently, Lee Burgunder and Karl Hartmann have described the churning problem in cost-benefit terms:

In an environment without section 28(e), research would be purchased until the last hard dollar spent for the research equalled the value of that research to the clients. Any additional research would benefit the clients less than its cost, and thus would be an unreasonable expenditure. Thus, if one argues that managers are more willing to buy additional research with soft dollars than they would using hard dollars, then one admits that the purchases are unreasonable in relation to their cost.\textsuperscript{72}

Consistent with the widespread consensus among financial market commentators, the SEC seems to have settled on the belief that soft dollars create real conflicts of interest, tempting managers to churn their portfolios to pay their research bills, thus enriching themselves at the expense of fund beneficiaries. A clear statement by the SEC on this issue is found in Fund Monitoring Services, Inc. (FMS),\textsuperscript{73} another SEC letter ruling. Fund Monitoring Services, Inc. was a third-party research originator that had developed a service to evaluate the investment performance of individual fund managers. FMS set up soft dollar accounts for pension plan sponsors and the advisors of fund complexes to provide them with this evaluation service. The agreement required that each fund manager direct a minimum amount of commission business over the course of the accounting year to any of the brokers on the FMS approved

\textsuperscript{70. Id. at 271.}
\textsuperscript{71. Pozen, supra note 8, at 956.}
\textsuperscript{72. Burgunder & Hartmann, supra note 8, at 176. Others note an additional reason why soft dollars have led to churning in the years following deregulation: "As commission rates fall, more and more volume must be done to reach the designated dollar amount." Berkowitz & Logue, supra note 8, at 44.}
\textsuperscript{73. Fund Monitoring Services, supra note 8.}
The managers were free to negotiate commissions with the chosen broker, who would provide brokerage services and in turn negotiate with FMS over the percentage of the commission FMS was to receive in cash. Any manager who failed to do sufficient business with the designated brokers would be required to make up the difference through a lump sum cash payment directly to FMS. The FMS arrangement, therefore, placed a floor on some combination of research and portfolio trading by the managers. According to the SEC, the arrangement appeared to create a conflict of interest, because it could provide an improper inducement to excessive trading by a money manager and could improperly influence the amount of commissions paid on behalf of the managed account. In spite of the purpose of the research—to identify the kind of substandard portfolio performance that could result from excessive trading by fund managers—the SEC found the arrangement outside the section 28(e) safe harbor.

Elsewhere, in discussing the protections afforded by section 28(e), the SEC has emphasized a manager’s common law and statutory fiduciary duty to “exercise the utmost care to avoid improperly enriching himself at the expense of his client.”

Although the unjust enrichment hypothesis is based on the normative assertion that fund managers, rather than shareholders, should pay for investment research, it can also be formulated as a positive hypothesis based on agency costs. Agency costs are likely to arise whenever a principal delegates discretion to an agent. According to Jensen and Meckling, authors of the seminal article on the subject, agency costs consist of monitoring costs by the principal, bonding costs by the agent, and residual loss:

The principal can limit divergence from his interest by establishing appropriate incentives for the agent and by incurring monitoring costs designed to limit the aberrant activities of the agent. In addition, in some situations it will pay the agent to expend resources (bonding costs) to guarantee that he will not take certain actions which would harm the principal or to ensure that the principal will be compensated if he does take such actions. However, it is generally impossible for the principal or the agent at zero cost to ensure that the agent will make optimal decisions from the principal’s viewpoint. In most agency relationships the principal and the agent will incur positive monitoring and bonding costs (non-pecuniary as well as pecuniary), and in addition there will be some divergence between the agent’s decisions and those decisions which would maximize the welfare of the principal. The dollar equivalent of the reduction in welfare experi-

74. The staff of the SEC reiterated its concern over churning in its July 1990 letter ruling to the Department of Labor. Ketchum letter, supra note 8.
75. Investment Information Inc., supra note 8, at 83,009.
enced by the principal due to this divergence is also a cost of the agency relationship, and we refer to this latter cost as the "residual loss."\(^{76}\)

Due to the agency costs of institutional management, it is possible that managers will overuse research, pay excessively high commissions, or churn their portfolios to pay the research bill that they would otherwise have to pay out of their own pocket. Jensen and Meckling place a manager's consumption of fund assets in this fashion in the general category of perquisites.\(^{77}\) Because monitoring and bonding are costly, past some point it will not be in the interest of beneficiaries to spend an additional dollar on monitoring and bonding to save ninety cents worth of perquisites. Fund managers, however, will not earn a windfall. Knowing they will be able to consume perquisites on the job in the form of free investment research, they will compete for coveted positions by offering to work for a lower management fee than they would accept otherwise. Labor market competition will bid down the management advisory fee until managers' total compensation, including the value of any perquisites they consume, provides them with only a competitive wage. Due to this competition, there will be no unjust enrichment over the long run. Nevertheless, it would be a mistake to conclude out-of-hand that managers should be left unconstrained in their use of investment research. Indeed, an important function of law is to eliminate destructive forms of competition, which necessarily reduce social wealth.\(^{78}\) The imposition of a fiduciary duty on agents is a relevant case in point. It would be ill-advised, however, to further restrict or even eliminate the section 28(e) safe harbor, as many observers suggest, without considering other sources of transaction and agency costs and alternative hypotheses that explicitly take them into account. This is because behavior that increases the agency problem on one dimension might actually reduce aggregate agency costs across all dimensions. If so, further analysis is warranted to determine the likely effects of proposed regulations.

III. The Incentive Alignment Hypothesis

To understand how soft dollars might reduce aggregate agency costs, it is important to address the issue of property rights to investment research. Many commentators have criticized the old fixed commission system from a normative position, arguing that the NYSE was nothing more than an exclusive club whose primary functions were to exclude outsiders and to perpetuate the

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\(^{77}\) *Id.* at 313.

\(^{78}\) See, e.g., D. Bruce Johnsen, *Wealth is Value*, 15 J. LEGAL STUD. 263 (1986).
spoils of government protection on behalf of its members. My position is largely positive—to understand how the system enforced property rights to investment research and to determine how this bears on the incentive alignment hypothesis.

A. Property Rights to Investment Research

Under the old system, full-service brokers produced investment research in-house and bundled their research conclusions together with brokerage services, charging a single commission to cover the costs of both functions. Since good research conclusions have always been scarce, brokers with a large group of clients had to determine how to allocate this research. It is common knowledge that under the old system—and to some extent under the new system—full-service brokers discriminated in favor of preferred clients, calling them first with news of the most recent trading opportunities. Although some clients were favored over others, those clients had to pay more to gain favor. The inevitable favoritism of individual brokerage-house accounts led clients to compete to be favored in the allocation process. With regulatory restrictions on competition between brokers, we would expect clients to have entirely dissipated any surplus value they stood to receive. Few individual clients had the bargaining power to command above-normal returns, and the transaction costs of forming bargaining coalitions were prohibitive.

Aside from favoritism, the property rights problem has at least two additional manifestations. The first, a measurement problem, arises due to the high

80. According to one journalist:

In the old days, Wall Street research was a more exclusive affair, and institutions had a greater need to keep close trading ties with brokers to stay informed. Whenever a broker unearthed a new investment insight, it was the customers who generated the most commission revenue who were assured of the “first call.”

