“Nobody is Proud of Soft Dollars”: The Impact of MiFID II on U.S. Financial Markets

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Abstract

Since 1975, investment managers in the United States have been permitted to pay excess brokerage commissions on securities transactions and then utilize those excess payments – commonly known as "soft dollars" – to purchase research and related services, thereby subsidizing the investment advisers' own profit margins. Over the past four decades, the Securities and Exchange Commission (SEC) has made fitful efforts to curtail the practice and enhance the transparency of soft dollar payments, but the Commission has been routinely thwarted by a financial services industry that profits from soft dollars and strives to keep the payments obscure and undiminished. In recent years, financial authorities in the European Union (E.U.) and the United Kingdom (U.K.) have taken a fresh look at excessive brokerage commissions and in January 2018 adopted MiFID II, regulatory reforms that force the unbundling of commission charges in a manner that is likely to make this aspect of European financial markets more investor-friendly than U.S. markets and arguably more efficient as well. The emergence of new international standards for the oversight of excess brokerage commissions presents challenges to global financial services firms that increasingly need to comply with conflicting legal regimes across national boundaries. These challenges also present an opportunity for the United States to reconsider its approach to soft dollars. This article starts with a brief and critical overview of the use of soft dollar payments in the United States as well as a summary of economic studies exploring the impact of soft dollars on investors. We then review the regulation of excess brokerage commissions in the United States concluding with an analysis of the scale of soft dollar payments and the manner in which they were disclosed to U.S. investors as MiFID II was being rolled out several years ago. We next summarize recent developments in the E.U. and the U.K. with respect to soft dollar payments, highlighting the extent to which those developments pose challenges for financial firms operating on a global basis and have already started to influence (and, in our view, transform for the better) soft dollar practices in this country. After offering an assessment of developments in European capital markets since MiFID II went into effect, we close with an overview of an array of reform efforts that could improve the regulation of soft dollar payments in the United States (short of legislation outlawing the practice in the United States). While we take a critical view of soft dollar practices, the story of MiFID II recounted here presents admittedly challenging and contested issues of policy analysis as the agency costs inherent in soft dollar payments are argument offset by positive externalities supporting the development of robust capital markets. The article also offers an unusual – and perhaps portentous – example of innovations in investor protections running from foreign markets into the United States rather than the other way around, as has been the norm in the post-World War II era.

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Table of Contents

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INTRODUCTION

For nearly half a century, the bundling of research services into securities commissions has been the focus of both policy discussion and academic debate. The practice whereby asset management firms make use of investor funds to cover the costs of research – known as soft dollar payments in the United States – resembles a form of kickback or self-dealing: the payments allow asset managers to use investor funds to subsidize the cost of the asset managers' own research efforts. On the other hand, the production of information on the value of securities arguably promotes the development of capital markets and might be understood as a public good, benefiting both investors and the economy more generally. These competing perspectives on bundled commissions have over the decades produced a standoff between investor advocates in favor of unbundling and financial industry interests committed to retaining a familiar, albeit opaque, business practice.

On January 2, 2018, the European Union (E.U.), under the leadership of financial authorities from the United Kingdom (U.K.), unbundled securities commissions for large swaths of the European capital markets with the implementation of an E.U. directive known as MiFID II.[1] This unbundling has had a dramatic impact on the cost and production of research in European markets. The implementation of MiFID II has also had a significant impact on the global financial services industry including asset managers and investment banks doing business in both European and U.S. markets. Just prior to the adoption of MiFID II, industry representatives scrambled to obtain SEC exemptive relief to accommodate compliance with two different sets of legal requirements, and, on November 4, 2019, the Commission extended that relief through 2023. Notwithstanding these accommodations, MiFID II has already had a material impact on U.S. capital markets. A number of global asset managers have chosen

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[1] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU, European Council Directive 2014/65/EU, O.J. (L 173) 57, 3 ("MiFID II").

unbundled commissions on a worldwide basis, including the United States, and a handful of domestic U.S. asset managers have followed suit bringing themselves in line with what might be perceived to the emerging best practices in the area.

Beyond its temporary exemptive relief to accommodate industry compliance with conflicting requirements, the SEC has so far taken a wait-and-see attitude with respect to its own regulations regarding soft dollar payments.[2] While some have argued that the Commission should conform with MiFID II unbundling requirements, others – particularly representatives of the financial services industry – have cautioned against such a move, pointing to concerns that MiFID II may have hampered the efficiency of European capital markets especially for small and medium-size enterprises. There is also some question as to whether the European Union will retain the unbundling provisions of MiFID II once the United Kingdom has exited the European Union and British authorities no longer play a role in the Commission's deliberations.[3] On the other hand, in the summer of 2019, the SEC Investor Advisory Committee entered the fray by proposing the Commission adopt improved disclosure standards for soft dollar payments.[4] While a less muscular response than a full blown prohibition of soft dollar payments, the Advisory Committee's approach could have a substantial impact on market practices in the United States and incorporate aspects of MiFID II reforms.

In parallel to the practical and policy challenges that MiFID II poses, there has emerged a fascinating theoretical debate over the social value of bundled commissions. The dominant academic perspective on bundled commissions and soft dollar payments is that these practices constitute an agency problem between asset managers and investors whereby the securities industry exploits information asymmetries to extract excess rents with inefficient pricing arrangements. A minority view, however, claims that these arrangements are, in fact, efficient and may also improve the quality of capital markets by producing information to an extent that would not be obtained in the absence of these arrangements. Empirical studies of the matter exist – and, in our view, point in favor of the former perspective – but have been limited, in part because good data sets about unbundled commissions have not generally been available to independent researchers. With MiFID II, however, a natural experiment has been created and a

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[2] For a discussion of the SEC's temporary no-action relief, issued initially in October of 2017 and recently, in November of 2019, extended until 2023 in November of 2019, see infra at __-__. In late 2018, the Commission solicited public input on MiFID II's unbundling provisions. See SEC Press Release No. 2018-301 (Dec. 21, 3018) (avail. at https://www.sec.gov/news/press-release/2018-301) (comments are posted at https://www.sec.gov/comments/mifidii/mifidii.htm).

[3] For dueling cross-channel press releases, *compare* FCA Press Release: FCA Finds MiFID II Research Unbundling Rules Working Well for Investors (Sept 19, 2019) (avail. at https://www.fca.org.uk/news/press-releases/fca-finds-mifid-ii-research-unbundling-rules-working-well-investors), *with* AMF Press Release: Reviving Research in the Wake of MiFID II (Jan. 27, 2020) (avail, at https://www.amf-france.org/en_US/Reglementation/Dossiers-thematiques/Marches/Directive-MIF/Relancer-la-recherche-apr-s-MIF-2---constats--enjeux-et-recommandation---L-AMF-publie-le-rapport-r-dig--par-Jacqueline-Eli-Namer-et-de-Thierry-Giami),. See also EU Press Release: Commission Launches Public Consultation on MiFID II and MiFIR Framework (18 Feb. 2020) (avail. at https://platform.dataguidance.com/news/eu-commission-launches-public-consultation-mifid-ii-and-mifir-framework) (announcing a new consultative process on unbundling and other aspects of MiFID II). See generally Sophie Baker, Regulators Split on Whether MiFID II Unbundling Rules are an Issue, Pension & Investments (Feb. 24, 2020) (avail. at https://www.pionline.com/mifid).

[4] *See* Recommendation of the SEC Investor Advisory Committee: Structural Changes to the US Capital Markets Re Investment Research in a Post-MiFID II World (July 25, 2019) (avail. at https://www.sec.gov/spotlight/investor-advisoryadvisory-committee-2012/investment-research-post-mfid-ii-world.pdf).

number of studies have been undertaken since 2018 to explore the impact of reforms on European markets. We discuss those studies (and add to them) in this Article.

The adoption of MiFID II's requirements for commissions and the ramifications of that decision for U.S. and other capital markets also provides a fascinating and arguably novel illustration of the transmission of regulatory reforms in global financial markets. At least in the post-World War II era, the Securities and Exchange Commission and U.S. capital markets have traditionally served as the font of investor-protection reforms, which other countries and regulatory networks then adopt often with the encouragement and assistance of U.S. authorities. In the case of MiFID II and the unbundling of commissions, the E.U. has taken the lead and the influence is running westward across the Atlantic Ocean. The principal vectors for incorporating aspects of MiFID II into the U.S. capital markets are also distinctive. At least at this stage, neither the SEC nor industry groups are taking the lead in promoting the unbundling of commissions in the United States. Rather consumer advocates and trade groups representing institutional investors are pressing U.S. asset managers and securities firms to align their commission practices with evolving international standards. To some degree, global firms are acquiescing with these efforts in order to operate their activities on a harmonized basis worldwide. But the driving force is from the side of investors. So, the adoption of MiFID II and its impact on U.S. financial markets may offer a telling case study for students of international relations and regulatory networks.

This Article begins in Part I with a more detailed introduction of soft dollar payments, offering some background on their scope and magnitude in the United States on the eve of MiFID II and then a brief review of past – that is, pre-MiFID II – academic writing on soft dollars. Part II explores the evolution of the regulation of bundled commissions in the United States, explaining the genesis of the safe harbor for soft dollar payments that Congress adopted in 1975 and the evolution of SEC statements with respect to soft dollar practices over the years. This Part concludes with a review of soft dollar disclosure practices in the United States as MiFID II was going into effect. In Part III, we turn to MiFID II itself, tracing the developments that lead up to the directive and highlighting implications for U.S. observers. This Part also introduces the legal challenges that MiFID II created for global financial firms operating in both U.S. and European markets. Part IV follows with an overview of reactions to the implementation of MiFID II in January 2018, chronicling both industry perspectives and the growing body of empirical evidences on the impact of the unbundling of commissions under MiFID II. This Part also explores SEC statements regarding MiFID II and the recommendation of the SEC Investors Advisory Committee to enhance transparency for soft dollar practices. Finally, Part IV summarizes the views of various industry representatives, trading groups, and consumer advocates on MiFID II and its implications. Part V concludes with series of recommendations and predictions as to plausible next steps in this area, focusing primarily on the capacity and incentives for investors and their advocates to force the unbundling of commissions in the United States, notwithstanding industry resistance and the cautiousness of current SEC leadership.

I. SETTING THE STAGE

A. A Brief (and Critical) Overview of Soft Dollar Payments

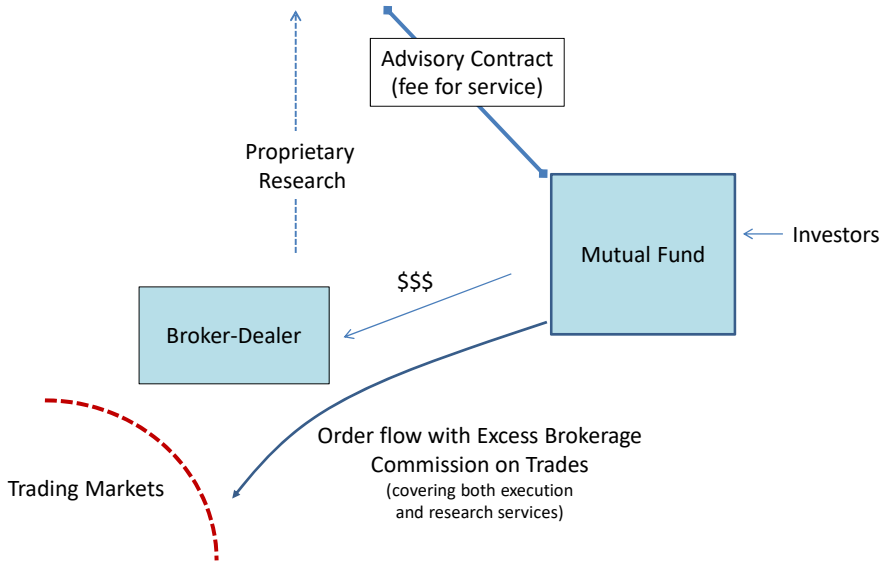
In the United States, and traditionally in many other securities markets around the world, asset managers are permitted to pay higher commissions on their clients' securities trades than would be required for pure execution services. In exchange for these excess commissions, asset managers can obtain various forms of research and ancillary services. Excess commissions used in this manner are often called soft dollar payments or simply soft dollars in the United States. The term soft dollars is intended to distinguish these payments from "hard dollar" payments for research services which would come out of the investment advisers' own pocket and thereby diminish the firms' operating margins. Later in this article, we will discuss the legal structure underlying the practice, but we begin with a brief discussion of why these payments are widely viewed as problematic among academic commentators, as well as disinterested industry experts. We also provide an overview of their economic significance in U.S. capital markets today.

The basic business model of many investment advisers – for example mutual fund sponsors like Fidelity or T. Rowe Price – is to charge an advisory fee for the management of client funds; in the case of Fidelity or T. Rowe Price, the most common vehicle for holding client funds would be a mutual fund. The investment advisers' operating margin is the difference between its advisory fee and its operating costs. The investment adviser can improve its operating margins by shifting costs from hard dollar payments for research and ancillary services into soft dollar payments, which are financed out of client funds through the payment of excess brokerage commissions on portfolio securities owned, at least indirectly, by clients. So, if a T. Rowe Price mutual fund pays excess commissions to a broker-dealer like Goldman or UBS, T. Rowe Price itself, as the fund's adviser, can reduce its own research costs and make use of proprietary research supplied by Goldman or UBS for soft dollars. The investment adviser's operating margins are thereby increased and costs are shifted over to the adviser's mutual fund clients who incur the costs as a result of lower net returns on their portfolios, diminished by higher commissions on brokerage transactions. Figure 1 illustrates these basic relationships. The key point to recognize is that, in today's trading markets with many options for

obtaining pure execution services, the investment adviser can often make the same trades with commissions by forgoing soft dollar credits and seeking only execution services.

Figure 1

Soft Dollar Payments for Proprietary Research



Soft dollar payments reflect a quite straightforward agency problem, where the investment adviser as agent for the investor is tempted to take actions that conflict with the interests of investors, but that benefit the investment advisers.[5] More subtle, but equally important, are incentives on the part of securities firms, like Goldman and UBS, to favor trading arrangements that include soft dollar payments. The key point here is to recognize that soft dollar payments entail the use of "bundled" commissions, that is, commission charges that cover both execution and research services. While securities firms will often negotiate an allocation for these components (say 2 cents a share for execution and 2 cents a share for soft dollars), that division generally will not be transparently reported to the investing public and therefore commission costs will not be as carefully monitored as would be the case with unbundled pricing: that is, where execution costs and research costs are priced separately. Opaque pricing of this sort

[5] A number of years ago, one of the authors identified soft dollar payments as being illustrative of a more general category of principal-agent problem, denominated the trilateral dilemma, and defined to include a large number of cases where financial services firms exploit discretionary authority over client decision-making in order to extract side payments for the benefit of the firms. See Howell E. Jackson, "The Trilateral Dilemma in Financial Regulation," in IMPROVING THE EFFECTIVENESS OF FINANCIAL EDUCATION AND SAVINGS PROGRAMS (Anna Maria Lusardi, ed.) (University of Chicago Press 2008). Another prominent example of the trilateral dilemma was the pre-Dodd Frank Act practice of mortgage brokers steering homeowners into higher priced mortgages in order to gain the brokers additional compensation through a side-payment known as yield-spread premiums. See Howell E. Jackson & Laurie Burlingame, *Kickbacks or Compensation: The Case of Yield Spread Premiums*, 12 STAN. J. LAW, BUS. & FIN. 289 (2007).

affords securities firms the opportunity to increase the profitability of their trading desks and diminishes their incentive to move away from bundled pricing. Plus, of course, these securities firms compete for order flow from investment advisers (like Fidelity and T. Rowe Price) and have little incentive to interfere with soft dollar practices that helps those firms enhance their own profitability.[6]

One final introductory point about the market structure in which soft dollar payments have flourished is the difficulties that investment advisers themselves face in trying to eliminate these practices. One might imagine that an investment adviser seeking to enhance its own reputation might commit to its investors to forgo soft dollar payments and pledge to purchase all research with adviser-financed hard dollars. In theory, this might seem a viable strategy, especially if investors had some sense of the problematic aspects of soft dollar payments. However, an investment adviser pursuing this strategy would encounter several substantial problems. First, in order to maintain its current levels of profitability, the investment adviser would need to increase its explicit management fees charged to its clients. In the case of mutual funds, there are legal impediments (in the form of shareholder approval requirements) for such price increases. Equally important, expense ratios are a highly salient factor upon which investors choose (and services like Morningstar rate) investment companies. An investment adviser would risk immediate and negative market reactions were it unilaterally to move away from soft dollar subsidies of research costs and shift towards a more transparent pricing model. In addition, the investment adviser might risk losing access to valuable proprietary research from leading securities firms, and possibly be denied access to the best execution services especially for more complicated trades. As noted above, securities firms also benefit from bundled commissions, and there is clear evidence that these securities resist investment adviser efforts to defect from industry practices.[7]

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[6] In *Intermediary Influence*, 82 U. CHI. L. REV. 573 (2015), Professor Kathryn Judge offers another conceptual framework that captures this symbiotic relationship between securities firms and investment advisers with respect to soft dollars. According to Professor Judge, financial intermediaries often have been able to exploit their informational and positional advantages to set up and maintain institutional arrangements that favor higher transaction fees. This description arguably captures bundled commissions. Despite the technological and market changes that have made executing trades easier, fund managers have encouraged mutual fund boards to pursue higher-cost, "full-service" arrangements at surprising levels, given the execution-only alternatives that are readily available. Such arrangements are favorable to the fund advisers, who are able to push expenses they would otherwise incur onto the funds they manage. One recurrent theme in Judge's analysis is that financial regulators often must rely on the superior market and technical expertise of these financial intermediaries in order to assess fully the effects of a proposed regulatory change. Analyzing the end of the fixed commission regime, Judge argues that "securities firms used their informational advantages to highlight potential costs and the challenges that might arise from ending fixed brokerage fees—most notably the risk of destructive competition among securities firms and the potentially adverse effects on small securities firms and small investors." *Id*. at 601. Again, this analysis applies to soft dollars as well. While these risks were not enough to dissuade Congress and the SEC from abolishing fixed commissions, they did lead Congress to enact section 28(e) in an attempt to ensure that research would still be provided in a competitive regime. In this way, the analysis of soft dollars presented here picks up where Judge's analysis left off. [Add citation to recent work of Charles Mooney.]

[7] In the 1990s, Fidelity Investments announced that it was going to move towards unbundled commissions on its portfolio transactions. See Letter from Eric D. Roiter, Senior Vice President and General Counsel, Fidelity Management & Research Co, to Jonathan G. Katz, Secretary, U.S. Securities and Exchange Commission (Dec. 22, 2005) ("[W]e have begun the process of negotiating agreements with executing brokers under which Fidelity purchases investment research with its own resources (so-called hard dollars), resulting in lower, unbundled commission rates paid by our funds for trade execution services.") Shortly thereafter, the firm retreated from the initiative – apparently because of push-back of leading securities firms – and continued to utilize substantial soft dollar payments for the next decade. As recounted below, in discussing U.S. market reactions to MiFID II, sell-side firms in the past few years have continued to oppose buy-side requests, especially among smaller institutional

Before turning to more technical aspects of soft dollar payments, we should add a few words on the title to this article: "Nobody is Proud of Soft Dollars." That admission was made in the recent past to one of the authors by a top executive in the U.S. asset management industry with several decades of experience working at a number of leading financial services firms. It was a candid acknowledgement of the seamy underside of soft dollar payments by an industry veteran. Tellingly, however, in his first major action upon taking up a new C-suite role with a new asset management firm, this same executive proposed a substantial increase in the firm's use of soft dollar payments so as to shift costs from the asset manager onto its client mutual funds and improve profitability. So even financial service professionals who understand the problematic nature of soft dollar payments have difficulty resisting the financial rewards for engaging in the practice.

B. Some Preliminary Data on the Scope and Magnitude of Soft Dollar Payments on the Eve of MiFID II

In order to appreciate the legal issues posed by recent developments in the regulation of soft dollar payments, one needs to have a slightly more granular understanding of the ways in which soft dollar payments are structured in today's markets. The basic relationships portrayed in Figure 1 above reflect only the simplest form of soft dollar payments, where a full-service sell-side firm itself provides both execution services and soft dollar research. Over the past decade or two, within the United States, the industry has moved towards a practice known as Commission Sharing Arrangements (or CSAs), whereby a certain amount of each commission (say 2 or 3 cents a share) is deposited on behalf of the investment adviser into an account with either the brokerage house executing the trade or some third-party vendor. See Figure 2. The investment adviser can then use the CSA account to purchase research and other services from independent research providers (Path 2a in Figure 2). One advantage of CSAs is that they provide investment advisers the ability to purchase a broader range of research services, including from firms that have substandard trading platforms or even no execution capabilities at all. In more recent times, even full services brokerage firms like Goldman and UBS have made use of CSAs to compensate themselves for providing research (Path 2b in Figure 2). While this use of CSAs may seem circular (as the brokerage house first deposits excessive commissions and then takes them back), it allows for more transparent accounting for the particular research services investment

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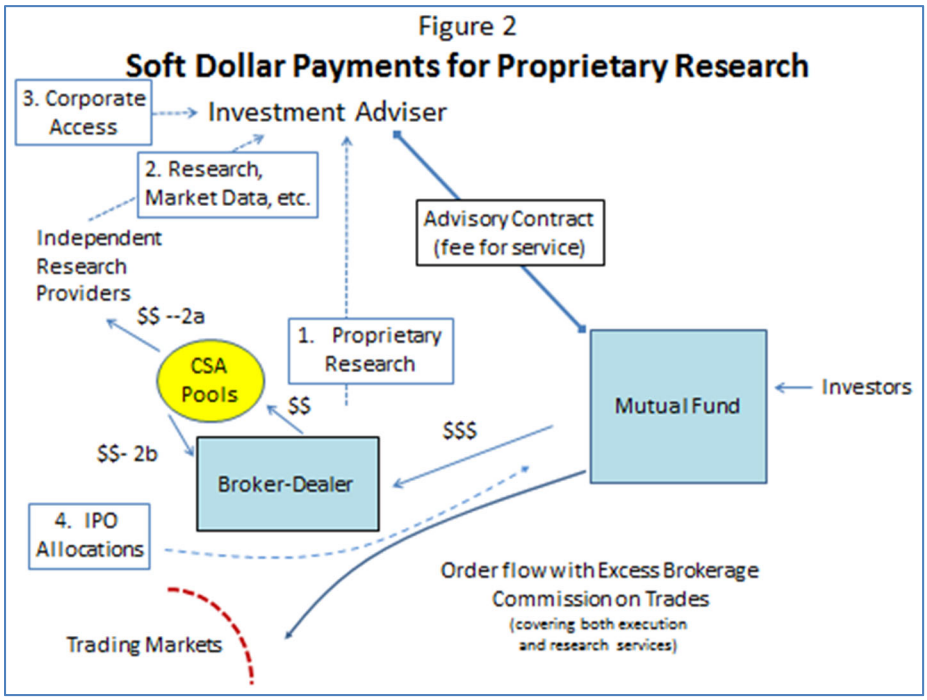
investors, seeking unbundled pricing as the sort that MiFID II affords European institutional investors. *See infra* at __-__.

advisers actually use and helps the brokerage firm make sure that investment advisers do not overspend their soft dollar allowance.



Another point to be made about modern soft dollar practices is that their use is not limited to traditional forms of proprietary research, such as sell-side analyst reports on specific companies. Market data – like Bloomberg feeds – can also be financed through soft dollars as well as more generalized educational programs such as conferences and seminars. As will be seen when we discuss legal restraints on soft dollar payments below, the SEC has attempted to restrain the scope of permissible research services from time to time, but the definition is still capacious and includes some counterintuitive services. An important example here is corporate access (Path 3 in Figure 2). One way that investment advisers can use their CSA balances (or other soft dollar privileges) is to purchase the right to speak with corporate executives. The charges for such visits are said to run in the neighborhood of $5,000 a meeting. In effect, public companies grant securities firms the authority to monetize corporate access by requiring soft dollar payments from investment analysts in order to meet with company officials. By serving as gatekeepers for corporate access, sell-side firms can inhibit asset managers from moving away from soft dollar payments unilaterally.

A final – and contested – service associated with soft dollar payments is IPO allocations. Although FINRA regulations currently prevent securities firms from imposing explicit charges for IPO allocations (and thus CSA records contain no explicit charges associated with IPO allocations),[8] there is substantial empirical evidence in both academic and industry statements suggesting that IPO allocations are correlated with

[8] [Insert citation to FINRA rules here and commentary thereon.]

higher levels of order flow to securities firms that serve as underwriters (Path 4 on Figure 2). Set out in the margins is a brief summary of the literature on this point.[9]

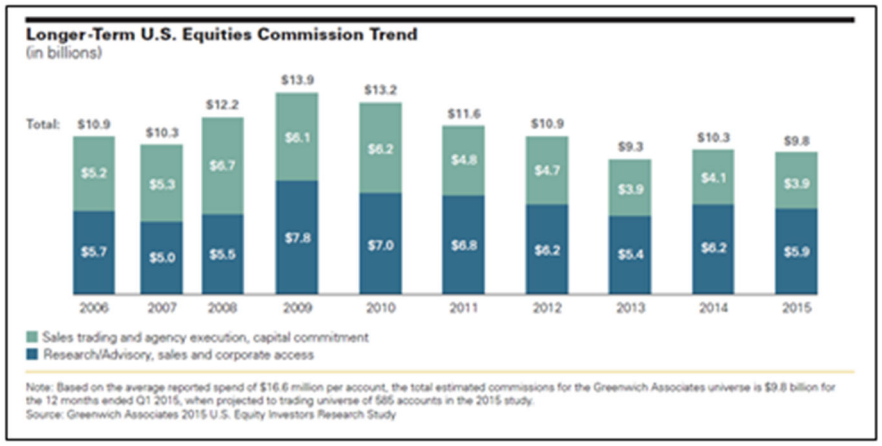
While public disclosures on soft dollar payments are quite skimpy at the level of mutual funds or investment advisers (a point to be elaborated upon below), there is relatively good aggregate data at the industry level, largely produced by firms such as Greenwich Associates that generate market intelligence for investment managers and their consultants. For example, Figure 3 reproduces a chart from the Greenwich Report of Q2 2015 trends in overall commissions in U.S. equity markets between 2008 and 2015. While the overall trend in total commissions in this period has been slightly downward, declining from $10.9 billion in 2008 to $9.8 billion in 2015, the share of commissions allocated to soft dollars has remained fairly constant (moving from $5.7 billion in 2008 to $5.9 billion in 2015), implying that the share of soft dollars during that period rose from 52.3% in 2008 to 60.2% in 2015. (The data presented in this section is drawn from a timeframe several years before 2018 when MiFID II went into effect. Later in the article, when we describe the directive's impact on the United States, we will discuss more current data, documenting the extent to which European developments have already begun to influence business practices in the United States.)

[9] Beginning with the academic research, Professor Jonathan Reuter's study of mutual fund families between 1996 and 1999 found evidence "of an economically significant link between the reported IPO holdings of mutual fund families and the level of the brokerage commission payments those families direct to lead underwriters each year." Overall, his analysis suggests that "the stronger the business relationship between the mutual fund family and the lead underwriter, the greater the mutual fund family's access to underpriced IPOs." Jonathan Reuter, *Are IPO Allocations for Sale? Evidence from Mutual Funds*, 61 J. FINANCE 2289, 2290 (2006). Other research confirms this tendency. For example, Nimalendran et al. confirm this relationship using data from 1993 to 2001, and additionally find that the more money "left on the table" in an IPO, the higher the trading in the 50 most active stocks during the IPO. This relationship suggests that funds reward access to underpriced IPOs with more trading. M. Nimalendran et al., *Do Today's Trades Affect Tomorrow's IPO Allocations?*, J. FIN. ECON.. 87, 102 (2007). Jenkinson et al. find a similar result using more recent data from 2010 to 2014—brokerage revenues have a significant impact on IPO allocations, even after controlling for investor and investor-bank fixed effects. Tim Jenkinson et al., *Quid Pro Quo? What Factors Influence IPO Allocations to Investors?* (Dec. 2016) (avail. at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2785642).

After the IPO pricing scandals of the late 1990s and early 2000s, congressional testimony from industry representatives confirmed that access to IPOs was in the bundle of services offered in bundled commissions. For example, in 2003, the Senior VP of American Century Investments testified that some of the services included in bundled commissions were "broker research, fund expenses, access to IPOs, and in some cases normal and customary business expenses, as in the expansive definition now allowed by the SEC." http://commdocs.house.gov/committees/bank/hba87798.000/hba87798_0f.htm.

Overall, this evidence suggests that there was a period at the turn of the 20th century in which firms were freely selling access to "hot" IPOs. After new FINRA rules and SEC enforcement actions at the beginning of the century, [supplement here] however, brokers do not seem to explicitly offer this in their bundle of services. However, academic research, including one study using more recent data, suggests that there is likely an implicit quid pro quo—advisers who place more higher-cost trades with a certain broker-dealer are more likely to be rewarded with better access to IPOs.

Figure 3
Trends in U.S. Equity Commissions



Source: Greenwich Associates, Greenwich Report, at 2 (Q2 2015).

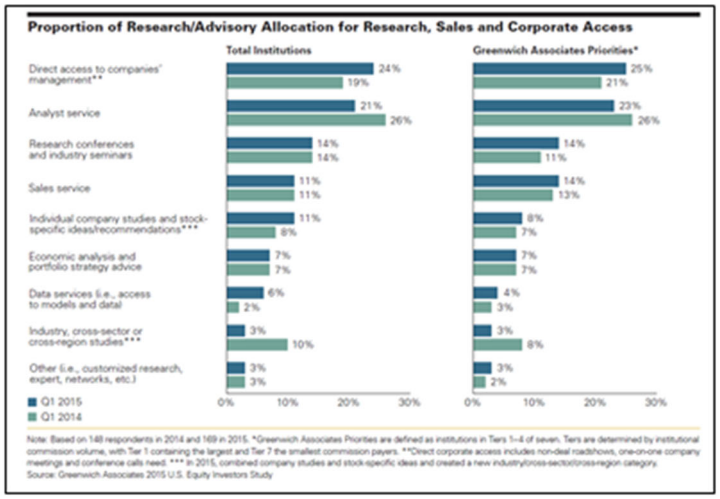
Industry sources also offer a picture of the allocation of soft dollar resources. Again, drawing on the work of Greenwich Associates, Figure 4 presents estimates for a broad industry grouping as well as for a subsample composed of larger institutional investors. Among other things, these allocations reveal corporate access to be among the largest uses of soft dollars in 2015, comprising roughly a quarter of all soft dollar payments. After traditional analyst services, conferences and seminars also seem to be substantial (at roughly 14 percent) with data services less than 5 percent.

In sum, industry sources indicate that the amount of equity brokerage commissions allocated to soft dollars is substantial, averaging close to $6 billion a year and now accounting for more than 60 percent of total commissions in recent years. As execution costs continue to decline through the proliferation of automated trading systems, the proportion of commissions utilized for soft dollar payments is likely to increase even further.[10]

[10] The importance of soft dollars appears to have risen over time. In 1989, Greenwich Associates reported that institutional investors generated approximately $1.7 billion of commissions on their equity trades, of which $692 million (40 percent) involved soft dollars. John A. Haslem, *Issues in Mutual Fund Soft-Dollar Trades* 3-4 (Aug. 26, 2011), available at https://ssrn.com/abstract=1917025 (quoting testimony of Morton Klevan, U.S. Department of Labor, PWPA Advisory Council, Working Group on Soft Dollars and Directed Brokerage, November 13, 1997) (noting that these figures provided by Greenwich Associates is likely an underestimate "because they are based only upon those commissions institutions explicitly identify as involving soft dollars, and it is likely not all soft-dollar transactions have been identified"). In 1996, Greenwich Associates reported that slightly over 70 percent of total transaction executions involved some form of soft-dollar arrangement. Yaman Ö. Erzurumlu & Vladimir Kotomin, *Mutual Funds' Soft Dollar Arrangements: Determinants, Impact on Shareholder Wealth, and Relation to Governance*, 50 J. FIN. SERVICES RESEARCH 95, 97 (2016) (internal citation omitted). In 1998, the Securities and Exchange Commission estimated that soft-dollar commissions for research comprised between 30 to 50 percent of total brokerage expenses. *Id.* (citing Securities and Exchange Commission, Inspection Report on the Soft Dollar Practices of Broker-Dealers, Investment Advisers and Mutual Funds (Sep. 22, 1998), available at

Figure 4

Allocation of Soft Dollar Resources in U.S.



Source: Greenwich Associates, Greenwich Report, at 3 (Q2 2015).

C. Prior Economic Studies into the Impact of Soft Dollars

Soft dollar payments have been the subject of a reasonably large body of economic analysis, both theoretical and empirical. For interested readers, this literature is summarized in Appendix A. In brief, at least as we review the literature, the weight of the analysis – both theoretical and empirical – suggests that soft dollar payments do not improve investor returns and likely detract from those returns. The literature is, however, mixed, even on the empirical side. In part this is because analysts lack good data on the amount of soft dollars incurred for different investors. As this particular point bears on some of the analysis that follows, it is important to consider why soft dollar payments are so difficult for scholars (or investors) to assess.

While a few investment advisers have chosen to make more granular disclosures – more on that below – SEC requirements dictate that mutual funds in the United States must disclose only the total brokerage paid in each annual period (that is, the sum of

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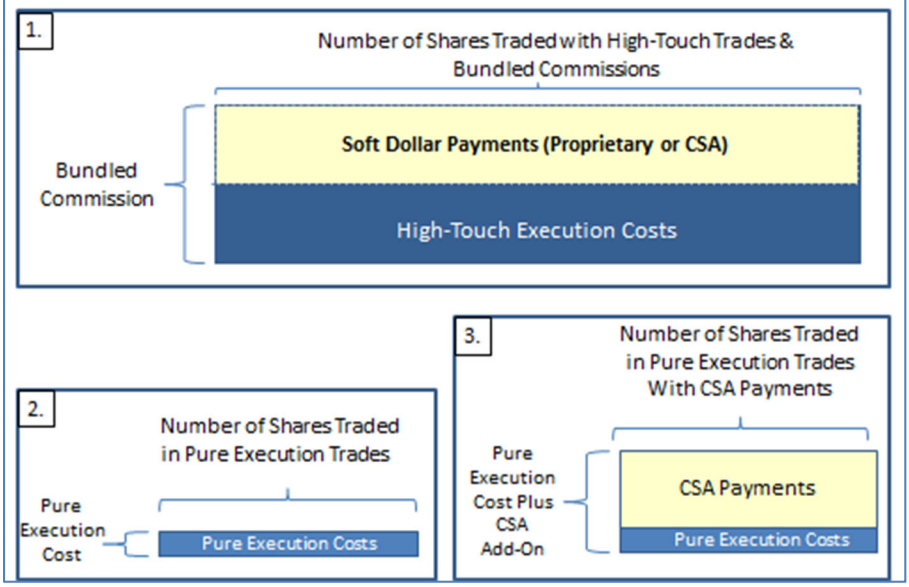
http://www.sec.gov/news/studies/softdolr.htm). The discrepancy between the 1996 Greenwich Associates report and the 1998 Securities and Exchange Commission report is likely due to the fact that soft dollars can be spent on services other than research. In 2002, soft-dollar expenditures were pegged at roughly half of the $12.7 billion in brokerage commissions paid by institutional portfolios. Stephen M. Horan & D. Bruce Johnsen, *Can Third-Party Payments Benefit the Principal? The Case of Soft Dollar Brokerage*, 28 INT'L REV. LAW & ECON. 56, 57 (2008) (internal citation omitted). In 2003, however, Greenwich Associates reported that soft dollars accounted for only 11 percent of total institutional commission payments. Again, the discrepancy is likely due to "imprecision over how to define soft dollars. The former figure probably includes the value of all research and other services bundled into institutional commission payments, while the latter probably refers exclusively to research supplied by independent research vendors." *Id*. at 57 n. 5. In 2008, Greenwich Associates estimated that total commissions for institutional investors come out to roughly $12 billion. John C. Bogle, *The End of "Soft Dollars"?*, 65 FIN. ANALYSTS J. 48, 51 (2009). One-tenth of that yields $1.2 billion and half of that yields $6 billion. That range is large, but anything in that range would suggest the soft dollar market is of significant size.

execution costs and soft dollar payments). This information is located in a portion of mutual fund registration statements called a Statement of Additional Information (SAI), which is rarely distributed to investors, but available online for interested parties and academic investigators. Mutual funds also often disclose the amount of total commissions paid to securities firms that offer research services, but since most commissions are paid to securities firms of that sort, the two measures – total commissions versus total commissions paid to firms also offering research services – typically do not to differ greatly. In other words, most investment advisers in the United States do not disclose how much of their investors' funds are allocated to soft dollars.