Today, with instantaneous communications, computerized information services and automated trading systems, research doesn’t stay proprietary for very long. That means not only that it’s harder and more expensive to stay ahead in the Wall Street research game, but also that the resulting product tends to be a more perishable, less lucrative commodity.


The obvious criterion for discriminating between clients would have been to favor those who generated the most commission business. A more subtle criterion would have been to favor those who provided bits of information in the investment research process. Allowing these clients to participate in the resulting trades was probably an extremely efficient way of compensating them because it tied their reward to the ultimate value of the information inputs they provided.
cost to investors of assessing the value of investment research conclusions.\textsuperscript{82} The problem with trading this kind of information in a non-recurring market setting is that the buyer can never know with certainty whether the trading opportunity has any value, and it is extremely difficult for the seller to provide a guarantee. To verify the value of the research, the buyer would have to devote considerable time and attention to measuring its value, and in the limiting case would have to completely reproduce it, thus eliminating any gains from specialization. The measurement problem makes it all but impossible to transact a good such as conclusory investment research in a non-recurrent market setting.

The second problem is leakage. Once an investor acquires superior information, he wants to achieve anonymity in a trading environment filled with potential interlopers eager to mimic his trades.\textsuperscript{83} In the extreme case, the broker himself may frontrun the trade or purposely tip his associates.\textsuperscript{84} In the less extreme case, the interloper might be an astute and watchful market participant who is capable of taking advantage of the slightest sign of carelessness by the broker. Either way, the manager stands to lose some of the value of his investment research.

The old fixed commission system overcame these property rights problems by using extra-legal sanctions against interlopers. Club members, the full-service brokerage firms and their preferred clients, invested heavily in their business reputations and dealt repeatedly with other club members. Anyone caught interloping, leaking information, or selling worthless investment research risked being ostracized and faced losing the stream of benefits that otherwise would have accrued to continued membership and a long course of dealing. The old system was probably efficient at establishing property rights to investment research when compared to alternative systems.

Deregulation changed all that. The rise of investment companies and other professionally-managed portfolios in the 1950s and 1960s, and the advent of financial market deregulation changed these ways of doing business. In contrast to individual brokerage-house accounts, mutual funds have the remarkable

\textsuperscript{84} Frontrunning occurs when the broker takes a forward position in the security or its derivative products in anticipation of a price change that he knows will be caused by his client's impending trade. Frontrunning allows the broker to capture a portion of his client's return and substantially increases the price impact of the trade. See, e.g., Lee A. Pickard & Judith W. Axe, \textit{Frontrunning: Regulatory Developments}, in \textit{TRADING PRACTICES}, supra note 38, at 21. This is not to say that all frontrunning is dishonest. In some cases, for example, a notoriously well-informed trader might have a completely uninformed trade to make that is certain not to cause any permanent price adjustment. If he knows that others are likely to mimic the trade he will also know that the price will temporarily adjust, followed by price reversion once the market discovers that he had no private information. This presents him with the opportunity to get even with the interlopers by authorizing a broker to frontrun the trade, first as the price adjusts in one direction and then as it reverts. In this way, the client may not only succeed in transferring wealth from the interlopers, but he will also deter them from future misconduct, thereby reducing price impact on his future trades.
advantage of averting the competition between clients to gain the favor of the investment researcher, in this case the fund manager. This advantage arises because fund beneficiaries have a common claim to an undivided pool of assets. There is virtually no way an investment manager can favor one investor over another in a given fund.\textsuperscript{85} As a result there is no reason for investors to engage in costly competition.

The transaction-cost advantages that institutional managers enjoyed over small private investors gave them a distinct advantage in bargaining with full-service brokers for give-ups, reciprocals, and other non-price concessions. Over time, institutional managers became less dependent on full-service brokers for in-house investment research. This independence allowed them to take advantage of low-cost, off-board trading on the regional exchanges and to capture the benefits of exchange membership. Additionally, the "electronics revolution" changed the fundamental character of investment research and accelerated the decline of full-service brokerage.\textsuperscript{86} Under the old system, investment research tended to be in the nature of an output; that is, conclusions concerning profitable trading opportunities, which were virtually impossible to transact separately in the market because of the problems involved in measuring their value and preventing leakage. Instead, information was assembled from private sources (club members) with the help of a relatively small number of well-heeled participants. Following deregulation, the investment research traded in the market has tended to be in the nature of inputs, such as computer software, hardware, and third-party research reports. Investment managers can assemble these in order to arrive at their own conclusions about profitable

\textsuperscript{85} In some cases, a single pension manager operates multiple pension funds, and the problem of favoritism moves to a new level. In some of these cases, however, each fund has a pro rata claim to an undivided pool of assets. Also, the central advisor of a mutual fund complex operates a number of individual, legally separate funds and is in a position to favor one fund over the others. This problem is mitigated in some fund complexes by rules allowing shareholders to convert freely between the various funds within the complex. Finally, to the extent investment managers continue to rely on full-service brokers for some amount of in-house investment research, the favoritism problem still exists. The legislative history of § 28(e) indicates that safe harbor protection "does not require that the value of research and brokerage services be imputed to any specific account."\textsuperscript{SENATE REPORT, supra note 40, at 70 (emphasis added).}

\textsuperscript{86} The general consensus among commentators is that the electronics revolution and the "information age" ushered in increased specialization and an inevitable dispersion of the information gathering function. See, e.g., Macey & Haddock, supra note 19, at 319-21; Henry R. Minnerop & Hans R. Stoll, Technological Change in the Back Office: Implications for Structure and Regulation of the Securities Industry, in TECHNOLOGY AND THE REGULATION OF FINANCIAL MARKETS 31 (Anthony Saunders & Lawrence J. White eds., 1988). The conclusion may therefore be inescapable that the electronics revolution was the driving force behind deregulation, whereas Jarrell identifies the rise of the regional exchanges as the driving force. Jarrell, supra note 2, at 273, 289. Yet, during its first 150 years the NYSE had faced recurrent competition from new entrants. Even with fixed minimum commissions it apparently succeeded in offering a superior product. One therefore has to ask why it took over 150 years for entry by competing exchanges to erode the NYSE's cartel. My belief is that the superior product was investment research and that only with the electronics revolution did viable alternatives to in-house research by full-service brokers appear. And only with the rise of professionally managed portfolios did efficient use of these alternatives begin to occur on a significant scale.
trading opportunities. The new system, information is often gathered from widely dispersed sources, at least some of which are public in nature.

The rise of professional portfolio management is a striking example of widespread vertical disintegration of the firm, with institutional managers taking on many of the investment research functions that had in the past been performed exclusively by full-service brokers. Eventually, the vertical disintegration of research and its reintegration into investment management tipped the balance of competing political interests in favor of deregulation. The new system that has evolved out of deregulation allows investors to avoid the favoritism and measurement problems of the old system, but it probably aggravates the leakage problem and adds the problem of agency costs in investment management.