Conceptually, total commissions can be deconstructed into three buckets, all of which are illustrated in Figure 5. The first and traditionally largest bucket represents bundled commissions paid on "high-touch" trades with soft dollar payments and equals

Figure 5

Three Components of Total Commissions



the product of the average cost of those bundled commissions times the number of shares traded. High-touch trades are the most expensive trades because they typically involve human interactions and potentially capital commitments on the part of sell-side firms. On these transactions, the soft dollar research can come in the form of proprietary research from the securities firm itself or from third party research providers, typically financed through CSAs. The second bucket consists of commissions paid for pure execution services (such as dark pools or algorithmic trading platforms) and equals the product of the number of shares traded in this manner times the average cost of pure execution trades of the firm in question. This component of total commissions represents pure execution costs and has no element of soft dollars. The third and final bucket also consists of trades made through pure execution services, but with a soft dollar component added on, typically as a payment into CSAs. Total commissions for this bucket equals the product of the number of shares traded times the average combined cost of pure execution plus CSA payments. Because pure execution services are largely

automated in today's markets, these services are much cheaper than high-touch execution services and so soft dollar payments are typically a much higher percentage of total commissions in this third category than those payments are in the first category.

SEC disclosure forms do not require detailed information about which trades actually incurred soft dollar payments. But, even if one could identify (or estimate) the amount of commissions allocated to soft dollar trades, it still would not be obvious how much of those commissions represent soft dollar payments. One could, of course, simply assume that some industry average governs in all cases – such as the Greenwich Associates estimate of 60 percent discussed above. But that's an estimate of soft dollar costs to total overall commissions, not the percent of soft dollars on commissions involving soft dollars (necessarily a higher number). In addition, as explained below,[11] investment advisers have had quite different policies with respect to soft dollar practices. Some do not use soft dollars to purchase market data; others refrain from using soft dollars to gain corporate access. Still others decline to use soft dollars for index and quantitatively managed portfolios. Finally, some have internal limits on soft dollar commissions as a percentage of total commissions that differ substantially from Greenwich Associates reported averages. So, there is a good deal of heterogeneity of soft dollar payments.[12]

In short, in the case of most U.S. mutual funds it is very difficult for anyone to estimate the actual amount of soft dollar payments incurred. (Other kinds of asset managers typically have even less demanding disclosure obligations.) This dilemma complicates the interpretation of empirical work on the impact of soft dollar payments, just as it inhibits the ability of investors to assess firm practices in the area. As will be discussed below, it also impedes the ability of firms and their regulators to assess compliance with best execution standards.

II. THE EVOLUTION OF THE U.S. LAW OF SOFT DOLLARS

A. Pre-1975 Litigation Finding Fiduciary Duties with Respect to Excess Commissions

We now turn to the legal structure governing the payment of soft dollars in the United States. This is a story that stretches back to the late 1960s when long-standing restrictions on trading practices of New York Stock Exchange (NYSE) member firms were starting to break down. Before 1975, commissions for executing securities trades on the NYSE were fixed in the sense that securities firms were supposed to charge a uniform commission to all customers regardless of size. As the marginal cost for executing these orders was small, large orders placed by institutional investors in this era were extremely lucrative for brokers. Although NYSE rules for the most part did not

[11] See infra __-__.

[12] In addition, even if one could estimate the exact amount of soft dollar payments, there are problems of endogeneity for using such an estimate in econometric work. One of the concerns about soft dollar payments is that they create incentives for investment advisers to increase portfolio turnover (because soft dollar commissions have traditionally been tacked onto most trades). So, soft dollar payments may detract from fund performance both directly as a charge on net returns and indirectly as an incentive to increase portfolio turnaround with attendant execution and market impact costs.

permit customers to receive rebates or discounts on orders, they did permit NYSE members to share commissions with each other. Thus, if multiple brokers were involved in a transaction, NYSE rules would allow an executing broker to "give-up" part of the commission to other brokers who provided different functions in relation to the trade.

During the 1960s, the financial services industry began to explore whether they might exploit the exception for "give-ups" to utilize excess brokerage commissions in other ways, that is, not to compensate securities firms that actually were involved in a transaction but rather to compensate securities firms that engaged in some other activity. While the legal rules governing this innovation were murky and contested, mutual fund sponsors, like Fidelity, eventually began to use give-ups to reward brokerage firms that distributed large volumes of Fidelity's mutual fund shares.[13] In effect, Fidelity was exploiting the excessive value generated by trading in the portfolio securities of their mutual funds to promote distribution of mutual fund shares. (Additional distribution of mutual fund shares benefited Fidelity because its management fees on mutual funds were directly tied to the size of their mutual funds.) These practices led to a spate of lawsuits and a series of legal decisions that collectively offered a number of different perspectives on the subject, but all raised serious questions whether such practices violated fiduciary duties designed to safeguard investors in mutual funds.[14]

The most far-reaching of these cases, *Moses v. Burgin*,[15] found a fund adviser – in fact, Fidelity – at fault for not establishing a broker affiliate to recapture give-ups and apply the value of the give-ups to the benefit of mutual fund investors. (In essence, the *Moses* decision suggested that excess brokerage might belong to mutual fund investors and could not be used for the benefit of Fidelity in promoting the sale of mutual fund shares.) Fidelity had argued that even if recapture were an option, "the directors still had a right to choose between recapture of the give-ups for Fund's direct benefit, and awarding them to brokers [who sold its shares to the public] for its indirect benefit."[16] The First Circuit saw things differently and stated that "if recovery was freely available to the Fund, the directors had no such choice."[17] According to the court, establishing a broker subsidiary (if possible) was mandated under the Fund's charter. Accordingly, the Fund should receive full asset value for sales of its shares. On the First Circuit's reasoning, if the Fund rewards a selling broker with give-ups that it had a right to recapture for itself, then "the net income Fund receives from the process of selling a share is less than asset value."[18] In addition to this violation, the First Circuit also found fault with management's disclosure. Because there was a conflict of interest with respect to management's decision of whether it would set up a broker affiliate, it was "under a duty of full disclosure of information to…unaffiliated directors."[19] The court saw management's disclosure as inadequate.[20]

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[13] Eric D. Roiter, Disentangling Mutual Fund Governance from Corporate Governance, 6 HARV. BUS. L. REV. 1, 36 (2016).
[14] See generally Michael S. Barr, Howell E. Jackson, Margaret E. Tahyar, Financial Regulation: Law and Policy ch. 10.2 (2d ed. 2018) (hereinafter "Barr-Jackson-Tahyar").
[15] 445 F.2d 369 (1st Cir. 1971).
[16] *Id.* at 374.
[17] *Id*.
[18] Id.
[19] *Id.* at 376.
[20] *Id.* at 384.

In a pair of analogous legal challenges, the Second Circuit agreed with *Moses* that full disclosure of give-up practices was required, but disagreed that an adviser was affirmatively required to set up a broker affiliate if feasible and recapture that value for the mutual fund itself. First, in *Fogel v. Chestnutt*,[21] authored by Judge Henry Friendly, the Second Circuit disagreed with *Moses*' analysis of whether a Fund's charter could require it to establish a broker subsidiary. Judge Friendly thought that *Moses'* argument "pressed too far."[22] As he saw it, the purpose of charter provisions of the sort identified in the *Moses* case are designed to prevent share dilution, and the failure to recapture commissions does not cause such dilution.[23] However, he agreed that there is a duty of full disclosure where there is even a possible conflict of interest between an adviser's interests and the interests of the Fund. As in *Moses*, Judge Friendly ruled that management did not effectively communicate the necessary information to the independent Fund directors.[24] In the second ruling, *Tannenbaum v. Zeller*,[25] the Second Circuit found that the adviser had sufficiently disclosed its conflict of interest to the independent directors.[26] In contrast to the careful disclosure management had provided independent directors, however, the court found that it did not provide sufficient disclosures in its proxy statements to shareholders. In the court's view, such disclosure "was necessary in order for the shareholders to make an informed decision on whether or not to approve the new management contracts or whether or not to continue or renegotiate the current ones."[27]

In the aftermath of these judicial decisions from the 1970s, the legal status of excess brokerage commissions remained ill-defined. Clearly, there was a judicial consensus that some fiduciary duties constrained the authority of investment managers to make use of excess commissions in any manner they saw fit. But whether that duty required excessive brokerage commissions to be returned to the mutual funds and other investment accounts from whose trading the commissions were derived (a quasi-property view suggested in portions of the *Moses* decision) or whether the duty simply required full disclosure to independent directors and fund investors (as held in the Second Circuit decisions) remained an open question. But a question that was very much on the minds of the financial services industry and Congress as major reforms to federal securities laws were being taken up at the time.

B. The End of Fixed Commissions on the NYSE and the Adoption of Section 28(e)

In 1975, a seismic shift occurred in the structure of U.S. capital markets. To begin with, the era of fixed commissions on the NYSE came to an end, following several years of policy debates and anti-trust litigation. That change was presaged by a decision of

[21] 533 F.2d 731 (2d Cir. 1975)
[22] *Id.* at 744-45.
[23] *Id.* at 745.
[24] *Id.* at 749.
[25] 552 F.2d 402 (2d Cir. 1977).
[26] *Id.* at 427.
[27] *Id.* at 433.

the SEC in 1973[28], but was codified in the enactment of major reforms of federal securities laws in 1975.[29] Beyond endorsing the elimination of fixed commissions on the NYSE, the reforms of 1975 called for the creation of a national market system whereby linkages would be created between the NYSE and other trading venues. Under the reforms, the SEC was encouraged to take a number of additional actions designed to reduce the monopoly power of the NYSE and set up a more competitive system of trading markets in the United States.

At the time, the reforms of 1975 were hotly contested. Proponents of reform largely focused on the anti-competitive aspects of NYSE rules, including fixed commissions, which were portrayed as a fairly heavy-handed form of price-fixing within a dominant cartel. (At the time, the NYSE also prohibited member firms from trading NYSE listed securities in other venues, thereby further inhibiting cross-exchange competition.) But there were also strong defenders of the NYSE's traditional practices. While some of these defenses sound in special pleading, especially for smaller NYSE firms unlikely to survive in more competitive markets, other defenses were based on a variety of arguments stressing the public goods that the pre-1975 NYSE trading restrictions produced. For our purposes, the most notable of these public goods were research services. Before 1975, "[m]any brokerage firms had developed special research services as a means of competing for institutional business, and some money managers and brokers were concerned that, with the advent of competitive rates, [they] might be seen to be violating fiduciary duties if they caused a beneficiary's account to be charged more than the lowest commission available for a particular transaction and that that development would jeopardize the availability of research."[30] In other words, fixed commissions facilitated the creation of research services, a public good, and the elimination of fixed commissions arguably would diminish the quantity of that public good.

In response to this concern, Congress passed an amendment to the Securities Exchange Act of 1934 (the 1934 Act). In a new section 28(e), Congress provided that fiduciaries would not be deemed to breach their fiduciary duty under state or federal law "solely by reason of his having caused the account to pay a member of an exchange, broker, or dealer an amount of *commission* for effecting a securities transaction in excess of the amount of commission another member of an exchange, broker, or dealer would have charged for effecting that transaction, if [the fiduciary] *determined in good faith* that such amount of commission *was reasonable in relation to the value of the brokerage and research services provided* by such [person] . . . viewed in terms of either that particular transaction or his overall responsibilities with respect to the accounts as to which he exercises investment discretion."[31] In order for an "excess" commission to meet this safe harbor, it must among other things be paid to acquire a "brokerage and research service." This term is defined in section 28(e)(3) as either (A) "furnish[ing]

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[28] In September 1973, the SEC announced that it would eliminate fixed commissions in May 1975. See Jason Zweig, *The Day Wall Street Changed*, WALL STREET J. (Apr. 30, 2015, 10:35 AM), http://blogs.wsj.com/moneybeat/2015/04/30/the-day-that-changed-wall-street-forever.

[29] [Add cite to 1975 Act.] See generally BARR-JACKSON-TAHYAR, *supra* __, ch 4.4.

[30] Interpretations of Section 28(e) of the Securities Exchange Act of 1934; Use of Commission Payments by Fiduciaries, S.E.C. Release No. 12251 at 1, 1976 WL 185942 (Mar. 24, 1976) [hereinafter SEC 1976 Guidance].

[31] 15 U.S.C. § 78bb(e)(1) (2012) (emphases added).

advice . . . as to the value of securities, the *advisability of investing* in . . . securities, and the availability of securities," (B) "furnish[ing] *analyses and reports* concerning issues, industries, securities, economic factors and trends, portfolio strategy, and the performance of accounts," or (C) "effect[ing] securities transactions and perform[ing] functions incidental thereto . . . or required in connection therewith [by SEC or SRO rules]."[32] The section further provides that the SEC and other appropriate regulatory authorities (presumably FINRA, but possibly other agencies) can prescribe "such disclosures of [investment managers'] policies and practices with respect to commissions . . . at such times and in such manner . . . as necessary or appropriate in the public interest or for the protection of investors."[33]

The design of section 28(e) is noteworthy in several respects. First, it is structured as a safe harbor. The provision does not affirmatively authorize investment advisers to use excess commissions to purchase research services; rather it provides these firms a defense to any claims that such behavior violated a fiduciary duty. While the provision does provide that either the federal government or a state could override that safe harbor by "expressly provid[ing] to the contrary by a law enacted by the Congress or any State subsequent to the date of enactment of the Securities Acts Amendments of 1975,"[34] no such overrides have been enacted (at least as far as we know). While even experienced practitioners will occasionally speak in terms of "violating section 28(e)," non-compliance with the provision's requirements is more accurately characterized as losing safe harbor protections and becoming subject to the pre-1975 case law of *Moses v. Burgin* and related Second Circuit decisions. In practice, U.S. firms strive mightily to organize all of their soft dollar arrangements to comply with section 28(e), as legal duties outside of the safe harbor remain murky and fraught with peril.

Another noteworthy feature of section 28(e) is the breadth of its protections. In determining both good faith and reasonableness of value, investment managers can take into consideration not just the benefits to the client from whose account excessive commissions are generated, but also a wide range of additional clients: "his overall responsibilities with respect to the accounts as to which he exercises investment discretion." So, section 28(e) does not demand that an investment manager demonstrate the value of research services to particular clients whose portfolios may have generated the commissions supporting those services, but can take into account the benefits of those research services to other clients, even those whose accounts may not have generated any soft dollars in a particular period of time or, for that matter, ever. While this expansive scope may strike one as problematic from the perspective of investor protections, it makes more sense when one recognizes that section 28(e) was adopted in response to concerns back in 1975 that the elimination of fixed commission might decimate research with respect to U.S. equity markets with potentially deleterious repercussions for the entire economy.

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[32] *Id.* § 78bb(e)(3) (emphases added).
[33] *Id.* § 78bb(e)(2).
[34] *Id.* § 78bb(e)(1).

C. The SEC's Uneasy Relationship with the Section 28(e) Safe Harbor over the Decades

The complete story of how the SEC's interpretation of section 28(e) has evolved over the decades since 1975 is long and circuitous. It has also been told well in several previous articles.[35] Rather than repeat a full history of the evolution of SEC reviews, we focus on a handful of thematic elements in this history, a number of which align with concerns that seem to have motivated recent efforts of the E.U. and U.K. to address similar problems.

a. An Initial Hard Line on the Scope of Eligible Research

The SEC first interpreted the section 28(e) safe harbor in 1976 and initially took a fairly hard line. In this early release, the SEC took the position that section 28(e) does not cover products and services that are "readily and customarily available and offered to the general public on a commercial basis," citing as examples of impermissible items newspapers, computer facilities and software, and office furniture.[36] While the release was relatively cryptic as to its reasoning, the assumption seems to have been that safe harbor relief was primarily intended to cover the sort of proprietary research services that full service brokerage houses traditionally provided their brokerage customers and did not offer to the general public for cash payments.

In its early statements on section 28(e), the SEC also addressed (albeit somewhat cryptically) the requirement that commission costs must be reasonable "in relation to the value of the brokerage and research services provided by such member."[37] This provision could be interpreted to mean that brokers could not purchase outside research that will be given to the client (third-party research), as the research would not be provided by the executing broker. The 1976 release raised questions about the general propriety of third-party research, while simultaneously acknowledging that such research might be allowed in some circumstances.[38] In subsequent interpretations a few years later, the SEC clarified that it did not believe that section 28(e) applies "where the broker was merely used as an alternative means of paying obligations incurred by the fiduciary in its direct dealings with the third party,"[39] apparently pushing – at least for a time – third-party research beyond the scope of section 28(e).

b. A Hasty Retreat in the 1980s

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[35] See, e.g., Robert C. Pozen, *Money Managers and Securities Research*, 51 N.Y.U. L. Rev. 923 (1976); Clifford J. Alexander et al., *Problems of Fiduciaries under the Securities Laws*, 20 REAL PROP., PROB. & TR. J. 503 (1985); Lee B. Burgunder & Karl O. Hartmann, *Soft Dollars and Section 28(e) of the Securities Exchange Act: A 1985 Perspective*, 24 AM. BUS. L.J. 140 (1986); *Developments in Banking and Financial Law*, 25 ANN. REV. BANKING & FIN. L. 1 184 - 95 (2006); John A. Haslem, *Issues in Mutual Fund Soft-Dollar Trades*, J. INDEX INVESTING, Fall 2011, 76; Gerald T. Lins & Thomas P. Lemke*: Soft Dollars and Other Trading Activities* (2016).
[36] *SEC 1976 Guidance*, *supra* note **Error! Bookmark not defined.**, at 2.
[37] 15 U.S.C. § 78bb(e)(1) (2012).
[38] See SEC 1976 Guidance, supra note __, at 2.
[39] In the Matter of Nat'l Ass'n of Secs. Dealers, Exchange Act Release No. 17371, at 12 n.54 (Dec. 12, 1980).