B. Aligning Managers’ Incentives

The above discussion suggests that the transaction and agency costs associated with investment management arose as a direct result of changes in the structure of property rights to investment research. It is virtually impossible for fund beneficiaries to know the extent of agency costs at any given moment, or what the net returns from institutional investing are likely to be in the near future. Ambiguities exist, in part, because both mutual fund expenses and gross portfolio returns are subject to substantial noise; that is, they vary unsystematically in the short run. The agency costs of monitoring manager performance, although not infinite, are therefore substantial. In any event, agency problems under the current system notwithstanding, the large number of investors who favor professional portfolio management are at least as well off as they would be under the former system of fixed minimum commissions and individual brokerage-house accounts. Net returns under the former system served as a constraint on the level of agency costs in institutional portfolio management.

The unjust enrichment hypothesis demonstrates that one broad category of agency costs arises from an agent’s consumption of perquisites. But a second broad category of agency costs arises from what Jensen and Meckling call “shirking” by the agent. Where the agent bears some of the input costs of the performance of a given activity, he will tend to do less than the principal would prefer. As with perquisites, monitoring by the principal and bonding by the agent will give the agent an incentive to perform the expected activity. However, some shirking will still take place, and some residual loss will persist.

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87. According to one commentator, “Many of the services provided by third-party brokers have been created in response to the technological changes that have shaken the investment world in recent years. They represent a dazzling array of computer-based services that have not, in large part, been available from the traditional full-service Wall Street firms.” Julie Rohrer, Soft Dollars: The Boom in Third-Party Research, INSTITUTIONAL INVESTOR, Apr. 1984, at 73, 75 [hereinafter Soft Dollar Boom].

88. Jensen & Meckling, supra note 76, at 309.
It is critical to understand that this residual loss provides the parties with an ever-present opportunity to increase their joint wealth by developing further solutions to the shirking problem. One obvious method to reduce shirking that is popular in other agency settings is for the principal to compensate the agent based on performance rather than by an hourly wage or a monthly salary. With performance-based compensation, the agent’s wealth rises and falls with the principal’s wealth. A less obvious way to deter shirking is to subsidize the agent’s inputs.

Fund beneficiaries hire managers to identify and implement profitable portfolio trades; that is, trades that increase fund wealth. Management inputs consist of investment research, brokerage executions, and the manager’s labor effort. All else being equal, the more inputs of given quality the manager devotes to the fund over the relevant range, the greater fund wealth will be. But this process is subject to the economic law of diminishing marginal returns; additional inputs yield successively smaller wealth increments. Just as the marginal wealth increment declines, the marginal opportunity cost rises as more and more inputs are invested in the fund. This situation is illustrated with a simple diagram in Figure 1, where the MW curve represents the marginal wealth increment from additional management inputs, I, and the MC curve represents the marginal cost. Under these circumstances, the optimal level of inputs to the fund is equal to I*, the point where the MC curve intersects the MW curve. Any deviation from I* by the agent will reduce fund performance and the parties’ joint wealth.

The shirking problem can be analyzed by considering how fund managers are compensated and the extent to which they bear the costs of management inputs. Most funds pay their managers a share of average fund net assets, or “net asset value,” with the sharing percentage typically in the range of fifty basis points (one-half of a percentage point). Designating the manager’s share of portfolio wealth increments as α, the curve αMW represents the marginal wealth increment received by the manager from devoting additional inputs to the fund.

Of course there are an infinite number of potential marginal cost curves. MC represents the lowest marginal cost attainable in a competitive environment. It thus assumes that investment research, portfolio executions, and manager labor effort are being contributed in the optimal combination for any given value of I.

In most cases, α will exceed the manager’s sharing percentage. Assuming a fifty basis point advisory fee, if the manager generates an increase in fund wealth of $100 in year one, his share is fifty cents. If this wealth increase persists (the securities hold their value) the manager will receive an additional fifty cents in year two, and so on. In the limiting case where the wealth increase is permanent, the manager is expected to live forever and holds his position indefinitely, his marginal wealth gain will equal the discounted present value of a fifty-cent perpetuity. At an interest rate of 10%, this perpetuity will be worth $5, or 5% of net asset value. This observation casts serious doubt on the widespread belief that the conventional management fee structure leads fund managers to focus solely on short-run performance. Compared to, for example, a one-time 5% share of any wealth increase the manager generates in a given year, the
contract to bear all the costs of management inputs, he will tend to shirk by
devoting too few inputs to the fund. Rather than $I^*$, he will choose $I_0$ inputs,
where the $\alpha$MW curve intersects the MC curve.

Note that at $I_0$ the marginal wealth increment to the fund from additional
management inputs is substantially greater than the marginal input cost. This
difference, summed from $I_0$ to $I^*$, illustrates the loss in wealth that fund benefi-
ciaries experience due to shirking by the manager and also represents the
parties' potential wealth gain from developing further solutions to the shirking
problem. One response is for fund beneficiaries to take an active role in
monitoring the manager. However, this monitoring is next to impossible in
many funds, and few fund beneficiaries show any inclination to do it. Fortu-
nately there are other solutions to the shirking problem. The most obvious, and
the one that occurs to some extent in many agency settings, is for the fund to
bear the cost of those inputs specifically devoted to enhancing fund wealth.
Since the manager shares $\alpha$ of both fund expenses and fund wealth, he bears
some of the costs and benefits of the subsidy. The ideal subsidy is that which
gives him an equal share of all the costs and benefits of operating the fund
because this would naturally lead him to choose $I^*$ inputs. This would be
impossible, however, because to subsidize the manager's labor effort the fund
would have to pay him an hourly wage in place of, or in addition to, a share
of fund wealth.

It is no accident that as a matter of long-standing convention most funds
bear the cost of portfolio executions. MC$_0$ represents the manager's marginal
input cost when the fund bears the cost of pure portfolio executions, exclusive
of any research costs. The effect of this subsidy on the manager's choice of
inputs is illustrated by the intersection of MC$_0$ and $\alpha$MW. Rather than choos-

smaller but recurring management fee provides him with a greater incentive to generate permanent, as
opposed to transitory, increases in fund wealth. So long as there is any possibility of early termination by
the manager, the longer payout on the recurring fee gives the manager a long-run stake in fund performance.

92. Once again, my emphasis is on understanding the parties' choice of organizational form, and not
on chastising fund managers for being indolent; my goal is to discern the methods used by the parties to
minimize the residual wealth loss that is due to agency costs. Most fund managers are no doubt sincere,
honest, hardworking people. Indeed, sincerity, honesty, and the work ethic go a long way in the real world
toward reducing agency costs, but, as with the other methods, they cannot be relied on to eliminate all
residual losses. If nothing else, fund managers face imperfect information about the preferences of fund
beneficiaries, and this alone will lead to some residual loss even for the most scrupulous managers.

93. To be exact, since MW reflects the net increment to fund wealth, when the fund begins bearing
the cost of portfolio executions the MW curve will shift down. By definition, however, the new MW curve
will intersect MC$_0$ at exactly $I^*$. The $\alpha$MW curve will also shift down, but only by $\alpha$ times the cost of
portfolio executions. Thus, as illustrated, $I_0$ will still fall to the right of $I_*$. This observation raises an
important point. Being paid a share of fund wealth, the manager is also a fund beneficiary; he enjoys a pro
rata share of fund benefits and bears a pro rata share of fund expenses. He is at least in some respects a
co-owner. In fact over the long-run the manager may receive virtually all the excess returns from fund
management. This windfall results because investors will compete to capture any excess returns. In an open-
end mutual fund, for example, shareholders will increase their contributions to the fund in anticipation of
any excess returns the manager is able repeatedly to produce. As fund assets expand, the manager's total
compensation and other expenses of management will also increase. The fund will continue to expand until
investors exhaust all excess returns. The empirical evidence showing that shareholders earn no risk-adjusted
ing $I_e$ the manager will have an incentive to choose $I_e$ inputs, which is closer to $I^*$, and the residual loss due to shirking will be reduced but not eliminated.