In response to prodding from the financial services industry, the SEC revisited its initial interpretations of section 28(e) in 1986. At that point, the Commission concluded that its previous standard (readily commercially available) was "difficult to apply and unduly restrictive in some circumstances, and that uncertainty about the standard may have impeded money managers from obtaining, for commission dollars, goods and services they believe are important to the making of investment decisions."[40] The SEC thus withdrew this standard[41] and created a new one: "the controlling principle to be used to determine whether something is research is whether it provides lawful and appropriate assistance to the money manager in the performance of his investment decision-making responsibilities."[42] At the same time, however, the SEC emphasized that section 28(e) requires the money manager to make a good faith determination about the service's value, and that the burden of showing that the commission paid is reasonable in relation to the service's value rests with the money manager.[43] The SEC also provided guidance on "mixed-use" products and services — those products and services that "may serve other functions that are not related to the making of investment decisions." [44] In its 1986 guidance, the Commission noted that mixed-use products or services may include items like hardware, quotation equipment, or invitations to research seminars.[45] Because a money manager has the incentive to charge the fund the entire cost of the product or service, it "should make a reasonable allocation of the cost of the product according to its use." [46] Finally, the SEC in 1986 endorsed the use of soft dollar payments for products and services produced by third parties, as many of the examples discussed in that release (like hardware) would rarely come from securities firms themselves. Overall, the 1986 release substantially widened the scope of permissible soft dollar services.

c. Policing the Scope of Permissible Research Services

For the next decade, the industry's use of soft dollar payments evolved without much direct input from federal authorities, but towards the end of the 1990s, the Commission returned to the subject with a particular attention to the kinds of research services that were being supported with these payments. In 1998, the SEC's Office of Compliance, Inspections, and Examinations (OCIE) conducted an inspection and produced a report on soft dollar practices of broker-dealers, investment advisers, and mutual funds.[47] Overall, the inspection report found that virtually all advisers used soft dollar accounts.[48] The report also found that 35% of broker-dealers and 28% of advisers "provided and received non-research products and services in soft dollar arrangements,"

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[40] SEC 1986 Guidance, supra note __, at 2.
[41] Id.
[42] *Id.* at 4 (emphasis added).
[43] *Id*.
[44] *Id*.
[45] Id.
[46] Id.
[47] *See* Office of Compliance, Inspections and Examinations, U.S. Secs. & Exch. Comm'n, Inspection Report on the Soft Dollar Practices of Broker-Dealers, Investment Advisers and Mutual Funds (1998), https://www.sec.gov/news/studies/softdolr.htm [hereinafter *OCIE 1998 Inspection Report*].
[48] Id.

that is, were using soft dollars to purchase impermissible goods and services.[49] The report found that "virtually all" of these advisers did not provide meaningful disclosure of such practices. Examples of impermissible soft-dollar payments included office rent and equipment, cell phone services and personal expenses, employee salaries, advisory client referrals, marketing expenses, legal expenses, hotel and rental car costs, personal travel, entertainment, limousine use, interior design, and construction expenses.[50] Even for products that fall within the safe harbor, the report found inadequate disclosure. While nearly all advisers made some disclosure of soft dollar practices, most "used boilerplate language to disclose that their receipt of research products and services was a factor that they considered when selecting brokers."[51] Only half provided meaningful detail about the products, research, and services received. The report also found that advisers were not allocating the purchase price of mixed-use items between "hard" and soft dollars and could not justify their allocation. Many advisers believed that any allocation, regardless of how (un)realistic, would suffice.[52] The report made several suggestions, including:

- Further guidance on soft-dollar practices, specifically regarding (a) electronically provided research and (b) items that facilitate trade execution;
- Better recordkeeping for soft-dollar transactions;
- Modifying Form ADV to require more meaningful disclosure; and
- Publishing the report to "encourage advisers and broker-dealers to strengthen their internal control procedures regarding soft dollar activities."[53]

The SEC did not immediately act on this report, but in 2005, the SEC proposed new guidance concerning the scope of the safe harbor,[54] and in 2006 it finalized these guidelines.[55] These revised guidelines provided a four-step framework to analyze soft-dollar practices. First, the money manager must determine whether the product or service qualifies as eligible research or brokerage under section 28(e)(3). Under this section, research services include advice, analyses, and reports.[56] The guidelines stressed that "an important common element among [these three] is that each reflects substantive content — that is, the expression of reasoning or knowledge."[57] The guidelines further clarified that items that do not reflect this reasoning or knowledge, "including products with inherently tangible or physical attributes (such as telephone lines or office furniture), are not eligible as research under the safe harbor."[58] However, market research data — including "pre-trade or post-trade analytics, software, and other products that depend on market information to generate market research"[59] — may be

[49] *Id.*
[50] Id.
[51] *Id*.
[52] Id.
[53] Id.
[54] Commission Guidance Regarding Client Commission Practices Under Section 28(e) of the Securities Exchange Act of 1934, 70 Fed. Reg. 61,700 (Oct. 25, 2005).
[55] Commission Guidance Regarding Client Commission Practices Under Section 28(e) of the Securities Exchange Act of 1934, 71 Fed. Reg. 41,978 (July 24, 2006) [hereinafter *SEC 2006 Guidance*].
[56] *See* 15 U.S.C. § 78bb(e)(3)(A)–(B) (2012)).
[57] *SEC 2006 Guidance*, 71 Fed. Reg. at 41,985.
[58] *Id.* at 41,987.
[59] Id.

eligible. The SEC believed that "[b]ecause market data contain aggregations of information on a current basis related to the subject matter identified in the statute," it should qualify as a "report." [60] Interestingly, the guidelines stated that mass-marketed publications do not qualify as research.[61]

The guidelines also clarified the meaning of "brokerage service." A brokerage service "relate[s] to the execution of securities transactions."[62] The guidelines adopted a temporal standard to determine when a service can "relate" to a securities transaction: a permissible relationship can "begin when an order is transmitted to a broker-dealer and end at the conclusion of clearance and settlement of the transaction."[63] Under this temporal standard, communications services related to the execution, as well as trading software used to route orders and software providing algorithmic trading strategies, among other things, are eligible for the safe harbor.[64] On the other hand, some hardware is not eligible "because [it is] not sufficiently related to order execution."[65]

Second, regardless of whether the item qualifies as research or a brokerage service, the item must "provid[e] lawful and appropriate assistance to the money manager in performing his investment decision-making responsibilities."[66] Research that would otherwise be appropriate under the safe harbor may not be purchased for a purpose other than research — for example, use in a marketing brochure. Third, the SEC reaffirmed the approach it took in 1986 regarding mixed-use items — money managers must make a good-faith determination regarding the item's allocation.[67] Fourth, the money manager must make a good-faith determination "that the commissions paid are reasonable in relation to the value of the brokerage and research services received."[68] The guidelines provide little guidance about what exactly this determination must entail.

The 2006 guidelines again reaffirmed that soft dollars generated with a broker could be used to purchase third-party research. As the guidelines stated, "third-party research arrangements can benefit advised accounts by providing greater breadth and depth of research."[69] In order to resolve any doubt, the guidelines expressly stated that "the safe harbor encompasses third-party research and proprietary research on equal terms."[70]

d. Facilitating Commission Sharing Arrangements (CSAs)

While the SEC initially expressed reservations about using soft dollar payments for third-party research, it came around to an almost diametrically opposite view of the subject in the 2000s. Rather than prohibiting the use of third-party research, the Commission came to view third-party research as an important form of competition for

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[60] *Id.* at 41,986.
[61] *See id.* at 41,986.
[62] *See id.* at 41,989.
[63] See id.
[64] See id.
[65] Id.
[66] Id.
[67] *See id*. at 41,990–91.
[68] *Id.* at 41,991.
[69] *Id.* at 41,992.
[70] Id.

proprietary research provided by full service securities firms. This change can be most clearly seen in the SEC's endorsement of commission sharing arrangements (CSAs), a mechanism described briefly above which is critical to the routinization of financial third-party research through soft dollar arrangements. The former U.K. Financial Services Authority ("FSA") actually anticipated and influenced this development through its endorsement of commission sharing arrangements in a series of consultative papers in 2005, which viewed CSAs as "hav[ing] the potential to form part of the market-led solution to deliver greater transparency and accountability in the use of dealing commissions and potentially better payment and pricing mechanisms."[71] These arrangements were thought by the FSA to be advantageous to investors because they allowed for more transparency in the separation of execution and research components of commissions. In addition, the arrangements "promote competition between those who produce investment research by removing the regulatory distinction between research services provided by brokers along with execution (i.e., bundled services) and research services provided by third parties." [72]

The next year, SEC adopted a release taking a similar view of CSAs, emphasizing the extent to which these arrangements enhanced transparency: "[W]here a broker-dealer also offers its research for an unbundled price, that price should inform the money manager of its market value and help the manager make its good faith determination."[73] The SEC shortly thereafter issued a several no-action letters that cleared the way for the U.S. financial services industry to establish CSAs of their own. For example, in a pair of letters related to registration requirements for broker-dealers under the 1934 Act, the SEC staff accepted the position that research vendors who received soft dollar commissions via a CSA would not be required to be registered as broker-dealers with the SEC under section 15(a) of the 1934 Act.[74] In a subsequent letter, the staff offered limited relief from the Investment Advisers Act of 1940 (Advisers Act) for research providers that received soft dollar payments through a CSA.[75]As will be discussed in more detail below, full-service broker-dealers offering proprietary research for soft dollar payments did not require special relief from the Advisers Act because the Act contains an exemption for such entities, as long as the advice they offer is "solely incidental to the conduct of . . . business as a broker and dealer and [they] receive no special compensation therefor."[76] SEC relief from the Advisers Act is, however, important for firms that are not offering execution services directly as their compensation for research services cannot so easily be categorized as "incidental" to

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[71] *See* Financial Services Authority, Bundled Brokerage and Soft Commission Arrangements: Proposed Rules at 15 (Consultative Paper No. 05/5) (Mar. 2005).

[72] *See* Financial Services Authority, Bundled Brokerage and Soft Commission Arrangements: Feedback on CP005/5 and Final Rules at 4 (Policy Statement No. 0595) (June 2005).

[73] SEC Rel. No. 34-54165, 71 Fed. Reg. 41978, 62991-92 (July 24, 2006). The release continued: "Third-party research arrangements can benefit advised accounts by providing greater breadth and depth of research. First, these arrangements can provide money managers with the ability to choose from a broad array of independent research products and services. Second, the manager can use third-party arrangements to obtain specialized research that is particularly beneficial to the advised accounts. We believe that the safe harbor encompasses third-party research and proprietary research on equal terms." *Id.*

[74] *See* https://www.sec.gov/divisions/marketreg/mr-noaction/2007/goldmansachs011707-15a.pdf; https://www.sec.gov/divisions/marketreg/mr-noaction/2007/capis041307-15a.htm.

[75] https://www.sec.gov/divisions/investment/noaction/2010/bnyconvergex092110.pdf.

[76] Section 202(a)(11) of the Investment Advisers Act of 1040, 15 U.S.C. § 80b-2(a)(11) (2017).

traditional brokerage activity. These rulings led to a proliferation of CSAs in the United States. Whereas fewer than a quarter of asset managers were reported to have CSAs in place in 2007, nearly eighty percent of those managers had such accounts in place by 2016.[77] According to industry sources, some 36 percent of all equity commissions were paid into CSAs by 2016, indicating that a quite substantial share of U.S. soft dollar payments are now being allocated through these arrangements.[78]

e. More Explicit Disclosures of Soft Dollar Payments

A further reform effort that the SEC has toyed with over the years has concerned proposals to break out the cost of research services from bundled commissions to give investors a clearer sense of the magnitude of these payments. In theory, one could deconstruct bundled commissions into an execution component and a research component, and then require the components to be reported separately. (That would mean pulling out only the rectangles marked as soft dollars or CSAs in Figure 5, above.) In the extreme, the SEC could even require one or both components to be added into disclosures of total expenses that investors and third-party services monitor closely. The SEC has never gone that far in its policy proposals, but it has made some tentative initiatives in this direction.

For example, in 1994, the SEC proposed adding a new rule to the Investment Advisers Act of 1940 (Advisers Act) — rule 204-4. This rule would have required any investment adviser registered under the Advisers Act that receives soft dollars "to deliver an annual report to clients on its use of client brokerage."[79] This report would have included a table that disclosed information about the 20 brokers to which the adviser directed the most client commissions and the top three brokers who only provided execution services (in other words, brokers from whom the adviser does not receive soft dollars) to which the adviser directed the most client commission.[80] For each of these brokers, the table would disclose "the aggregate amount of commissions directed by the adviser to the broker; the percentage of the adviser's discretionary brokerage commissions that this represents; the average commission rate (in cents per share) paid to the broker; and a description of the soft dollar services provided by the broker." These disclosures were intended to help investors determine whether advisers are using soft dollars to benefit the client and whether execution-only alternatives were available.[81] The SEC eventually withdrew this proposal.[82]

f. A Trial Balloon for Repeal

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[77] *See* Integrity Research Associates, MiFID II Research Solution Providers 23 (April 2017) (citing research of Greenwich Associates).
[78] Id.
[79] Disclosure by Investment Advisers Regarding Soft Dollar Practices, 60 Fed. Reg. 9750, 9753 (Feb. 21, 1995) (to be codified at 17 C.F.R. pts. 275, & 279.).
[80] Id.
[81] See id.
[82] See Eric W. Pinciss, Sunlight is Still the Best Disinfectant: Why the Federal Securities Laws Should Prohibit Soft Dollar Arrangements in the Mutual Fund Industry, 23 ANN. REV. BANKING & FIN. L. 863, 868–69 (2004). [add explanation of reasons.]

Finally, in its most recent foray into soft dollars, SEC leadership briefly raised the possibility of repealing the section 28(e) safe harbor altogether. In 2007, then-SEC Chair Christopher Cox wrote to Senator Chris Dodd, then Chairman of the Senate Committee on Banking, Housing and Urban Affairs, urging the Committee "to consider legislation that would repeal or substantially revise" section 28(e).[83]According to Chairman Cox, soft-dollar arrangements are troubling because they "involve an inherent conflict of interest between a money manager and its clients," may contribute to higher brokerage costs, and are difficult to administer. Chairman Cox argued that although section 28(e) "may have been" justified in 1975, the securities industry has long since adjusted to the reality of competitive commissions.[84] In the face of intense industry opposition, no action was taken in the Senate, and no further SEC action on section 28(e) has been advanced since 2006. While some groups – such as the Mutual Funds Director Forum – favored the repeal of 28(e), opposition to its repeal was strong, stressing (among other factors) the difficulty of unbundling commissions and pricing research separately.[85]

D. U.S. Soft Dollar Practices on the Eve of MiFID II

Within the boundaries set by section 28(e) and interpreted by the SEC, disclosure is the primary mechanism for policing soft dollar payments in the United States. This section summarizes the scope of legal requirements and also provides an overview of how the financial services industry complies with those requirements in practice. It also provides additional granularity into variation in actual soft dollar practices of investment advisers in the United States, granularity that is typically missing from SEC disclosures. The section closes with a short discussion of additional information that might be, but is not required to be, disclosed with respect to execution costs, with a brief explanation as to why this information would be useful both to investors and financial service professionals seeking to comply with duties of best execution.

a. Limited Disclosure Requirements under SEC Rules

SEC disclosures with respect to soft dollar practices appear in two separate places. The first is Form ADV, which is a registration form for investment advisers, including advisers of mutual funds and other investment companies.[86] All investment advisers

[83] Letter from Christopher Cox, Chairman, U.S. Sec. & Exch. Comm'n, to Sen. Christopher Dodd, at 1 (May 17, 2007), https://www.scribd.com/doc/13752510/Cox-Requests-Legislative-Action.
[84] *Id.* at 2.
[85] *See*, e.g., Report of the NASD Mutual Fund Task Force on Soft Dollars and Portfolio Transaction Costs 10 (Nov. 11, 2004) (avail. at https://www.finra.org/file/report-mutual-fund-task-force-soft-dollars-and-portfolio-transaction-costs-november-11-2004) ("A majority of the Task Force . . . strongly objected to a recommendation that the SEC require an adviser to provide a fund board with an estimate of the dollar amount of Section 28(e)-eligible proprietary research and brokerage services obtained. These Task Force members believe that it is illusory to conclude that such estimates will add value to a board's oversight."). [Add MFDF position paper.]
[86] Form ADV is filed by investment advisers when they register with the SEC. Because of the potential for conflicts of interest in soft dollar practices, "the [SEC] has long maintained that an adviser must disclose soft dollar arrangements to clients." SEC 1986 Guidance, *supra* note __, at 6 [confirm quote]. Section 28(e)(2) gives the SEC the authority to create rules regulating disclosure that are "necessary or appropriate in the public interest or for the protection of investors." 15 U.S.C. § 78bb(e)(2) (2012). The SEC originally proposed to adopt rules regulating disclosure of soft dollars in 1976, but it later determined to incorporate more comprehensive disclosures "within the registration process for investment advisers under the Advisers Act." SEC 1986 Guidance,

must keep a current version of Form ADV on file with the SEC or state authorities. In addition, investment companies, including mutual funds, have their own registration requirements with the SEC, including the requirement to file a Statement of Additional Information (SAI) with the SEC and update the form on a periodic basis.[87]

For the most part, the disclosure requirements for these forms are quite open-ended and general. Typically, the disclosures include some boiler-plate language indicating that brokerage commissions may include research services "to the extent permitted by section 28(e) under the Securities Exchange Act of 1934," thereby incorporating all permissible forms of research services allowed by the SEC without imposing any additional restraints on the investment adviser. In addition, the disclosures commonly include several innocuously drafted sentences about the use of those research services and the potential for conflicts of interest. Here, for example, is some illustrative

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supra note __, at 7. Item 12 of Part II of Form ADV "requires disclosure to clients regarding investment or brokerage discretion." *Id*. "Because brokerage policies and practices vary greatly," Interpretive Release Concerning the Scope of Section 28(e) of the Securities Exchange Act of 1934 and Related Matters, Release No. 34-23170 (Apr. 28, 1986), https://www.sec.gov/rules/interp/34-23170.pdf. The SEC advises that disclosure under Item 12 should "provide sufficient information to enable a client or potential client to understand such policies and practices." SEC 1986 Guidance, *supra* note__, at 7. Specifically, Item 12 requires disclosure regarding (1) whether the adviser or related person can, without client consent, determine "the broker-dealer to be used in a securities transaction or the commission rate to be paid," or (2) whether the adviser or related person "suggests broker-dealers to clients." *Id*. If so, the adviser must disclose the factors it considers in selecting broker-dealers and the factors it considers in determining whether the commissions charged are reasonable. *Id*. Finally, the adviser must disclose the types of products received for soft dollars in the last year. *Id.*

[87] Mutual funds must make disclosures under Form N-1A. Part A governs information required in a prospectus, and Part B governs the Statement of Additional Information (SAI). Mutual funds are not required to include execution commissions or soft-dollar payments in their expense ratio or fee table in the summary prospectus. However, mutual funds must include some information in their SAI. Item 21, titled "Brokerage Allocation and Other Practices," requires mutual funds to describe how "transactions in portfolio securities are effected," which must include "a general statement about brokerage commissions, markups, and markdowns on principal transactions and the aggregate amount of any brokerage commissions paid by the Fund during its three most recent fiscal years." Form N-1A Item 21(a), https://www.sec.gov/about/forms/formn-1a.pdf. This disclosure must include whether the Fund will consider either the receipt of research services or brokerage services (or products not research nor brokerage services) in selecting brokers, and if so, the nature of those products or services. *Id.* Item 21 Instructions 1–2. Additionally, the fund must state "whether persons acting on the Fund's behalf are authorized to pay a broker a higher brokerage commission than another broker might have charged for the same transaction in recognition of the value of (a) brokerage or (b) research services provided by the broker." *Id.* Item 21 Instruction 3. Further, if the research provided will be used across multiple funds, the fund's disclosure must include the policies by which the adviser will distribute the costs across the various funds. *Id.* Instruction 4.