This solution poses several problems. First, to the extent the manager can convert portfolio executions into personal wealth, he will have an incentive to do so, and we again encounter the perquisite problem. As in any agency setting, this occurs from time to time in investment management, but it does not appear to be a widespread problem. In any event, such conduct certainly falls outside the section 28(e) safe harbor and has little to do with the issues addressed in this Article. Second, to the extent the portfolio executions are a viable substitute for either investment research or the manager’s labor effort, the manager will have an incentive to use these inputs in a suboptimal combination. In managing the portfolio, he will tend to conserve on investment research and his own labor effort, treating portfolio executions as a free good in an attempt to gain an advantage. As a result, the MC curve will shift up. Though there is little evidence on the subject, it is difficult to imagine how uninformed and essentially random trading could possibly allow the manager to gain an advantage. Moreover, in the long-run, the manager’s fee will adjust to mitigate this effect. In any event, subsidizing portfolio executions is advantageous for fund beneficiaries so long as the new marginal cost curve, $MC_e$, lies below $MC$. Under such circumstances the total level of inputs chosen by the manager will be closer to $I^*$ and the associated wealth loss will be smaller.

So long as $I_e$ lies to the left of $I^*$, fund beneficiaries might be able to further reduce the shirking problem by subsidizing both portfolio executions and investment research. Assuming managers are unable to convert research into personal wealth at will, this response will be advantageous. One way for the fund to subsidize investment research is to allow managers to charge all research costs to the fund. In this case, the fund faces a far more extreme problem of preventing suboptimal substitution by the manager. The manager will tend to treat both brokerage and investment research as free goods and to overutilize them in order to conserve on his own labor effort. Unlike the situation in which the fund subsidizes only portfolio executions, it is fairly easy to imagine how the manager could gain by substituting unlimited research and portfolio executions for his own labor effort. To the extent that he can purchase

abnormal returns from mutual fund ownership is therefore unsurprising. See, e.g., Mutual Fund Performance, supra note 18. Although we cannot observe the costs of managers’ labor effort, these costs are no doubt substantial and once deducted from their fees will provide only a normal, risk-adjusted return over the long run.

94. See, e.g., Goodrich Securities, Inc., supra note 8.

95. Recall that the manager bears $\alpha$ of any expenses paid by the fund but 100% of his own expenses. All else equal, by substituting fund expenses for his own the manager will cause fund wealth to decline. His share will decline accordingly, but at the margin the decline will be smaller than the amount he saves by reducing his own expenses.
only nonconclusory research inputs with bundled brokerage, as appears to be the case for third-party research, he has little to gain from suboptimal substitution because he must also input his own labor effort to identify profitable portfolio trades. This scenario suggests that the research provided by full-service brokers, which has tended in the past to be conclusory in nature, may be an especially troublesome source of agency costs; the manager may substitute bundled brokerage for his own labor effort and may impose more of the costs of identifying profitable portfolio trades on the fund.

Another way for the fund to subsidize investment research would be to tie it together with portfolio executions, so that the manager could increase his use of one only by increasing his use of the other. Bundled brokerage—especially in the form of soft dollars, where the ratio of investment research costs to execution costs is fixed—achieves exactly this result. Even though the manager will still have an incentive to substitute bundled brokerage for his own labor effort—with a fixed ratio, he must use investment research and executions in equal proportions and cannot strategically substitute one for the other. With the fund bearing the costs of bundled brokerage, the manager will devote an even greater level of inputs to identifying profitable portfolio trades.96

According to accepted agency theory, fund managers have insufficient incentive to identify profitable portfolio trades. This section has shown how bundling might serve to reduce the shirking problem with respect to one dimension of investment management. By subsidizing both portfolio executions and investment research and by tying them together in a fixed ratio (at least for the case of soft dollars), bundling appears to align managers’ incentives with the interests of fund beneficiaries. Seen in this light, Burgunder and Hartmann’s assertion that managers who pay for research themselves would continue purchasing “until the last hard dollar spent for the research equalled the value of that research to the clients”97 is indefensible. So, too, is their conclusion that soft dollars necessarily lead managers to purchase too much research. The SEC’s concern in FMS, that the floor placed on some combination of research and brokerage by the managers “could provide an improper inducement to excessive trading,” is similarly misplaced.98 While it is true that the FMS arrangement may have led to increased trading by the managers, according to the incentive alignment hypothesis we cannot conclude that the increased trading was necessarily excessive. In fact, given that the FMS arrangement was administered by the central advisor of the fund complex, whose function was

96. If the manager can be constrained to using inputs of research, execution, and his own labor effort in exactly the proportions reflected by MC, he will choose fewer than \( I^* \) inputs because he bears 100% of the costs of his own labor effort but receives only \( \alpha \) of the benefits.
97. Burgunder & Hartmann, supra note 8, at 139.
98. Fund Monitoring Services, supra note 8, at 80,425.
to monitor the independent fund managers' performances, it seems extremely unlikely that the FMS arrangement would have led to excessive trading.

C. Aligning Brokers' Incentives

Portfolio brokerage constitutes another source of agency costs. Like the manager, the broker is an agent. Even if an individual client could capture all the benefits from monitoring, he would suffer a residual wealth loss because monitoring execution quality would remain costly and therefore subject to optimization rather than maximization. The broker might shirk by searching carelessly for better prices, inadvertently leaking the news of impending trades. He might also consume perquisites by front-running the client's trades or by purposely leaking the news to an associate. When the client is an investment manager, the agency problem is compounded because the manager receives only a fraction of the gains from monitoring the quality of the broker's executions. As with investment research, the manager will tend to do too little monitoring, and leakage and price impact are even more likely to occur. The available evidence indicates that price impact comprises a substantial portion of institutional trading costs and can have a substantial long-run effect on fund performance. As with investment research, one would therefore expect the parties—in this case the manager, brokers, and fund beneficiaries—to develop further solutions to align appropriately the agents' incentives.

Although there might be alternative explanations for price impact on institutional portfolio trades, evidence exists that it is partly caused by leakage. One well-known empirical study shows that certain fund managers routinely pay higher-than-average brokerage commissions and incur higher-than-average market impact costs on their trades. The simple inference from this observation is that some managers are lazy or incompetent. But, such a situation cannot persist indefinitely. A more plausible inference is that some managers are generally reputed to have superior information and frequently lose some of the information's value to interlopers through leakage. To minimize the problem,

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100. The broker is in the unenviable position that any additional price search, no matter how carefully performed, increases the likelihood that an interloper will be able to anticipate the impending trade.

101. See, e.g., Stephen A. Berkowitz et al., The Total Cost of Transactions on the NYSE, 43 J. Fin. 97, 98 (1988).

102. Id. The authors note the inconsistency of their data with the widespread expectation of a tradeoff between commission levels and market impact. They recognize that these variables might be simultaneously affected by other variables, such as trade difficulty. They attempt to control for trade difficulty, in part, by adjusting for trade size but find only mixed evidence of a tradeoff. While it is true that informed trades will tend to involve larger blocks of securities, not all large block trades result from superior information. Furthermore, there is a tendency to break informed trades into smaller blocks to avoid attracting attention. Presumably, this dilutes the measurable effects of adjusting for observed trade size as a proxy for trade difficulty.
they must pay their brokers a commission premium to execute their relatively
difficult trades, but at the margin they tolerate some amount of price impact,
just as the equi-marginal principle from economics would predict.\textsuperscript{103}

The widespread importance many brokers place on "order flow" also
indicates the prevalence of the leakage problem. Any broker who traded
exclusively on behalf of those with superior information would face the same
leakage problem as the traders he represented. No one would trade with him
except at a price that reflected his clients' superior information. This scenario
accounts for the willingness of many broker-dealers to pay a cash rebate for
retail order flow.\textsuperscript{104} Only by regularly performing a large number of routine,
uninformed trades can a broker hope to disguise his informed trades and
preserve his informed clients' anonymity.\textsuperscript{105}

The leakage problem also arises in a dealer setting, where managers often
choose to hire a broker to search for prices among various dealers. This of
interpositioning is often criticized because it requires the manager to pay two
intermediaries rather than one. The anonymity provided by the broker may well
pay the broker's commission, however, by reducing the price impact that would
otherwise arise due to leakage by the dealers, who have no direct fiduciary duty
to the manager.

The problem of price impact is often characterized as one of assuring "best
execution" by the broker. It arises because price impact is virtually impossible
to measure in the short run.\textsuperscript{106} How the parties overcome the problem can
be understood by reference to a well-known economic model concerned with
quality assurance.\textsuperscript{107} In this simplified model there are two otherwise similar
goods, one high quality, the other low quality. Consumers are willing to pay

\textsuperscript{103} The equi-marginal principle simply holds that a rational wealth maximizer will equalize net
benefits at the margin for all close substitutes.

\textsuperscript{104} See PAYMENT FOR ORDER FLOW COMMITTEE OF THE NATIONAL ASSOCIATION OF SECURITIES
DEALERS, INC., INDUCEMENTS FOR ORDER FLOW (1991). This scenario also accounts for the tendency of
fund managers to distribute their trades across a large number of different brokers. It also accounts for the
fact that brokerage and price impact costs tend to be lowest for the most actively-traded securities.

\textsuperscript{105} Indeed, there is some evidence to indicate that active brokers routinely have the lowest market

\textsuperscript{106} Berkowitz et al., supra note 101, at 98-101.

\textsuperscript{107} See, e.g., Benjamin Klein & Keith B. Leffler, The Role of Market Forces in Assuring Contractual
a higher price for the high quality good, and, of course, the high quality good is also more costly to produce. This model resolves the problem of consumers' inability to distinguish the high quality good from the low quality good prior to purchasing it (when pre-purchase inspection costs are fairly high and the good comprises a fairly small portion of the consumer's budget). Examples of such goods include fast-food, gasoline, over-the-counter medicines, and overnight motel lodging.\footnote{See \textit{Cartel Rents}, supra note 16, for an analysis of the quality assurance problem in gasoline markets under a refiners' cartel.}

In the absence of some method of assuring quality, consumers will be unwilling to pay a price above the producer's cost of providing the low quality good. Consequently, only the low quality good will be provided. The problem faced by a producer who wants to specialize in providing high quality goods is how to convince consumers that he will not cheat them by deceptively lowering quality. To guarantee against cheating, the producer might post a performance bond in the form of a large, sunk capital investment that is entirely specialized to the continued provision of the high quality good. Subject to this constraint, the form of the capital investment will be that which provides the highest possible value to consumers.\footnote{Generally, any brand name capital fits this requirement. Oftentimes a firm's brand name is closely connected with tangible capital, such as signs or globes bearing the firm's logo, that has virtually no value in any other use. McDonald's golden arches are the standard example.}

As long as the producer maintains quality, he earns a price premium above the short-run marginal cost of producing the high quality good. Due to competition, however, the premium need only be sufficient to provide a normal return on his sunk capital investment. For this solution to work, consumers' response to quality cheating by the producer must be rapid enough that the one-time gain from cheating is less than the long-term gain from maintaining quality.\footnote{This condition is met if the difference between the high quality price and the cost of producing the low quality product, multiplied by the number of sales the producer can make before consumers terminate purchases, is less than the discounted present value of the high quality price premium.}

If the producer cheats consumers, the deception would soon be discovered, news of it would spread, and consumers would eventually terminate their purchases of what the producer touts as the high quality good. Most importantly, the producer would lose the entire value of his sunk capital investment. The specialized, non-salvageable nature of the capital investment thus serves as a performance bond, signalling to consumers that the producer will not cheat them by deceptively lowering quality.

Institutional portfolio brokerage fits this model almost exactly. In terms of price impact, execution quality is impossible for the manager to assess prior to purchase, and even after-the-fact small deviations in quality are notoriously difficult to measure because of the inherent noisiness of securities prices. Only over the long course of a trading relationship can the manager realistically hope to make an accurate assessment. In the context of institutional portfolio broker-
age, the performance bond consists of the broker’s prepayment of the manager’s research bill. At least with soft dollar brokerage the broker pays the research bill up-front, debits the manager’s account, and hopes the manager provides him with the promised trades.\footnote{111} If the broker cheats by front-running or by providing low quality executions, he risks being terminated with his account balance unpaid.\footnote{112} The balance of the manager’s account serves to bond the quality of the broker’s performance. It is important to note that this bond is entirely sunk and therefore completely specialized to the continued provision of high quality executions. This result is due, in part, to the SEC’s ruling that the manager can be under no legal obligation to perform the promised trades without risking the loss of his section 28(e) protection.\footnote{113} Although stories of “welshing” by fund managers are uncommon, they have indeed appeared in the financial press from time to time,\footnote{114} and in one reported case a soft dollar broker became insolvent as a result.\footnote{115}

This view of bundling gives renewed meaning to the notion that managers “pay up” for investment research. When the trades are made, well after the research has been bought and paid for, the bundled brokerage commission substantially exceeds the broker’s short-run marginal execution cost for high quality executions. The difference is the quality assuring premium. Due to competition, this premium provides the broker with only a normal return on the investment he makes in supplying the manager with up-front research. Moreover, given the manager’s tendency to do too little investment research, bundling is the ideal form of bond for the fund.

Bundling not only provides the manager with the tools to identify profitable trades, but because it imposes a tie-in sale within the limits of continued patronage, it encourages him to do a minimum number of trades. In any given time period, any broker who cajoles a manager into doing unprofitable trades merely for the sake of generating brokerage commissions risks reducing the manager’s performance and losing his future patronage. Soft dollar brokers report that when a manager is unable to generate the promised trades, the broker will defer his trading obligations until the next accounting period, bearing the interest cost on the manager’s account receivables in the process. Thus, by providing up-front research, the soft dollar broker holds a long-term

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\footnote{111} I have been unable to determine the extent to which full-service brokers provide research up-front in the expectation of future commissions. In part, this is due to their relatively informal system of accounting for bundled research.