In addition, mutual funds must make ongoing disclosures under Form N-SAR (semi-annual report). Item 20 of this disclosure requires funds to list the ten brokers that received the largest amount of brokerage commissions by virtue of the fund's portfolio transactions and requires the fund to list the size of the gross commissions. Form N-SAR, Item 20, https://www.sec.gov/about/forms/formn-sar.pdf. Funds must also disclose the total brokerage commissions paid during the reporting period. Id. Item 21. Finally, funds must disclose what factors affected their choice of dealers, including:

- Sales of the fund's shares
- Receipt of investment research and statistical information
- Receipt of quotations for portfolio valuations
- Ability to execute portfolio transactions to obtain best price and execution
- Receipt of telephone line and wire services
- Broker or dealer which is an affiliated person
- Arrangement to return or credit part of all of commissions or profits to the fund or another party.

text recommended for inclusion in Form ADVs by the author of a volume known as "The Investment Advisor's Compliance Guide":

In selecting or recommending a broker-dealer, we will consider the value of research and additional brokerage products and services a broker-dealer has provided or will provide to our clients and our firm. Receipt of these additional brokerage products and services are considered to have been paid for with 'soft dollars.' Because such services could be considered to provide a benefit to our firm, we may have a conflict of interest in directing your brokerage business. We could receive benefits by selecting a particular broker-dealer to execute your transactions, and the transaction compensation charged by that broker-dealer might not be the lowest compensation we might otherwise be able to negotiate. The products and services we receive from broker-dealers will generally be used in servicing all of our clients' accounts. Our use of these products and services will not be limited to the accounts that paid commissions to the broker-dealer for such products and services. In addition, we may not allocate soft dollar benefits to your accounts proportionately to the soft dollar credits the accounts generate. As part of our fiduciary duties to you, we endeavor at all times to put your interests first. You should be aware that the receipt of economic benefits by our firm is considered to create a conflict of interest.[88]

This example is a bit more fulsome than many Form ADV disclosures in that it does quite clearly outline the extent of potential conflicts, though one might reasonably wonder how many retail investors actually understand the practices that are being described or the extent to which soft dollar payments diminish investors' returns and inflate adviser profitability.

The SAIs of investment companies are required to include similar summaries of applicable soft dollar practices but also are supposed to include a certain amount of information about the actual amount of brokerage commissions. In particular, the SEC instructions provide: "Describe how transactions in portfolio securities are effected, including a general statement about brokerage commissions, markups, and markdowns on principal transactions and the aggregate amount of any brokerage commissions paid by the Fund during its three most recent fiscal years." [89] For the most part, mutual funds in the United States comply with this requirement by including boiler-plate language similar to that described above with respect to Form ADV. In addition, many firms disclose aggregate data regarding the amount of total commissions paid to securities firms providing soft dollar services (but without indicating what share of those payments constituted soft dollar payments and what share represented execution services). Failure to break out soft dollar payments is one of the reasons (mentioned earlier) that academic studies face such great difficulties studying the economic effects of soft dollar practices. This reporting practice also keeps hidden from investors potentially valuable information that the mutual funds and their advisers have in their possession. All soft dollar payments made into CSAs – currently more than a third of soft dollar payments in the United States – have explicit prices, and even bundled commissions are typically based on negotiated allocations between research components and execution components (e.g., 2 cents per share trade for each component). In other words, mutual

[88] Les Abromovitz, Client Commission Practices and Soft Dollars (Jan. 1. 2012) (avail. at http://www.thinkadvisor.com/2012/01/01/client-commission-practices-and-soft-dollars).
[89] SEC Form N1A, Item 21(a) (Brokerage Transactions) (avail. at https://www.sec.gov/files/formn-1a.pdf).

funds companies could easily report their soft dollar costs, but they choose not to (and are not required to under current SEC rules).

In rare instances, however, U.S. investment companies have provided more information about soft dollar payments than SEC rules require. Fidelity is one such firm, and we draw from Fidelity's disclosures to show what U.S. disclosures typically contain

Table 1
Deconstruction of Total Commissions and Soft Dollar Payments for Selected Fidelity Funds: 2015

	Total Commissions Paid for Execution and Soft Dollars	Commissions Paid to Firms Providing Soft Dollars Services	Commissions Allocated to Soft Dollar Services	Soft Dollars as % of Total Commissions (Col. 3/Col.1)	Soft Dollars as % of Commissions Paid to Soft Dollar Firms (Col. 3/Col. 2)	Portfolio Turnover in 2015	Average Net Assets ($ millions) (est.)	Basis Cost of Soft Dollar Payments (Col.3/Col.7 & adjusted)
	(Col. 1)	*(Col. 2)*	*(Col. 3)*	*(Col. 4)*	*(Col. 5)*	*(Col. 6)*	*(Col. 7)*	*(Col. 8)*
Fidelity Dividend Growth Fund	$ 4,272,475	$ 3,252,211	$ 1,361,089	32%	42%	64%	$ 6,478	2.1
Fidelity Low Priced Stock Fund	$ 6,641,317	$ 4,336,677	$ 1,892,318	28%	44%	9%	$ 30,363	0.6
Fidelity OTC Portfolio	$ 5,608,088	$ 3,779,004	$ 1,545,485	28%	41%	66%	$ 8,790	1.8

Sources: SEC Filings.

and what they omit. Table 1 summarizes the disclosures with respect to trading commissions for three Fidelity funds in 2015. All three of the mutual funds covered are actively managed equity funds, but with different investment strategies. The first two columns show the figures most U.S. mutual funds present in their SAIs: total trading commissions paid to all securities firms and then total commissions to firms that provide soft dollar payments. As explained earlier – and to the consternation of academic investigators – these two figures offer little guidance as to the actual level of soft dollar payments made from these funds. Fidelity, however, distinguishes itself by providing the numbers in the third column: commissions allocated to soft dollars. With this additional figure, one can calculate that soft dollars as a percentage of total commissions ranged from 28% to 32% on these three funds, less than half of Greenwich Associates' estimate of industry averages. Viewed as a percentage of commissions paid to brokers providing soft dollar services, the figures for the Fidelity Funds rise to a fairly uniform 41% to 44%, suggesting a fairly consistent markup on execution costs for these trades, which is how soft dollars are typically financed in the United States. With a precise figure for soft dollar payments broken out, one can also determine the exact impact of these payments on investor returns: ranging from a low of 0.6 basis points of the Low Priced Stock Fund and a high of 2.1 basis – that is, 3.5 times more – for the Dividend Growth Fund. The reason for this differential impact is that the Dividend Growth Fund has a much higher turnover rate than the Low Priced Stock Fund, and the manner in which Fidelity allocates soft dollar costs penalizes investors in funds with high turnover.

b. Variations in Practice: Obscure but Real

Also not readily apparent from SEC filings is the variation with which investment managers in the United States police their own soft dollar practices. While this

information is not widely available, in 2016, Integrity Research Associates LLC conducted a survey of thirty-three leading sponsors of mutual funds, including a review of SEC filings and interviews with firm executives. While a majority of the firms (19 of 32) reported using soft dollars without any restrictions beyond legal requirements, 13 firms did restrict their usage, as summarized in Table 2.

The most common restriction that these firms imposed was on the use of market data; six firms reported that they do not use soft dollars to purchase these services. A fair number of these firms also eschewed using soft dollars for corporate access (5). Two did not use soft dollars to purchase research from third parties, and one limited the use of all soft dollars on U.K. accounts. A final firm kept in place the SEC's original prohibition on using soft dollars to purchase commercially available services through 2016, and then switched over to a budgeting process similar to an approach being encouraged in European markets under MiFID II. Finally, four firms had various kinds of caps on soft dollar payments, although one of those caps (Firm BB) was at 75 percent

Table 2

Summary of Survey of Soft Dollar Practices of 32 Major US Financial Services Firms

(not Including 19 firms that reported no restrictions beyond legal requirements)

	Uses Soft Dollars	*Restrictions Beyond Those Imposed by Legal Requirements*
Firm A	Yes	Does not use for corporate access
Firm C	Yes	Does not use for market data
Firm D	Yes	Some limits for market data
Firm J	Yes	Does not use for market data or corporate access
Firm R	Yes	Does not use for market data or corporate access
Firm S	Yes	Soft dollars limited to 30 percent of total research
Firm U	Yes	Does not use for corporate access or third party research
Firm W	Yes	No soft dollars on UK accounts
Firm Y	Yes	Does not use for third-party research
Firm Z	Yes	Does no use for market data, index data, or software
Firm BB	Yes	Limits soft dollars to 75 percent of total equity commissions
Firm DD	Yes	Does not sure for corporate access; thirty-party research capped at Greenwich Associates ratios (presumably 60 percent of equity commissions)
Firm GG -- Pre 2017	Yes	Did not use for market data or for any research services commercially available for cash (SEC standard of 1976)
Firm GG-- 2017	Yes	Board-imposed soft dollar budget allocated to funds based on net assets; overages reimbursed by investment adviser; does not use for market data; does not use for index funds or funds employing quantitative trading strategies

Sources: SEC filings and 2016 survey conducted by Integrity Research Associates LLC

of total equity commissions, well above Greenwich Associates' estimate of industry averages (roughly 60 percent).

It is somewhat puzzling why firms with restrictions on their soft dollar practices do not do a better job publicizing these restrictions to shareholders. Conceivably, the firms regard the information as too technical to be useful. But another possibility is concern over legal liability if the firms fail to comply completely with these restrictions. As the SAI is part of a registration statements filed under the Securities Act of 1933, disclosures in the SAI are subject to stringent liability rules under section 11 of that Act.

c. Absence of Granularity with Respect to Types of Execution or Market Impacts

A final point to make about current SEC disclosure requirements with respect to commissions on trades is the lack of transparency with respect to types of trades and market impact. High-touch trades – that is, trades handled on an individualized basis by securities firms, sometimes with the commitment of firm capital – are much more expensive than electronic trading platforms or crossing-systems.[90] Even if all mutual funds followed Fidelity's lead and broke out soft dollar costs from execution costs, it would be difficult for analysts to assess whether the execution-portion of the funds' trading commissions were high or low without having some information about the kinds of trades involved. And, of course, a full assessment of trading quality would also require data on market impact, which is typically a more significant cost to investors than trading commissions. While pulling out soft dollar costs would improve visibility into trading quality, it would not be a complete solution.

III. E.U. AND U.K. DEVELOPMENTS LEADING UP TO MIFID II

We now turn to the evolving system of regulating excess commissions in E.U. capital markets. The path to reform in recent years has been circuitous and entails numerous interactions with E.U. institutions and regulatory authorities in other member states, topics which challenge local experts and are taken up only with trepidation by those less familiar with the subtleties of E.U. processes. Appendix C offers a more detailed review of key legislative and consultative materials, spanning E.U., ESMA, and local British authorities (initially the FSA and more recently the Financial Conduct Authority (FCA)). We begin with a very brief summary of the process of reform and then focus in on the state of play in the U.K. in the spring of 2017. In Part IV, we discuss post-MiFID II developments in European markets.

Following British efforts to study and then reform soft dollar practices in the first decade of the millennium, E.U. authorities committed, in principle, to an unbundling of commissions with the formal adoption of MiFID II in 2014.[91] The precise manner in

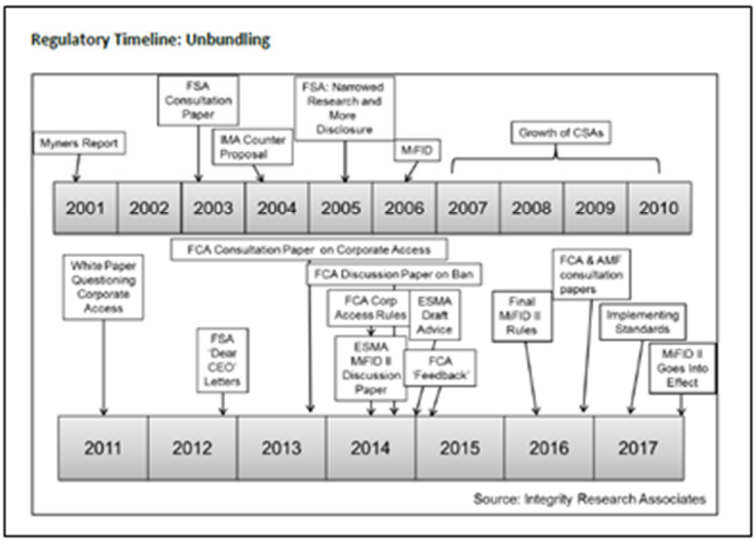
[90] The volume of electronic trading is clearly on the rise, both in the United States and European markets. Just a few years ago, Greenwich Associates estimated that electronic trading in the European market would rival high-touch trading by 2017. *See* Greenwich Associates, European Equities Under Attack from All Angles (Q4 2014) (projecting high-touch trading to fall to 46% of European equity trading volume, with electronic trading rising to 36% and portfolio trades up to 18%).

[91] At the time these reform proposals were initiated, the percentage of commissions allocated to soft dollar payments in the U.K. was roughly comparable to the use of those payments in the United States today, albeit in a somewhat smaller market. According to a recent article in the Financial Times, "[o]f the £3bn spent in 2012 by U.K. investment managers on dealing commissions; roughly £1.5bn was notionally kicked back in the form of investment reports."

which this commitment is to be implemented has been the subject of intense and extensive consultations and negotiations over the past few years, with disagreements among member states on many key issues, such as the extent to which *de minimus* research services would be exempt from the prohibition, and the extent to which

Figure 6

Regulatory Timeline



traditional CSAs would be permissible under the new regime. In general, British authorities – most prominently, the FCA – have pushed for stricter implementation of the MiFID II standards, whereas the French have advocated more lax readings. To a degree, ESMA has refereed these disputes through the issuances of technical guidance and interpretive rulings, siding on balance with FCA positions, but leaving some wiggle room on particularly contentious points to appease continental sensibilities. This approach has left the FCA in a posture that might be viewed by some as slightly gold-plating MiFID II's requirements, which are set to go into effect in January of 2018.[92]

Figure 6 – drawn from a recent report of Integrity Research – offers a graphic timeline of the implementation process, highlighting the very substantial role that the FCA and other British organizations have played in the unbundling of commissions embraced in MiFID II. While practices in continental markets also remain of interest – and perhaps increasing interest as Brexit is implemented – the balance of our analysis

See FT View, Brokers Should Bin the Bundles of Research Notes, Financial Times (Feb. 3, 2016), available at https://www.ft.com/content/871f77f6-ca75-11e5-be0b-b7ece4e953a0. In other words, approximately 50 percent of commissions were in the form of research related soft dollars. The proportion would be even higher if it included non-research related soft dollars. An industry survey for overall EU equity commissions suggests that soft dollar payment run in the range of 53 to 57 percent of total commissions in the 2012 to 2014 period. See Greenwich Associates, European Equities Under Attack from All Angles (Q4 2014).

[92] For an excellent recent overview of the process with a focus on U.K. implementation, see Integrity Research Associates, MiFID II Research Solution Providers (April 2017) [hereinafter "Integrity Research Study"].

focuses on U.K. implementation of commissions unbundling, as that is where the new rules have received the most attention, and it is also the market with greatest implications for U.S. practices.