\footnote{112} One soft dollar broker recently confided to me that his current “account receivables” totaled roughly six million dollars. On Wall Street, where news travels notoriously fast and a person’s reputation is his stock in trade, a soft dollar broker who clearly cheats one client, say, by front-running, might well be terminated by a large number of his other clients. The deterrent effect of prospective termination on the diligence with which soft dollar brokers execute trades therefore appears substantial.

\footnote{113} Scope of § 28(e), supra note 61.

\footnote{114} Soft Dollar Boom, supra note 87, at 78.

\footnote{115} Maher, supra note 2, at 18.
stake in both the quality of his executions and his own research recommendations to the manager. Finally, by bonding the quality of the broker’s executions, up-front bundled research mitigates the negative effects of the manager’s tendency to devote too few resources to monitoring execution quality.

IV. Predictive Power and Policy Implications

This Article has developed an alternative hypothesis suggesting that soft dollar brokerage mitigates the agency problems associated with institutional portfolio management. Soft dollar brokerage aligns properly the incentives of fund managers, and therefore has played a critical role in the evolution of the securities firm. By any reasonable standard, this evolution has generated considerable benefits for all investors. This Part briefly traces the implications of the incentive alignment hypothesis. Section A examines its predictive power as a positive hypothesis, and section B examines its legal and regulatory policy implications as a normative hypothesis.

116. There are literally thousands of research products available to a manager. Prudently selecting between them could drain the manager’s time. Most managers provide their brokers with information about their trading strategies and the composition of their portfolio. Given that the broker has made it his business to know and understand the available research products, he is no doubt in a good position to understand the manager’s research needs and to recommend the appropriate research products, including the many new products that are introduced from time to time. This saves the manager from having to incur considerable search costs. The better the broker is at identifying appropriate research products, the more trading the manager will do and the more trades the manager is likely to place with the broker. See, e.g., Fred Williams, Soft Dollars Debated, PENSION & INVESTMENT AGE, Apr. 3, 1989, at 14.

117. Soft dollar brokerage appears to be a reasonable alternative to full-service brokerage for providing the benefits of bundling to investment managers and their funds. Ronald Coase’s work on the nature of the firm can be used to explain why soft dollars are useful to formally account for bundled research. Ronald H. Coase, The Nature of the Firm, 4 ECONOMICA 386 (1937). Coase proposed that the extent of the firm will be determined by an equality between the cost of performing transactions within the firm and the cost of performing transactions in the market between separate firms. An obvious implication of this hypothesis is that when the cost of using market exchange falls relative to the cost of performing transactions within the firm, the extent of the firm will shrink. Where two functions were previously performed by one firm, they will come to be performed by two firms instead. The deregulation of brokerage commissions reflected a fundamental change in the costs of market exchange, largely due to changes in technology that altered the optimal structure of property rights. By formally accounting for the costs of bundled research, soft dollar brokerage has played an important role in this process.

Full service brokers account rather informally for bundled research, with the broker’s research obligations only loosely tied to the trading commissions he expects from the manager. This method is perfectly reasonable, since over time the parties know whether their expectations are being met. With soft dollars, however, the broker’s research obligations are explicitly tied to the cash value of future trading commissions. By precisely metering them, soft dollars allow these obligations to be priced and delegated to others. With specialty research originators producing the manager’s research inputs, the soft dollar broker is free to specialize in performing better quality executions, while the manager specializes in transforming research inputs purchased with soft dollars into profitable investment decisions. Soft dollars therefore appear to be an innovative form of exchange lying somewhere between the firm and the market that reduces the costs of transacting and allows these functions to be specialized and performed by entirely separate firms. Given the intensely competitive nature of securities brokerage, investment research, and investment management, the benefits from specialization have no doubt been passed on to fund beneficiaries and other investors. It is important to note that none of the criticisms of soft dollars focus specifically on what is really novel about them, the formality with which they account for bundled research and the specialization of functions that results.
A. Predictive Power

Both the unjust enrichment hypothesis and the incentive alignment hypothesis give plausible answers to the question of bundling. Ultimately, the validity of either hypothesis can be determined only by examining the consistency of its empirical predictions with facts in the real world.\textsuperscript{118} It would be convenient if the effect of bundled research on fund performance could be directly measured. Unfortunately, such an undertaking appears futile. In the absence of an extremely large database, the inherent noisiness of fund performance and non-research expenses would undoubtedly overwhelm any attempt to find a statistically significant relationship between bundled research and fund performance. Instead, any empirical test must be aimed at how bundled research varies with other observable behavior. Both the unjust enrichment hypothesis and the incentive alignment hypothesis predict that bundling will lead managers to research and trade more than they would otherwise do. According to the unjust enrichment hypothesis, this increase necessarily injures fund beneficiaries; according to the incentive alignment hypothesis it will, within limits, enhance fund wealth. But even if some amount of bundling makes fund beneficiaries better off, managers may transact beyond the point at which further research and trading add to fund wealth. Nothing in the incentive alignment hypothesis rules out this result as a logical possibility.

Since both hypotheses rely on agency costs, the issue can be examined by identifying situations in which agency costs differ systematically and then noting whether the use of bundled research varies as either hypothesis would predict. To provide a clear test, of course, situations in which the two hypotheses generate conflicting predictions must be identified.

Several persuasive tests can be found in the setting of the pension fund. Most large corporations establish pension plans to finance employee retirement benefits. The plan is typically administered by the corporation itself, acting as the plan’s sponsor. In many cases the sponsor hires an outside manager to make investment decisions concerning fund assets. Recall from Foley & Lardner that the plan sponsor retains an ongoing duty under ERISA to monitor the manager’s performance.\textsuperscript{119} There are two basic types of pension plans, defined contribution (DC) plans and defined benefit (DB) plans. In either type, employees contribute retirement premiums to the fund throughout the period of their employment. On retirement, however, those who contribute to DC plans will have a claim only to their pro rata share of the value of the fund. Employee benefits vary proportionally to fund performance. Furthermore, employees receive no guarantee and bear virtually all the variability in fund performance.

\textsuperscript{118} Milton Friedman, \textit{The Methodology of Positive Economics}, in \textit{ESSAYS IN POSITIVE ECONOMICS} 3 (1935).
\textsuperscript{119} \textit{Supra} note 59 and accompanying text.
In DB plans, the employees contract with the plan's sponsor for a predetermined level of retirement benefits. The plan sponsor then sets up the pension plan to fund its future liabilities, contributing to the fund as necessary to generate the appropriate cash flows. Barring insolvency by the corporation, employees bear little or none of the variability in fund performance; rather, the corporation as plan sponsor bears it all.

Employees under both types of plans are dispersed and face extremely high costs in attempting to monitor the manager's performance. Instead, they rely on the plan sponsor's monitoring. Allocation of variability in the two types of plans determines agency costs. For otherwise identical corporate pension plans, the costs of monitoring sponsors will not vary systematically, while the benefits surely will. Unlike sponsors of DC plans, sponsors of DB plans receive 100% of the gains from monitoring, and their incentive to monitor is commensurately stronger. This situation suggests a set of preliminary implications. The unjust enrichment hypothesis predicts that sponsors of DB plans will prefer that their managers use no bundled research because bundling necessarily reduces fund performance. The incentive alignment hypothesis predicts that they will encourage some amount of bundling because bundling can actually improve fund performance.

Even under the unjust enrichment hypothesis, however, sponsors of DB plans will probably tolerate some amount of bundling. Past some point, further monitoring is just too costly; the sponsor will prefer to sacrifice ninety cents worth of fund performance rather than spend one dollar to prevent it. Yet, sponsors of DC plans will reach this point at substantially higher levels of bundling than will sponsors of DB plans because they receive virtually none of the benefits from monitoring. This result leads to a second set of implications. According to the unjust enrichment hypothesis, sponsors of DB plans will tolerate less bundling than the sponsors of otherwise identical DC plans. But, according to the incentive alignment hypothesis, sponsors of DB plans will allow roughly the same amount of bundling as sponsors of DC plans. In fact, they may even go out of their way to encourage some amount of bundling while the sponsors of DC plans would not find it worthwhile.

To test these predictions empirically, extensive data on the use of bundled research by the managers of DC and DB plans would be necessary. Unfortunately, such data is currently unavailable. In the meantime, it is possible to draw inferences from scattered casual evidence. This evidence indicates that plan sponsors, as a group, devote a considerable amount of time and attention to monitoring their managers. Moreover, they are fully aware of and vitally interested in how their managers allocate brokerage and the extent of bundling. While they often express concern that their managers may be using bundled
research to pay expenses that should come out of the management fee, most plan sponsors nevertheless tolerate a considerable amount of bundling.\textsuperscript{120}

As in \textit{FMS}, plan sponsors often require their managers to direct trades to specific brokers from whom the sponsor receives some form of in-kind rebate, often performance monitoring services.\textsuperscript{121} Indeed, one recent empirical study finds that portfolio consulting services and transaction cost analysis are the two products plan sponsors most often purchase with directed brokerage.\textsuperscript{122} Although the SEC's decision in \textit{FMS} found that plan sponsors receive no protection under section 28(e)'s safe harbor in directing portfolio brokerage, in many cases the plan sponsor has either expressly provided by contract that the fund should pay certain expenses or has vertically integrated into fund management. The monitoring function that plan sponsors perform is in many cases amenable to the same type of agency cost analysis as fund management. In this regard, however, it is interesting to note that the sponsor of a DB plan is not, in any economically meaningful sense, an agent for fund beneficiaries. As the sole stakeholder in fund performance, the plan sponsor is in fact the principal.

For the most part, the discussion has yet to make a distinction between third-party research provided by soft dollar brokers and in-house research produced and provided by full-service brokers. In terms of the shirking problem, both types of bundling appear to have identical effects. In terms of quality assurance, these effects differ slightly. For soft dollar brokerage to provide a performance bond, the broker must provide the research up-front. Most, but by no means all, third-party research is provided by soft dollar brokers in this fashion. In any event, soft dollar brokerage breaks the temporal connection between the receipt of research inputs by the manager and the execution of portfolio trades. Thus, the parties may adjust the balance of accounts to more efficiently perform the quality assuring function. Variations in the account balances held by soft dollar brokers provide a fruitful source of testable implications. All else being equal, where the returns from quality assurance are higher, we would expect the balance of the soft dollar account to be in the manager's favor, with the broker holding account receivables for future trades. For example, managers who use a broker for the first time will tend to use more up-front research. Once a trustworthy trading relationship has been established, the importance of the soft dollar account as a bonding mechanism declines. Similarly, soft dollar brokers who are new to the industry would be expected to hold relatively large net account receivables. Finally, where managers' costs of assessing execution quality are higher, soft dollar

\textsuperscript{120} SEC Action Memorandum, \textit{supra} note 62, at C2-8.

\textsuperscript{121} Fund Monitoring Services, \textit{supra} note 8; \textit{supra} text accompanying note 73; see also SEC Action Memorandum, \textit{supra} note 62, at C6-8.

\textsuperscript{122} Blume, \textit{supra} note 6, at 38.
brokers would be expected to hold larger net account receivables, as for relatively large trades or those in unusually noisy securities.

The extent to which in-house research occurs up-front is difficult to determine with full-service brokerage, because of the informality with which the broker accounts for bundling. Given the long-standing business reputations of most full-service brokers, no immediate need to establish a performance bond exists. For them the benefits of up-front research are much smaller, and the theory predicts that they will provide research closer in time to the associated trades. Indeed, to the extent in-house research is conclusory, it must occur immediately following identification of the trading opportunity because of information decay.

The quality assurance hypothesis does not postulate that soft dollar brokers necessarily provide the highest quality executions available in the market, only that the quality of their executions is higher than it otherwise would be. Full-service brokers have little empirical evidence to support the claim that they provide better execution than soft dollar brokerage. For extremely large, difficult trades in noisy or illiquid securities where price impact is potentially great, managers may prefer to use full-service brokers. Not only do these brokers have established business reputations to bond the quality of their performance, but the cost to the manager of monitoring execution quality relative to the benefits is fairly low, simply because of the large dollar value of the transaction. For smaller, less difficult trades that cannot be classified as "no-brainers," however, the managers’ monitoring costs are likely to be too high. It may be in the interest of the fund for the manager to pay a lower commission, net the advanced research rebate, and rely instead on the quality assurance provided by the rebate. Unlike the established full-service firms, soft dollar brokers must rely on a more immediate method of bonding execution quality.

One recent empirical study of soft dollars reports that 75% of investment managers were “almost always or always” satisfied with the quality of execution by firms that provide in-house research, while only 57% of managers were similarly satisfied with the quality of execution by firms that provide third-party research.123 Yet the same study finds that 30.9% of all brokerage commissions went to soft dollar brokers to purchase third-party research, compared to 45.7% to full-service brokers to purchase in-house research.124 Given that gross per share commissions differ little between the two types of brokerage,125 the equi-marginal principal implies that managers must be getting something from soft dollar brokers to match the benefits they would receive with full-service

123. Id. at 39. The study also finds that full-service firms receive a disproportionate share of the “potentially more difficult orders.” Id.
124. Id. at 38.
125. Id.
brokerage. Most likely, that "something" is better investment research. This implication is consistent with widespread industry reports that third-party research is much better than in-house research. This perception may be true for at least two reasons. First, securities brokerage is only one of the many functions performed by full-service firms. In spite of the Chinese walls that are said to exist between various divisions of these firms, their research recommendations are subject to internal conflicts of interest that have led to a general sense of distrust held by many investment managers. The research division of a full-service firm, for example, will not likely be permitted to make a negative recommendation about securities underwritten by the firm's investment banking division. Also, in-house research by these firms is still subject to favoritism and its attendant problems.

B. Policy Implications

With few exceptions, the SEC has consistently narrowed the safe harbor protection of section 28(e). Most recently, the agency ruled that soft dollar payments on dealer trades will receive no protection. Soon thereafter, the NASD submitted a letter to the staff of the SEC urging that the agency require fund managers to provide detailed disclosure of their soft dollar arrangements. The NASD made no such request in regards to the less formal bundling provided by full-service brokers. No doubt partially in response to this letter, the SEC has resolved to investigate the soft dollar controversy in its upcoming "Market 2000" study. These events are just a shadow of the widespread animosity towards and misunderstanding of soft dollar brokerage that exists among regulators and financial market commentators. Everyone, it seems, knows that soft dollars deserve to be condemned without the benefit of taking time to assess either their probable or actual effects on the behavior of market participants and ultimately on fund beneficiaries.