A. The State of Play as of 2017

To offer a more textured picture of emerging practices in the U.K., we will shortly present an extended extract from a recent FCA study summarizing the law of the land in late 2016. But first, a word on the precise manner in which British authorities contemplate that bundled commissions will be eliminated in the U.K. capital markets. In brief, starting in January 2018, British asset managers could pay for previously bundled research services directly, that is, with hard dollars. In local parlance, this approach is sometimes described as moving the costs to the asset managers' own profit and loss statements and amounts to the internalization of research costs previously financed through excessive commissions and taken from client funds. Alternatively, asset managers could establish a ring-fenced Research Payment Account (RPA) to cover research costs. The RPA can be funded from client resources, but the charge must be clearly disclosed to clients in advance and on a periodic basis. According to industry sources, regulatory authorities have approved two mechanisms for funding RPAs, one as a charge imposed alongside execution commissions and a second as an assessment on client funds (presumably as a certain number of basis points on net assets).[93] In the U.K., this new regime will apply both to managed accounts and collective investment vehicles, the British analog to U.S. mutual funds.[94]

Late in 2016, the FCA released an interim draft of a market study of the U.K. asset management sector with a succinct assessment of issues related to the unbundling of commissions in that market. As the assessment captures a number of interesting aspects of official U.K. views on the matter, as well as some useful historical perspective, we reproduce an extended extract here:

> 7.56 Historically, research costs have been incurred as a trading cost (as research and execution costs were bundled into dealing commissions). Research costs should not need to be driven by the frequency of trading and bundling research with other trading costs does not necessarily encourage firms to set a research budget and control the costs. Since 2006, the FCA and its predecessor the Financial Services Authority (FSA) have therefore sought to move asset management firms towards unbundling the payment for research from execution costs, and to spend clients' money on research as if it were their own in order to create stronger incentives to control these research costs. The recent history is as follows:
>
> • In 2011-12, the FSA tested how well firms had implemented 2006 rule changes on the use of dealing commissions to pay for research. It found that

[93] *See id.* at __-__.

[94] Apparently, the French and other continental authorities have not yet chosen to extend this aspect of MiFID II to collective vehicles. *Id.*

many of the firms had made little progress and that some asset managers were breaching FCA rules around the use of dealing commissions.

• Following the review, the FCA consulted on changes to rules in 2013-14, chiefly tightening the evidential provisions on what can constitute 'substantive research', explicitly requiring mixed use assessments for payment for research bundling with market data services and prohibiting payments for corporate access. The new rules were introduced in June 2014.

• In 2014, the FCA conducted further work into how firms are controlling research costs, which concluded that there were still too few firms applying sufficient rigour in assessing the value of the research services they use. Supervision of 25 further firms took place in 2016.

• In recent months, a small number of asset management firms have announced a move to full unbundling ahead of MiFID II, which will introduce a requirement that execution fees are separated from research fees, whereby the firm will either need to meet the cost of broker research from its own resources or present the client with a separate, upfront research charge which must be based on a fixed research budget, not linked to transaction volumes or values. This research charge and subsequent payments to providers must be controlled through a 'research payment account', which is subject to specific oversight and disclosure requirements.

7.57 Our data on dealing commissions incurred by active equity assets suggests firms have improved control over research costs. We hold data on the dealing commissions paid by 31 mainstream and alternative asset and wealth management firms of various sizes, collected as part of our market based supervision of firms' use of dealing commissions. The data suggest that research and execution spending has decreased since 2012.

7.58 Our 2016 supervisory work found that the majority of firms sampled now set budgets for research spending. Once budgets have been met, firms often switch to trading on execution only rates, suggesting that setting budgets goes some way to firms unbundling research and commission spends. A minority of firms were meeting a greater portion of the research budget from their own resources than in previous years. Some firms could also demonstrate they had negotiated better commission rates for their funds.

7.59 However, we have concluded that most firms are still not applying the same rigour and oversight to the way in which they spend clients' research budgets as when they spend their own money. Research budgets, where set, are still predominantly linked to historical research consumption levels which were primarily driven by transaction volumes, as opposed to a robust assessment of the value of the substantive research received. Practices for evidencing, challenging and validating how they use substantive research remain varied. We remain concerned that a minority of firms are continuing to use client dealing commissions for services which we have explicitly deemed ineligible for payment from commissions, such as corporate access

and market data services. Where this has been found we are addressing this on a firm specific basis and where deemed appropriate, a referral for investigation will be considered.

7.60 As well as considering how firms control the cost of research, we have also looked at how firms are approaching their best execution requirements. We published the Best Execution and Payment for Order Flow thematic review in July 2014. Asset managers were not directly involved in the initial sample of firms but we have since conducted multi-firm supervisory work as a follow-up to this thematic review to find out how asset managers have implemented the changes we called for.

7.61 Within this multi-firm review of best execution arrangements in asset management firms, we visited eight firms in 2016. The firms which demonstrated a decrease in the cost of equity trading in recent years showed an increase in the use of low cost trading venues such as broker-supplied algorithms, direct market access and the increasing use of crossing networks for appropriate trades. These firms had an effective governance process in place that challenged the overall costs of execution, renegotiated commissions on an annual basis and could identify trends that helped improve future execution and fed into a high level trading strategy. All the firms we visited had management information that allowed them to accurately view equity execution costs. However, the way these data were used was mixed and not all firms could demonstrate the improvements they had made to their execution process based on these data.

7.62 All the firms we visited had management information that allowed them to accurately view equity execution costs. However, the way these data were used was mixed and not all firms could demonstrate the improvements they had made to their execution process based on these data.[95]

B. An American Perspective on E.U. and U.K. Reforms

From an American perspective, recent developments in the E.U. and U.K. are illuminating, both for the insights they offer into the dynamics of soft dollar practices in a market that has been extensively studied and for the opportunities they suggest for potential reforms in the United States, a topic to which we return in some detail in Part IV. In this section, we identify a series of notable aspects of these developments.

a. The Intensity of Regulatory Attention

Starting with the obvious, the intensity of regulatory attention to soft dollar practices in Europe and the U.K. is striking. (Recall Figure 6 above.) Especially when one considers that the SEC has basically absented itself from soft dollar reforms since 2006, European initiatives are remarkable. Also noteworthy is the effort the FSA, and later the

[95] FCA, Asset Management Market Study: Interim Report ¶¶ 7.55 to 7.62 (Nov. 2016) (MS15/2.2).

FCA, have taken to ensure that CSAs actually do improve the transparency of soft dollar payments. While the SEC early on sanctioned these arrangements as paying lip service to transparency, the Commission staff has never made any effort to improve disclosure of those payments for investors. Rather, CSAs have simply served as a convenient accounting convention to allow for greater use of third-party research in the United States.

b. Refinement of Permissible Research Services

In a similar vein, one cannot help but be struck by the stringency with which British authorities have attempted in recent years to narrow the scope of permissible research services (or, in local parlance, substantive research). Most prominent here has been the attention focused on corporate access in U.K. markets, which was identified as potentially problematic in 2011-2012 and then prohibited in 2014. (See ¶ 7.56.) While the zeal with which research services are policed seems to have varied across E.U. member states,[96] it is noteworthy that a service which now accounts for roughly a quarter of all U.S. soft dollar payments is prohibited in one of the world's leading capital markets.[97]

c. Chronic Recidivism and Laxity of Oversight

Another telling (though perhaps not surprising) theme of British oversight of soft dollar practices is the extent to which industry participants have had difficulty bringing themselves into compliance with applicable standards. In all of their supervisory reviews, British authorities report a degree of non-compliance even with the relatively straightforward ban on corporate access adopted in 2014. Apparently, British industry representatives, like the American executive quoted in the title of this article, have difficulty limiting the extent to which they pass research (and other) costs on to their clients. Even when operating within permissible boundaries, the FCA reports, asset managers do not oversee research spending with the same rigor that they police their own expenses. (See ¶ 7.56.)

d. Benefits of Explicit Budgeting

Another lesson to be drawn from the early days of unbundling in the U.K. concerns the benefits gained from explicit budgeting of research costs. To the extent that firms choose to fund RPAs from client resources (rather than pay for research with hard dollars), the U.K. will now be requiring asset managers to establish and abide by research budgets for individual client accounts. That discipline has, according to the FCA, already begun to have some impact on the quality of research spending, lowering costs and increasing discipline. (See ¶ 7.57.) While progress has not been uniform (See

[96] France, apparently, has chosen to exempt certain kinds of corporate access as *de minimus*. *See id.* at __.
[97] *See supra* at __ - __.

¶ 7.59), there is a possibility that the increase of salience for soft dollar expenses will have a salutary effect over time.

e. Capacity to Combine Budgets as Add-ons to Execution Costs

Experience in the U.K. also demonstrates that it is possible to decouple soft dollar research charges from execution commissions. As discussed earlier and demonstrated by data extracted from Fidelity SAIs, U.S. investment advisers typically assess soft dollar charges alongside execution costs at some fixed rate (like fifty or sixty percent of total commission). Within the U.K., firms are now moving away from this execution-based approach and allocating RPA charges on some other basis (presumably based on a pre-established research budget for each client account). (See ¶ 7.58.) In addition to devising technical mechanisms to allocate soft dollar expenses in this manner, British firms have also been able to transition to execution-only transactions once research budgets are exhausted. For those interested in soft dollar reforms in the United States, this is a critical insight, because it demonstrates that it is now possible, at least in U.K. markets, to operate in a trading environment with no bundling of commissions.

f. The Relationship Between Unbundling and Best Execution

A further insight to be derived from British experience is the relationship between the unbundling of commissions and execution practices. In addition to getting a clearer line of sight into research costs, unbundling clarifies actual execution costs, prompting (according to the FCA) greater use of more cost-effective algorithmic trading, crossing transactions, and other low-priced alternatives to high-touch trading platforms. (See ¶ 7.61.) As the final paragraphs of the excerpt suggest (See ¶¶ 7.60 -62.), unbundling is thus intimately connected to the ability of investment managers to ensure compliance with their duties of best execution, a subject to which we will return in Part IV in the U.S. context.

g. Assessment of Negative Effects from Unbundling

A final illuminating feature of the debate over unbundling of commissions in European markets are concerns of potentially negative impacts of unbundling on the broader economy. As has been true over the years in U.S. debates about soft dollars, one of the defenses of the bundled commissions is that it encourages the production of research, which is said to be a form of public good. (The assumption underlying this claim is that investors, if fully informed of the cost of research services, will choose to purchase a suboptimal amount of research, but that if securities firms are allowed to obscure the cost of that service, the firms will choose to invest the excessive commissions in socially beneficial research.) Industry advocates have raised precisely this point in the debate over MiFID II, especially with respect to small and medium sized enterprises (SMEs). In addressing this concern, British authorities have concluded that larger securities firms invest relatively little into research on SMEs and that most of the

research on these firms comes from smaller, independent research shops that would likely benefit from fully unbundled commissions. While British experts do not completely discount claims that overall research budgets may decline under the new MiFID II regime, their analyses suggest that the impact will be modest and that oversetting positive effects will be more significant.[98]

Another possible negative externality of unbundling is the potential impact on smaller asset managers in the U.K. Under this view – expressed by some industry experts[99] – bundled commissions somehow profit smaller asset managers a form of cross-subsidy that will disappear if commissions are unbundled. If true, this impact could cause these firms either to go out of business or to move to other markets that permit bundled commissions. Again, this concern is reminiscent of earlier U.S. debates, especially back in the 1970s when the elimination of fixed NYSE commission was thought to threaten the viability of smaller securities firms – a fear that was actually realized after 1975. While outside studies commissioned by U.K. authorities have taken different views on this issue,[100] more recent FCA statements on the topic question whether bundled commission actually do cross-subsidize smaller asset managers, suggesting that unbundling may not have any effect on industry structure.[101]

C. Looming Cross-Border Challenges

As the preceding sections suggest, the unbundling of commissions in the U.K. and throughout the E.U. represents a divergence in international practice. As such, it poses complicated and as yet unresolved issues of cross-border coordination. This is a matter to which financial firms are currently expending considerable attention, which is likely to intensify in the coming months as the January 2018 implementation date of MiFID II looms closer. These concerns are relevant both for U.K. based firms executing trades for accounts governed by MiFID II in the United States, as well as for U.S. based firms seeking to maintain consistent practices for global operations.

a. Application of the Investment Adviser Act

The most prominent cross-border challenge arises under the U.S. Investment Advisers Act, which establishes a separate regulatory regime for those giving investment

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[98] See, e.g., FCA CP16/29 (2016) (consultation on MiFID II) (unbundling would make the research market more competitive by making it easier for independent research providers to compete); FCA DP14/3, at 59 (2014) (noting that mandating hard dollars will make it easier for independent research shops to compete, and highlighting that many of the large investment banks focus on breadth of coverage and do not currently cover mid- or small-cap stocks in the first place.).

[99] [Reference to come.]

[100] Compare FSA CP176 (2003) ("While smaller fund managers would be hit harder, '[an OXERA study from 2001 found] that this effect is likely to be offset by other, beneficial factors and that the incremental costs of this effect should be very low.'"); with FSA CP05/5, at 12 (2005) (a subsequent Deloitte study estimated that £53b–£142b in assets would leave the U.K. market. £24b–£80b of this would be from medium-sized managers, and £28b–£62b of this would be from small fund managers).

[101] FCA DP14/3, at 39 (2014).

advice for compensation. As is explained in greater detail in the margins,[102] this regime does not apply to securities firms who give advice in connection to providing execution services so long as the firm does not receive any "special compensation" for giving the advice. Based on reasons that are neither entirely coherent nor especially well-articulated, the SEC has previously taken the position that neither bundled commissions (even though they contain separate pricing for execution and research components) nor CSA programs rise to the level of special compensation for purposes of the Adviser Act.[103] So, broker-dealers in the United States that receive soft dollar payments for research services remain exempt from the Advisers Act.

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[102] Under the Advisers Act, an investment adviser is "any person who, for compensation, engages in the business of advising others . . . as to the value of securities or as to the advisability of investing in, purchasing, or selling securities, or who, for compensation and as part of a regular business, issues or promulgates analyses or reports concerning securities." 15 U.S.C. §80b-2(a)(11) (2012). However, this definition goes on to list a number of exceptions. Important here, brokers and dealers are not subject to the Advisers Act if they provide investment advice that is (1) "solely incidental to the conduct of [their] business as a broker or dealer," and (2) they "receive[] no special compensation therefor." *Id*. §80b-2(a)(11)(C). In Financial Planning Association v. SEC, 482 F.3d 481 (D.C. Cir. 2007), the D.C. Circuit struck down an SEC rule that allowed broker-dealers to offer asset-based and fixed-fee accounts. *See id*. at 483. Under the proposed rule, broker-dealers who received special compensation would not be deemed an investment adviser if "any advice provided is solely incidental to brokerage services provided on a customer's account and . . . specific disclosure is made to the customer." *See id.* at 485. Although the SEC had authority under the Advisers Act to exempt individuals who did not fall within the intent of the listed exceptions to the Advisers Act, *see* 15 U.S.C. §80b-2(a)(11)(F), the D.C. Circuit ruled that the SEC exceeded its authority under Chevron because Congress had already spoken to the issue when it exempted "any broker or dealer" whose advisory services are incidental and who receives no special compensation. *See* Fin. Planning Ass'n, 482 F.3d at 487.

[103] The plain language of the Advisers Act might suggest that broker-dealers who provide research under soft-dollar arrangements, especially when commissions are unbundled, must register as an investment adviser because they receive "special compensation" for their reports. Under Financial Planning, the SEC would not even have the rulemaking authority to provide broker-dealers an exemption. While section 28(e) could coexist with the Advisers Act in a world where (1) commissions are "bundled" and (2) no third-party research is provided, if either of these two conditions break down it seems hard to escape the conclusion that broker-dealers who provide research under soft-dollar arrangements are not acting as investment advisers. First, if commissions are "unbundled," that is, there is a separate charge for execution and soft-dollar credits, the broker-dealer is receiving "special compensation" for any money spent on research. The second is just a corollary of the first: if soft dollars are used to purchase third-party research, the money the third party receives is "special compensation" for providing research.

Despite these oddities, the SEC has not seriously confronted the issue, and has instead encouraged "innovative" commission arrangements. For example, in its 2006 guidance, the SEC noted the development of CSAs in the United Kingdom, believing that this development and related comments "highlight the considerable variety of arrangements under Section 28(e) that the industry has developed to seek to obtain the benefits that inure to investors from best execution on orders for advised accounts and providing money managers with both third-party and proprietary brokerage and research products and services of value to the advised accounts." 2006 Guidance at 52. Based on this information and the "congressional intent behind Section 28(e), we are revising our interpretation of the safe harbor to address the industry's innovative Section 28(e) arrangements and permit the industry to flexibly structure arrangements that are consistent with the statute and best serve investors." *Id*. Further, in the BNYConvergEx, LLC No-Action Letter (NAL), the SEC provided certain relief for CSAs. See File No. 132-3 (Sept. 21, 2010) [hereinafter NAL], https://www.sec.gov/divisions/investment/noaction/2010/bnyconvergex092110.pdf. In this NAL, ConvergEx was a broker who maintained CSAs with a number of Money Managers. The Money Managers did not receive any research from ConvergEx itself, but instead received research from third parties (Research BDs) that were paid for with CSA credits. These Research BDs were unaffiliated with either the Money Managers or ConvergEx. The SEC focused on whether an advisory relationship was formed between the Research BD and the Money Manager's Managed Accounts. The SEC concluded that "the provision of research services by a Research BD to a Money Manager . . . would not in and of itself establish an investment adviser/client relationship under the Advisers Act between the Research BD and the Money Manager's Managed Accounts." Id. Unfortunately, however, this interpretive release is somewhat limited. First of all, this only focuses on the relationship between the Research BD and the Managed Account — it does not address the relationship between the Research BD and the Money Manager. Further, one assumption underlying this analysis is that "the Managed Account does not

The U.K. regime as it existed in the recent past, based as it was on bundled commissions and CSAs, did not pose a problem under the Advisers Act. However, the arrival of MiFID II would likely pose more difficulties. First, in disallowing bundled commissions, MiFID II explicitly requires the separate pricing of research. Further, payments under MiFID II must be made from the adviser directly or from an RPA, which may be levied alongside execution charges but is immediately transferred to the account of the investment manager (in contrast to CSAs which are held on the books of the broker-dealer or an agent acting on the broker-dealer's behalf). Because the research purchased under MiFID II is required to be kept much further away from execution commissions, it is more difficult to avoid concluding that an entity receiving MiFID II payments is receiving "special compensation" for its research.

Thus, RPAs and even more so direct adviser payments bring with them the real possibility of registration requirements under the Advisers Act. While the paperwork and compliance costs associated with registration are potentially problematic, the primary issues here are regulatory requirements under the Advisers Act. These requirements consist of both an open-ended fiduciary duty for advisers to act in the best interests of their clients, as well as cumbersome disclosure requirements that are especially intrusive (and potentially insurmountable) for securities firms that plan on engaging in principal transactions with the client to whom the advice is given. Industry representatives have expressed concern that application of the Advisers Act in this way could be extremely disruptive,[104] and are currently seeking relief from the SEC. [105]

b. New York State Sales Tax

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have a contractual relationship with the Research BD or any of its affiliated persons . . . with regard to the provision of investment advice to the Money Manager for the benefit of the Managed Account, and does not compensate the Research BD or any of its affiliated persons for investment advice [other than through the CSA]." Given the previous analysis, it seems safe to say the following: Advisers Act issues will not arise under CSAs or unbundled commissions when an adviser uses soft-dollar credits to purchase research from unaffiliated third parties. Additionally, advisers can use bundled commissions to pay for first-party research. The most difficult situation occurs when an adviser uses unbundled commissions to pay for first-party research from a broker. This last situation seems the most analogous to Financial Planning—the "soft dollar" portion of the execution commission is clearly demarcated and looks a lot like "special compensation" for research services.
In some ways this state of affairs is understandable, and in other ways it is completely incoherent. The SEC has the unfortunate task of reconciling two competing policies. First, section 28(e) reflects congressional encouragement of research provided by broker-dealers. In addition, as most forcefully stated by SEC v. Capital Gains Research Bureau, the Advisers Act (1) holds those who provide investment advice to a high standard and (2) replaces caveat emptor with a policy of full disclosure. If Congress is willing to tolerate broker-dealers providing investment advice in limited circumstances, it goes against the purposes of the Advisers Act to allow such advice only when the payment for such advice is opaque—condemning a practice because it is more transparent is nonsensical. Further, the distinction between first-party research and third-party research, which may be a consequence of the ConvergEx NAL, is a distinction that does not find comfort in either section 28(e) or the Advisers Act.

[104] Insert References to Industry letters on this point.

[105] Cite to SIFMA letter. Relief could presumably take a number of different forms. First, the SEC could determine that RPA payments do not constitute special compensation for purposes of the Advisers Act, analogizing to CSAs which are functionally similar. Alternatively, following the ConvergEx letter, the Commission could conclude that even if the Advisers Act is applicable, the client is the investment manager and not the investment account. While not a complete solution, this latter approach might alleviate the most problematic aspects of the Advisers Act. Finally, the FCA could reverse itself and deem U.S.-based CSAs with appropriate safeguards in compliance with MiFID II requirements.

Another less well publicized but potentially important issue concerns New York State Sales Tax. New York imposes a sales tax on the sale of certain kinds of information services. Specifically, under New York Tax Law section 1105(c)(i), "the furnishing of information. . . including the services of collecting, compiling or analyzing information of any kind or nature and furnishing reports thereof to other persons" is taxable.[106] However, "the furnishing of information which is personal or individual in nature and which is not or may not be substantially incorporated in reports furnished to other persons" is exempt.[107] The law in this area is murky, and in the past New York authorities have been fairly lax in imposing sales tax on the research portion of bundled commissions or even CSA-style arrangements. In recent years, however, state authorities have begun to focus on soft dollar payments.[108] While the law here is contested and could well be litigated,[109] were financial services firms to transition either to RPAs where research services are explicitly priced or to direct hard dollar payments, there is a possibility that these research payments would become subject to NY state taxation when made into that jurisdiction.[110]

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[106] New York Tax Law § 1105(c)(i).

[107] *Id*.

[108] *See* Lindsay M. LaCava & Maria P. Eberle, *Information Services: New York Takes a Hard Look at Soft Dollars*, 2013 STATE TAX POLICY EXCHANGE 981, 983, http://files.mwe.com/info/pubs/NY_Takes_a_Hard_Look_at_Soft_Dollars_Part1.pdf ("On audit, department auditors have been making blanket assertions that research services procured through soft dollar arrangements are taxable information services, regardless of the facts of the specific research services at issue.").

[109] According on one practitioner "[a] review of New York case law reveals that the classification of a service as a taxable information service . . . hinges on whether the service provider . . . applies its independent judgment or expertise in the course of performing its services so that what is provided to the customer is the service provider's opinion or advice." *Id.* If it is the opinion or advice that is sought, and not merely the underlying information, the service is not taxable. On the other hand, even if the information is arguably "personal or individual in nature," under the "common database rule" it is still taxable if "the information supplied to the customer includes information culled from a common database of information." Timothy P. Noonan and Joshua K. Lawrence, *The Nuts and Bolts of Sales Taxation of Investment Research*, 2011 STATE TAX POLICY EXCHANGE 795, 796, http://www.hodgsonruss.com/media/publication/185_09_2011%20The%20Nuts%20and%20Bolts%20of%20Sales%20Taxation%20Of%20Investment%20Research.pdf; see also New York State Department of Taxation and Finance, TSB-M-10(7)S, Sales and Compensating Use Tax Treatment of Certain Information Services, at 1, https://www.tax.ny.gov/pdf/memos/sales/m10_7s.pdf ("As a general rule, furnishing information created or generated from a common database, or information that is widely accessible, is a taxable information service.").

[110] In certain respects, the restrictions that the U.K. imposes on substantive research may actually reduce to some extent the likelihood of New York taxation. In the United Kingdom, research must "present the investment with meaningful conclusions based on analysis or manipulation of data." COBS § 11.6.5(1)(d). This requirement actually makes it less likely that the research would be taxable under New York law. New York law is less likely to tax information when it provides the client with actual, personalized advice. The U.S. approach, which allows more generic items like market data and post-trade analytics, is more likely taxable under New York law. For example, in the Matter of the Petition of TeleCheck Services, Inc., 2009 WL3869786 (N.Y. Div. Tax. App. Nov. 5, 2009), the New York Division of Tax appeals whether a check verification service was taxable under section 1105(c)(i). Merchants would submit information regarding a customer who was attempting to pay by check to TeleCheck, who would perform two steps of analysis. First, it would run the submitted data through its in-house database which "contains all check data that [TeleCheck] has amassed over the past seven years." *Id.* at *2. Second, it would run the data through its "risk scoring system" which used 400 different variables. *Id*. Ultimately, "the aim of petitioner's process is to develop accurate predictive risk models and formulae tailored to particular merchants so as to . . . advise its client (the merchant) as to whether or not to accept a customer's check." *Id*. The court ruled the service was not taxable. It argued that "[p]etitioner provides . . . advice in the form of a one-word recommendation . . ., as contrasted with the provision of the information itself or the analysis upon which such recommended opinion or advice was based." *Id*. at *6. Applied here, this analysis shows that when it is the ultimate advice that is sought as opposed the underlying data, which is more strongly an element of research under COBS than it is under SEC regulation, the service is less likely to be taxable.

c. Challenges of Aligning RPAs and CSAs

While the preceding two points are primarily a concern for U.S. broker-dealers seeking to offer research services to asset managers subject to MiFID II's requirements, global asset managers – serving customers in both MiFID II jurisdictions and the United States – face challenges in establishing uniform systems of trading that comply with both British and U.S. standards. In terms of simplicity of operations, an appealing strategy here would be for global asset managers to shift away from traditional bundled commissions and adopt a CSA-only policy that funds both first-party and third-party research (paths 2a and 2b from Figure 2). The difficulties, however, are numerous. To begin with, current CSA programs in the United States do not generally have the budgeting requirements required by the FCA nor do they comply with FCA cost allocation standards, as U.S. CSAs are typically a function of execution costs. In addition, FCA's disclosure requirements – both *ex ante* and *ex post* – are considerably more robust and granular than SEC requirements. Nor do U.S. firms typically collect data on execution costs and practices of the sort the FCA is requiring to monitor best execution duties. So many technical aspects of U.S.-style CSAs fail to meet new British requirements.

A further – and deeper – difference is aligning the usage of research generated by CSAs and RPAs. As noted earlier, U.S. investment advisers have wide latitude to make use of research generated through soft dollars for a range of clients. In evaluating the reasonableness of total commissions, U.S. advisers can take into account benefits to all clients, even those who don't support soft dollar payments. The SEC has been fairly lax in requiring a fair allocation of charges to client accounts supporting soft dollar payments. Under MiFID II and its implementation in the U.K., the FCA has imposed relatively strict standards that RPA budgets are established at the account level in an amount that is proportionate to the benefit to investors in that account. The ability of firms to generate cross-subsidies across client accounts through soft dollar payments under MiFID II is severely limited.[111]

Finally, a less obvious but important difference between CSAs and RPAs concerns ownership structures of the accounts. Under FCA rules, funds allocated to RPAs become ring-fenced property of the investment manager, to be used for the benefit of client accounts or remitted to those accounts if not expended as planned. So, the fees are assets of the investment manager with residual rights vested in client accounts. Excess commissions under CSAs become property of the broker-dealer, under contractual commitment for use upon instruction of the investment manager. This difference is most relevant in the event of insolvency on the part of the broker-dealer – a Lehman-style event – when the assets will be subject to insolvency proceedings even if eventually applied to the benefit of the investment manager. To comply with FCA standards, the contractual structure of U.S. CSAs would need to be radically transformed, and in a manner that would likely exacerbate the Investment Adviser Act issues and New York State taxation issued flagged above.

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[111] Cite to Integrity Study, at __.

d. Risks of Maintaining Divergent Regimes

As the foregoing analysis suggests, U.S. asset managers may well be reluctant to bring their domestic operations in alignment with emerging U.K. standards. There are also, however, substantial risks for U.S. investment managers seeking to maintain legally distinct trading practices based on the geographic location of clients, following one set of rules for clients based in Europe and another for those located in the United States. One complexity is the administrative burden of keeping separate lines of order flows and the loss of economies of scale from not being able to aggregate orders. But perhaps an even larger problem relates to the optics and legal risks of a global investment manager of offering one set of clients in one jurisdiction a more investor-oriented set of protections than the same firm affords similarly situated clients in other markets. One can only imagine the kinds of stories the financial press will run about these differences. And the safe harbor afforded under section 28(e) may not be strong enough to combat the host of legal challenges that could arise once commissions in the U.K. and other major E.U. capital markets are fully unbundled. More on those legal challenges shortly.

D. A Reprieve for U.S. Securities Firms Through No-Action Relief

In October 2017, the SEC intervened to provide clarity for global financial services firms just three months before MiFID II was scheduled to go into effect. In response to entreaties from industry groups and confidential filings made over the course of the preceding few months, the SEC issued a trio of no-action letters.[112] The most prominent of which dealt with the application of the Advisers Act to securities firms that accepted cash payments from clients as a result of MiFID II's requirements.[113] The letter provided that, for the next thirty months, "we will not consider a Broker-Dealer to be an investment adviser" if the broker dealer "provides research services that constitute investment advice under section 202(a)(11) of the Advisers Act to an investment manager that is required under [MiFID II] either directly or by contractual obligation . . . to pay for the research services from its own money, from a separate research payment account . . . funded with its clients' money, or a combination of the two."[114] As a result of this relief, at least until mid-2020, sell-side firms in the United States could accept research payments as specified in the no action letter without being subject to the Advisers Act's heightened requirements. At the same time, SEC staff issued two additional forms of no-action relief: the first allowing the aggregation of orders for MiFID II and non-MiFID II clients,[115] and the second clarifying that U.S. investment

[112] *See* SEC Press Release No. 2017-200 (Oct. 26, 2017) (avail. at https://www.sec.gov/news/press-release/2017-200-0).
[113] *See* SIFMA No-Action No-Action Letter (Oct. 26, 2017) (avail. at http://www.sec.gov/divisions/investment/noaction/2017/sifma-102617-202a.htm) (SIFMA No-Action Letter).
[114] *Id.* (footnotes and citations omitted.)
[115] *See* ICI No-Action Letter (Oct. 26, 2017) (avail. at http://www.sec.gov/divisions/investment/noaction/2017/ici-102617-17d1.htm) (ICI No-Action Letter).

managers would be entitled to rely on the Section 28(e) safe harbor for purchasing research services under the terms of MiFID II authorized research payment accounts.[116] Together these two additional letters resolved technical and operational challenges posed for U.S. securities firms attempting to comply with MiFID II requirements within U.S. markets.

As a result of the SEC's intervention, securities firms in the United States gained the capacity to conform to MiFID II's unbundling requirements for both asset managers paying cash from their own resources as well as those making use of the RPA alternative (which passes along the costs as an explicit charge to clients). But the relief simultaneously created for the first time a bifurcated regulatory structure for the use of excess brokerage commissions in U.S. capital markets. Starting in January 2018, the terms on which securities firms operated with MiFID II clients diverged from those applicable to domestic U.S. clients. While MiFID II clients could, in effect, insist on separating out the payment of research services from execution services, sell-side firms could resist offering such terms to domestic clients on the grounds that the Advisers Act presented insuperable difficulties as they were not covered by the Commission's no-action relief. [117]As will be explored in the next Part, this differential in legal structure has not been well received by many domestic investors and almost immediately led to efforts on the part of some investor groups to seek a level playing field with their European counterparts.

IV. THE ADOPTION OF MIFID II AND ITS AFTERMATH

Since MiFID II's unbundling rules went into effect in January of 2018, considerable industry and official sector attention has gone into documenting, lamenting, and analyzing its impact. In this Part, we unpack a number of overlapping narratives about the consequences of MiFID II, starting first with the European perspective and then turning to impact of MiFID II on U.S. capital market and industry practice. We focus in how the SEC and industry participants have responded to MiFID II. In the final section of the part, we attempt to summarize our own understanding of the consequences of MiFID II, focusing on the economics of commission unbundling and analysis of the emerging empirical literature on MiFID II. We end the section with a summary of original empirical work of our own, which is presented in greater detail in Appendix C and suggests that the impact of MiFID II on small and mediums size enterprises may not be nearly as significant as some critics of the directive suggest.

A. The European Perspective

[Explain that while MiFID II's unbundling rules have had a global impact, their primary effect has been in Europe and so the European consequences of these new requirements is of particular importance. The European perspective has, however,

[116] *See* SIFMA-AMG No-Action Letter (Oct. 27, 2017) (avail. at https://www.sec.gov/divisions/marketreg/mr-noaction/2017/sifma-amg-102617-28e.pdf). (SIFMA-AMG No-Action Letter).

[117] Some analysts have suggested that domestic U.S. investment managers could, literally, fall under the SIFMA No-Action letter if the managers were contractually obligated to do so (for example, under advisory agreements with asset owners). While senior SEC officials have conceded to one of the authors that this interpretation of the letter is literally correct, the Commission staff has not publicly endorsed the position.

evolved over time and remains hotly contested, with potential fissures emerging between the UK's FCA, which championed the unbundling rules, and continental authorities, which have been much less enthusiastic about the reforms. Brexit has only exacerbated these divisions.]

a. A Jump to Hard Dollars and Intense Industry Reactions Early On

[Here we summarize the manner in which MiFID II was adopted in EU, mostly through the payment of hard dollars by investment advisers rather than through RPAs, where costs would be passed on to investors. Explain reason for this somewhat surprising response. Then chronicle the initial and somewhat hysterical market reactions from industry groups. Focusing mostly on UK reactions where the issue is most prominent but also discussing broad European issues.

[Quote for more dire points and explain the drop off estimates and other concerns. Introduce the SME issue as a rallying point for opponents of MiFID II. Also mention the concerns of small asset managers, arguably disadvantaged by the unbundling of commissions and initial competitive responses of larger sell-side firms, offering substantial discounts.

[Also mention the compliance challenges of MiFID II and especially focus on preventing inducements. This has led to a near price-regulation regime and substantial attention to preventing below cost pricing and cross-subsidization. On the positive side, buy side has developed much greater rigor in monitoring and valuing research. And many new vendors and information aggregators have come onto the market to help with MiFID II compliance and research monitoring.]

b. Normalization of Compliance Efforts and Alternative Narratives

[Feature FSA pushback on market complaints and September 2019 reports on early compliance. Include alternative perspectives on narratives regarding benefits to investors and absence of market harms. Plus, slight turning of tide in press etc. Utilize notes and materials from HEJ interviews with FCA officials in October of 2019, including some previously unreported data.

[Also discuss efforts of third party vendors (like Frost) to document the differential between research spends of different asset managers in different asset classes include a chart with illustrative example of data sets. Explain how this kind of information is feeding into discussions in Europe and market practices. Nice illustration of differential effects and significance of soft dollars, especially in less efficient markets, like small cap and emerging markets.]

c. Conflicting Official Sector Responses and the Impact of Brexit

[Explain complexity here and pushback across the EU, uncertainty as of next steps. France and Germany but also Netherlands. Cover French AMF report of January 2020, earlier German statements as well as February 2020 EU consultative paper on

MiFID II and speculation from financial press of the likely directions in the EU post-MiFID II. Contrast continuing firm stand of UK authorities.]

B. The Impact of MiFID II on U.S. Markets

The impact of MiFID II on U.S. markets has been less direct, but nonetheless significant and multifaceted. This section starts with a review of initial industry responses and reaction. It then chronicles the developing of official sector (and particularly SEC) positions with respect to MiFID II's unbundling provisions.

a. Early Industry Responses and Reactions

[Start with the handful of major asset managers that have gone with the MiFID II approach and internalize their soft dollar payments. Explain how this is being done without triggering Adviser Act Issues.]

[Also mention that a number of asset managers have been pushing for unbundling of their own accounts as well, but not always successfully. In addition to general resistance on the part of sell-side firms to unbundle for clients without significant market power (for reasons explained earlier), some sell-side firms have cited concerns about some uses of CSA. On the other hand, at least one major firm, Merrill Lynch, reorganized its research function to locate research services in a separate legal entity, and thereby avoid the most problematic aspects of the Advisers Act (involving trading activity). Explain complexities in the margins.