Indeed, few soft dollar critics have inquired vigorously enough even to recognize that the arguments against soft dollars apply with equal force to all bundled research. This connection, of course, has been entirely lost on those who criticize soft dollars for partially obscuring the costs of fund management. It seems anomalous to condemn soft


128. Rawlins Slates, supra note 13. Mr. Peter Rawlins, chairman of the London Stock Exchange, has publicly condemned soft dollars purely because they fail the "smell test." See also Peter Rawlins, Speech at the Annual Conference of the National Association of Pension Funds (Feb. 28, 1992).
dollars because they only partially reveal what is entirely hidden from view with other forms of bundled research.

The novel insights of the incentive alignment hypothesis suggest a complete and careful re-analysis of the fiduciary duties of institutional brokers, fund managers, and pension plan sponsors. Unfortunately, such an analysis is beyond the scope of this Article. Nevertheless, a few recommendations are in order. First, section 28(e)’s safe harbor should be extended to pension plan sponsors when they act in their fiduciary capacity as monitors. Effective monitoring clearly carries with it the inherent authority to act with discretion concerning fund assets, even if only by exerting control over the fund manager. Moreover, careful monitoring by a plan sponsor can have a significant effect on fund performance. Working backwards, it seems reasonable to infer that any exercise of discretion over a fund that stands to have such a profound effect on fund performance deserves to qualify as “investment discretion” under section 28(e). Indeed, this interpretation lies well within the bounds established by section 3(a)(35) of the Securities Exchange Act of 1934 in defining investment discretion. The SEC’s failure to provide such protection has led the parties to resolve this ambiguity through costly contractual provisions in the plan document. It may also have led some plan sponsors to sacrifice the gains of specialization by vertically integrating into fund management.

Another implication of the incentive alignment hypothesis is that dealer trades should once again be given the protection of section 28(e). Bundling research into the dealer’s mark-up or mark-down provides the same benefits to the fund from subsidizing the manager’s research as on broker trades. With dealer trades, however, there is ample evidence to suggest that leakage, self-dealing, and other problems are just as bad or worse than with broker trades. Unlike brokers, dealers have no general common law fiduciary duty to either the fund or the manager to deter misdealing. In addition, dealers are generally not required to disclose the terms of their trades, making it difficult for fund managers to evaluate their performance. The role of soft dollars in providing up-front research in order to bond the quality of the broker-dealer’s performance is, therefore, much more compelling in the context of dealer trades. Finally, the exclusion of dealer trades from safe harbor protection appears to apply only in those cases where the bundled research has been explicitly accounted for with soft dollars. Traditional broker-dealers, who provide in-house research on an informal basis, have not been restricted, which has no doubt given them a considerable advantage in trading certain securities.

The incentive alignment hypothesis further implies that careful consideration should be given to repealing or amending section 11(a) of the Securities Act of 1934.

Exchange Act of 1934. As previously discussed, this section prohibits anyone who exercises investment discretion over a managed account from effecting trades on behalf of that account on an organized exchange. Recall also that funds that have vertically integrated into brokerage are free to initiate trades as long as they are routed through an unaffiliated broker for final execution. Reports in the financial press suggest that floor traders often monitor closely and emulate the trades of the prominent funds’ brokers. This is a form of leakage and, in essence, it allows floor traders to free ride on the investment research of fund managers. A repeal of section 11(a) has been proposed in Congress in recent years in order to curb this practice; it should receive serious consideration.

Conclusion

Where property rights are problematic, market participants often develop innovative ways to reduce the wealth losses that result from agency problems. Precisely because soft dollars are an innovative and often unusual method of enforcing property rights, the natural tendency is to condemn the innovators as either anticompetitive or downright dishonest. Like the renowned “man on the spot” in F. A. Hayek’s Nobel Prize winning essay, The Use of Knowledge in Society, the innovators may neither know nor care about the broader social benefits of their actions, and are in turn likely to be at a disadvantage when called upon to defend themselves in the public policy arena. This view fits nicely with economic explanations for the SEC’s role in the deregulation of fixed commissions. Greg Jarrell, former Chief Economist at the SEC, found that prior to deregulation the SEC appears to have been captured by the more prominent members of the industry it was created to regulate—namely the NYSE and its established, full-service member firms. For much of its history prior to deregulation, the SEC systematically sought to enforce the NYSE’s cartel, primarily through the regulation of minimum commissions. Only with the rise of regional exchanges and other off-board trading alternatives was the SEC’s political support for minimum commissions overwhelmed by “consumer” interests, in this case those demanding institutional portfolio brokerage. In the spirit of Jarrell’s work, Jonathan Macey and David Haddock argue that the SEC’s preference for the NYSE has lingered in the post-deregulation era. They find that rather than developing a “national market system,” as Congress

130. See, e.g., Salwen, supra note 82.
envisioned for the Securities Acts Amendments, the SEC has instead continued to support the NYSE's monopoly by maintaining off-board trading restrictions, limiting delisting by corporations, and protecting the specialist's trading advantages. Macey and Haddock make the following insightful observation:

[T]he economic theory of regulation predicts that the owners of investments [specific] to an industry—in the present case, the investments consist of the infrastructure and human expertise of the exchanges and their members—will seek regulation whenever innovations make potential new forms of competition threatening. The legislative body usually gives a regulatory agency powers that enable the agency, allegedly in the "public interest," to require [uniform] behavior that before regulation only the "most reputable" members of the regulated industries practiced. This policy has the political advantage of appearing to retard "unethical" practices. But, in a way not nearly so apparent, the policy hampers the innovation of techniques that new entrants otherwise may have introduced. Indeed, these new techniques may have been the principal attraction of the entrants from the consumer's viewpoint.

This observation is particularly telling in the context of soft dollar brokerage. With few exceptions, the SEC's interpretations of section 28(e) have favored full-service brokers and other established industry interests at the expense of soft dollar brokers and investment managers. The main exception came with the SEC's liberalized interpretation of "investment research" in conformity with the legislative history of section 28(e) to include anything that provides "lawful and appropriate assistance to the money manager." This interpretation was timed roughly with the London Stock Exchange's Big Bang deregulation of fixed commissions in 1986. Whether consciously or not, the sudden threat of lost trading volume to the London Exchange may have influenced the SEC's ruling and temporarily spared the soft dollar industry from protracted strangulation at the behest of powerful vested interests. It remains to be seen whether this process has begun anew with both the exclusion of dealer trades from section 28(e)'s safe harbor and calls for onerous disclosure requirements.

135. Macey & Haddock, supra note 19, at 319-20 (emphasis in original). It is important to note that this view of the SEC's regulatory role does not require conscious motivation by the members of the SEC staff. It requires only that the powerful vested interests that are trying to repel the forces of change "have an advantage in presenting timely arguments and information before the Commission." Id., at 319 n.15.
Soft Dollars

In this Article I have argued that soft dollars are an innovative form of organization that enhances fund wealth by reducing agency problems, facilitating vertical disintegration and promoting specialization in securities brokerage, investment research, and investment management. Further evidence of the effects of soft dollar brokerage awaits extensive empirical work. In the meantime, soft dollars and other forms of bundled research should receive the presumption of legitimacy that Congress intended when it passed section 28(e).

FIGURE 1 – Management Inputs