[Inability to force unbundling of commissions across the board in the United States has led some U.S. investors to seek relief from the SEC, including extension of no-action relief to domestic firms (or at least to clarify that these firms can contract into MiFID II treatment). Note the problem of cross-subsidization of European investors in global contests. Contested, but very bad optics and exacerbates the problem of cross-subsidization implicit in Section 28(3).

[Finally, also mounting dissatisfaction on the sell-side through 2019, as the 2020 expiration date of the Commission's initial no-action letters approach. Fear that they might be forced to go cold turkey after July 2020, potentially having to following Merrill Lynch's reorganization strategy, which would make it difficult to resist a full unbundling of commissions in the United States. In resisting this outcome, sell-side firms strongly emphasized the purported negative impact on SME markets.]

b. Official Sector Caution and Accommodation

[The big issue for the official sector in the US has been the impact of MiFID II unbundling on SMEs. Concerns mentioned as far back as 2017 in Treasury Report (before MiFID II even implemented). Picked up in many statements of Chairman Clayton and senior SEC personnel. Feeds into concerns about the decline of public companies in the U.S., dearth of IPOs, and concerns that the Analysts Settlement of the

early 2000s suppressed the level of research in U.S. markets. In margins, explain these issues and potential relevance or lack thereof.]

[Notwithstanding these concerns, for a while in 2019, SEC seemed to be on track to letting no-action relief expire. This presumably would have forced sell-side in the Merrill Lynch approach although possible to imagine accommodations with respect to the Advisers Act application that would have provided an alternative approach. Apparently, concern amongst the Commission's senior leadership to extend no-action relief as opposed to more formal APA rulemaking. Explain relationship to Trump Administration's Executive Orders and OIRA positions on use of guidance not subject to notice and comment on rulemaking.

[At the same time, pressure from industry groups to address the inequities of bundled commissions for investors. Also the SEC's own Investor AdvisoryAdvisery Committee issued a report in summer of 2019 favoring greater transparency with respect to commissions and research. Report did not specify how exactly this transparency would be required, but also didn't support movement to complete unbundling.

[Given the pace of rulemaking procedures and the study necessary to come up with concrete reform proposals, perhaps not surprising that the SEC chose in November of 2019 to extend no action relief for another three years, that is until July 2023. But as a sop to investor groups, the Commission did clarify some open questions about the use of CSAs, thereby eliminating one issue that some sell-side firms were using to resist client requests for unbundling, thus very modestly nudging U.S. markets further in the direction of MiFID II.]

c. Developments in the Provision of Research and Commission Payments

While much of the financial press on MiFID II and its impact on the United States has focused on the public position of industry participants and official actions recounted in the preceding two subsections, there have been a lot of subtler changes in market practices that suggest that MiFID II may have had a greater impact on U.S. markets than generally understood. A number of these changes parallel developments in European markets, and it is not entirely clear how many have simply migrated across the Atlantic through what is largely a global financial services industry and how many may have emerged independently. Quite conceivably, the greater attention on valuing and budgeting research services in Europe has had an indirect, but real, influence on U.S. markets. By way of anecdotal evidence, the leading conference organization on MiFID II Unbundling holds two conferences a year: one in London in the Fall and one in New York in the Spring.

[A list of recent developments arguably related to MiFID II include:

- Decline in Research Payments as a Fraction of Total Commissions. Compare 2019 Greenwich date to 2015 data cited earlier.
- Increase in Buy-side Research Budgets and Use of Alternative Data.
- Increasing Attention of Hedge Funds and other Private Funds on Active Management.

- Migration of Corporate Access from sell-side chaperoning model that dominated soft dollar payments in 2015 to the provision of corporate access in other ways.]

C. Three Provisional Assessments

In an effort to synthesize the post-MiFID II developments described above, we offer three provisional assessments as to the state of affairs two plus years after adoption of the directive. The first locates the cross-border effects of MiFID II in the larger literature on the transposition of legal regimes. In the second analysis, these same developments through a law-and-economics framework. And the third focuses on an emerging body of empirical research on the impacts of MiFID II, including an original contribution of our own, addressing the critical and contested question of the actual – as opposed to asserted – impacts of MiFID II on the production of research and the ability of small and medium sized enterprises to access capital markets.

a. MiFID II and the Transposition of Legal Regimes

Wholly apart from its impact on U.S. capital markets and commission paying practices, MiFID II offers a striking and novel illustration of the transposition of legal standards across national boundaries. Regulatory networks and related processes for coordination among national financial regulators has received considerable attention within the academic literature in recent years.[118] Most commonly, these mechanisms of coordination are characterized as centering on government officials – whether from regulatory bodies, government ministries, or occasionally legislatures. The Basel Committee on Banking Supervision would be perhaps the best studied example, but similar bodies exist with respect to securities regulation (ISOCO), insurance industry trends (IAIS), and many other more specialized bodies.[119] Through these mechanisms, U.S. authorities have in recent decades been able to collaborate with their foreign counterpart both to develop international standards of conduct and to work towards harmonized, or at least substantially equivalent, local practices. In many of these settings, the United States and other leading economies have used these networks to articulate international standards for less-developed economies. But in the aftermath of the Financial Crisis of the late 2000s, the United States and other members of the G-20 used these mechanisms to collaborate on a post-crisis regulatory framework designed largely for application within their own borders.

What is striking about MiFID II and its cross-border impact is that there is no such official coordination involving U.S. authorities. As was outlined above, the SEC largely abandoned the field after Chairman Cox's aborted attempt in 2007 to encourage Congress to repeal Section 28(e)'s safe harbor for soft dollar payments. While European negotiations that led up to MiFID II, and especially the British focus since the early 2000s on the problem of excessive commissions, were well-publicized in financial circles, U.S. authorities did not weigh in on the process nor – as far as the public record

[118] [citations to Ann-Marie Slaughter, Pierre Verdier, Stavros Gadinis, Chris Bummer, Katja Lagenbucher]
[119] [citation to literature review here].

indicates – appreciate that the directive would have substantial implications for U.S. capital markets until domestic industry representatives raised the alarm just months before the directive's January 2018 implementation date. As Eric Pan explores in a forthcoming article, U.S.US regulatory authorities are in increasingly failing to participate in international collaborations in recent years, thereby losing control of developments that may ultimately have a substantial bearing on U.S. markets and consumers.[120] The SEC's posture with respect to the adoption of MiFID II fits comfortably within his thesis.

The channels through which MiFID II has impacted U.S. capital markets are also noteworthy. Rather than official and top-down adoption of harmonized or substantially equivalent standards, the U.S. response has been driven through the responses of a broad array of private actors. To some degree, the financial services industry itself – especially global securities firms – have sought standardized operating practices, with emerging European standards around them, thus indirectly elevating investor protections in the United States to align with European requirements. But institutional investors, other asset owners, and their representatives have also played a substantial role, generating what might be characterized as a demand-side effect. As European asset managers moved towards the internalization of sell-side research costs as a "best practice" for MiFID II compliance, a number of major U.S. asset managers followed suit, presumably in the hopes of gaining positive reactions from their customers. The increased salience of unbundled commissions in Europe may have unsettled the status quo of prior decades, allowing U.S. asset managers to compete on commissions practice in a way that was not viable in the past. In addition, new practices emerging in Europe undercut a number of the arguments that sell-side firms have traditionally used to resist requests for unbundling. For example, in the last round of serious U.S. debates over soft dollar reforms in the mid-2000s, industry representatives claimed that they were incapable of pricing research services and therefore were incapable of bundling commissions.[121] The emergence of research pricing and accounting practices in E.U. markets under MiFID II largely gave lie to entirely undercut that position. In addition, the increasing transparency of research costs in Europe, as well as variations in costs across asset classes and firms, focused the attention of U.S. asset owners on the possibility of this, then disadvantageous, cross-subsidization and encouraged greater scrutiny of the issue.

While one can see illustrations of similar cross-border demand effects in other areas – increased U.S. consumer interest in data privacy in response to the EU's General Data Protection Regulation (GDPR) would be one example[122] – MiFID II offers a particularly enlightening example, if only because data on research unbundling in the United States can be so precisely measured and because the financial press has devoted so much coverage to the issue.

b. The Law and Economics of Unbundled Commissions

[120] [Insert citation and relate to Trump Administration's statements on international coordination.]
[121] [Cite to section above and quote "research is a process not a product."]
[122] [Insert citation and literature.]

While the debate over MiFID II and the intensity of opposing views on the directive can be confusing, the law-and-economics of MiFID II's unbundling of commissions are, in certain respects, fairly straightforward and unsurprising. To begin with, the directive's prohibition on the opaque use of client funds to pay for research services changed the relative pricing of sell-side research services as compared to other kinds of research. Previously, asset managers in Europe and the United States had been paying for sell-side research services with what was effectively a different currency with a lower value than hard dollars. Asset owners were much less sensitive to charges imposed through excessive commissions as compared with explicit management fees. Under MiFID II, the price of sell-side research services effectively increased as they were either moved to collect hard dollar payments from asset managers or transferred into RPA accounts where the cost of payment became immediately salient to asset owners.[123] As with other markets, when the price of a good increases one would expect to see a decline in the amount purchased. And that is exactly what happened in European capital markets: less sell-side research is being provided, analysts on the sell-side are being laid off, and the price charged for sell-side research – now levied in real currency – has come down, in some cases quite dramatically. Adam Smith would have expected as much.

In addition, the use of substitutes for sell-side research – which become comparatively cheaper under MiFID II – has increased. This substitution effect can be seen on both sides of the Atlantic in the increase in buy-size research spending, the movement of products, such as corporate access to other distribution channels not financed through excess commissions, and the emergence of new forms of research substitutes, such as alternative data, which typically are charged to IT budgets and paid for with hard dollars. While much of the coverage of MiFID II focuses on the decline in the provision of sell-side research, this decline has been offset at least to some degree – and that degree is quite difficult to measure in the short run – with other research alternatives not captured in payments made for sell-side research.

In sum, to a considerable degree the observed phenomena in U.S. and European capital markets have followed a fairly predictable path once MiFID II raised the effective price of sell side research. The only genuinely surprising feature of the process has been from the fact that an overwhelming majority of European asset managers chose to implement MiFID II through cost internalization. As mentioned above, the cause of this response is unclear, and may simply have been the product of first mover decisions and path dependence once a "best practice" appeared to have emerged.[124] Whatever the reason, the jump to cost internalization in late 2017 was clearly disruptive. The profit margins of asset managers, especially with the movement towards passive investment vehicles and pricing pressure over the past decade, have narrowed.[125] To the extent that MiFID II imposed further downward pressure on firm profitability, one can appreciate

[123] [Explain how, to a more modest degree, the same effect is occurring in the U.S. as the cost of soft dollars becomes more salient in light of MiFID II.]

[124] [industry experts have explained in public venues that the tendency may partially have been explained by the difficulty of explaining RTA payments to existing customers.]

[125] [Insert footnote on estimated margins and research budget effects from U.S. data: profit margins estimated to be on the order of 10 basis points. Even firms with relatively modest budgets, like Fidelity described above, had soft dollar costs on the order of a couple of basis points and likely more for other asset classes, such as small and emerging markets. Cite to Frost data above.]

the immediate uproar over MiFID II in certain circles and the subsequent, unexpectedly abrupt changes in research spending practices, especially among smaller asset managers. That effect, however, might best be understood as a transitory phenomenon, as the level of management fees adjusts over time to ensure long-run sustainability for the asset management industry, coupled perhaps with some degree of firm consolidation as smaller firms seek to achieve greater economies of scale. It is also conceivable that the relatively intricate compliances mechanisms imposed (especially by the U.K.'s FCA) to police the anti-inducement principle may have added to transition costs and exacerbated market reactions. The extent to which these transition effects ameliorate over time is a matter for further analysis, but the softening of rhetoric two years plus from January 2018 suggests that some of the kinks in the European system are being worked out, albeit perhaps not in time to prevent some adjustments in MiFID II at the E.U. level in the aftermath of Brexit.

What the foregoing analysis does not address, of course, is whether the net overall impact on research spending has had a detrimental impact on capital markets in general and most particularly on the market's ability to price and support small- and medium-size enterprises. That is the principal argument that critics of MiFID II have pushed forward. It is also the consideration that most concerns senior SEC officials as well as European authorities who are exploring the possibility of relaxing MiFID II, at least with respect to SMEs. As a theoretical matter, one cannot dismiss the possibility that MiFID II both has positive benefits for asset owners in terms of reducing and rationalizing research spending by asset managers, and simultaneously reduces some sort of informational public good that promotes the capital markets and social welfare more broadly. Whether this theoretical possibility is in fact the case is an empirical question to which we return in the next section

Before examining the growing body of empirical evidence, it is, however, important to pause on the logical chain of steps that would have to underlie such a claim of a substantial reduction in informational public goods. To begin with, MiFID II does not regulate the amount of money that asset managers spend on reserve searches. It merely requires that asset managers internalize those costs into their management fees or explicitly charge those costs to asset owners in the form of RPA. In either case, the cost of those services is passed on to asset owners in an explicit and salient way. To the extent that those costs add value to asset owners – and there is a robust industry emerging to demonstrate precisely such a relationship[126] – asset owners would presumably be happy to bear those costs just as they bear other costs critical to the management of their funds, such as the hiring of experienced portfolio managers and maintenance of the extensive administrative structure necessary to operate a modern asset management firm. The unbundling commissions will only detrimentally reduce the production of research services if asset owners will not be willing to pay for those services. Moreover, capital markets will also not occur if alternative investment vehicles, such as hedge funds and private equity, do not enter the space and invest in research dollars to gain returns from inefficient market prices.

In addition – and this point is, as far as we can tell, wholly absent from the literature – the decline in public goods arguments rests on what strikes us as rather heroic

[126] [cite to literature above.]

assumptions about the eleemosynary inclinations of sell-side firms such as Goldman Sachs and Morgan Stanley. If asset owners, and therefore asset managers, do not value and want to pay for SME research, it is unclear what incentives sell-side firms have in expanding their resources on research services that none of its customers want to purchase. Imagine, for a moment, that you were in an annual budgeting session at one of these major sell-side firms, and the question is put on the table of whether excess commission dollars should be dedicated to SME research that no customer values or funneled into the bonus pool for executive compensation. Perhaps we have an uncharitable understanding of the financial services industry, but we have a hard time envisioning how such a discussion of this sort leads to sell-side investment into unwanted research.

c. The Emerging Empirical Literature on the Impact of MiFID II

Numerous reports and studies have emerged during the past couple of years, attempting to capture the impact of MiFID II on market performance and analyst coverage. This is not a straightforward task, which is why the estimates seem so fragmented when viewed quickly. When estimating the impact of MiFID II's unbundling requirement on fund performance and analyst coverage, a key modeling decision is the time horizon used for the analysis. Studies focused primarily on fund performance in 2018 versus 2017 yield stark conclusions regarding the impact of unbundling on performance, namely, MiFID II has severely disadvantaged European funds relative to U.S. funds. When the period of comparison is extended back to the late 1990s, however, or even back to 2014 or 2015, we see that the impact of MiFID II has not been as significant as feared. With this in mind, we proceed by reviewing, in turn, industry analysis, academic analysis, and public sector analysis.

Recent industry studies utilize a significant cross-section of firms but are more limited along the time dimension. For example, with a sample of 4,674 small companies, 751 medium companies, and 681 large companies, a recent Bloomberg analysis concluded that MiFID II has had an impact on small and midsize companies.[127] Specifically, within the EMEA market—that is, the Europe, the Middle East, and Africa market—small-cap coverage fell 23 percent since 2017, to an average of 3.89 analysts per stock. In comparison, the research coverage of both mid-cap and large-cap stocks fell only 11 percent since 2017. Similarly, a study by Evercore ISI also found a significant MiFID II impact, using a sample of 3,363 equity mutual funds with more than $100 million in assets under management (AUM).[128] The analysis suggests that U.S. funds thoroughly outperformed their European counterparts in 2018. In fact, the margin of victory by U.S. "winners" was, on average, a staggering 250 basis points.[129]

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[127] *See* Bloomberg Intelligence, MiFID II: Investment Research Topic Primer (Sept. 30, 2019) (on file with authors). The contact person is Sarah Jane Mahmud of Bloomberg's London office.

[128] *See* Glenn Schorr, Kaimon Chung, John Dunn & Eric Young, The Most Self-Serving Research Note Ever?, Evercose ISI (April 26, 2019), available at http://www.frostconsulting.co.uk/files/Evercore_Performance_Report.pdf.

[129] While beyond the scope of this research note, the implied "value" of bundled commissions in this study stands in striking contrast with a large body of empirical evidence – stretching over multiple decades – suggesting that soft dollar payments do not add value for investors. An overview of this literature is presented in Jackson, Rady

Focusing on 2018 is sensible, because MiFID II was implemented in January of that year. However, the length of the time series prior to implementation matters tremendously. We can see the importance using only the data presented in the industry reports. Consider Figure 2 of the Evercore ISI analysis. In the first row of Figure 2, the U.S. outperformance percentage in number of sectors was roughly the same in 2018 (66.7 percent) as it was in 2016 (64.3 percent), with an upward spike in between in 2017 (85.7 percent). One would be hard-pressed to say that MiFID II had a significant impact when the three years of data look like an inverted "V" shape?[130]

Recent academic studies also have compared the post-MiFID II statistics to those of the years prior to implementation. These studies attribute an impact to MiFID II, but not one that is as substantial as reported by the industry studies. In fact, a trio of recent academic studies, summarized below, suggest that while MiFID II has decreased the aggregate amount of information gathered, particularly on large firms, the remaining coverage is of higher quality. This would strongly suggest that MiFID II has improved market efficiency by eliminating redundancy and producing information that is of greater value to investors.

Using quarterly Computstat data of firms that exceed $10 million in total assets, Lang, Pinto, and Sul show that analyst coverage of EU firms dropped relative to U.S. firms, thereby decreasing the aggregate amount of available information.[131] This finding is in line with expectations, as academic research has argued that the previous state of the world had excess analyst coverage. The authors show that the reduction in analyst coverage was greatest for firms that were larger, older, less volatile, and had greater coverage to begin with, "with no evidence of a reduction for small firms." Remaining analysts now add more value on the margin, which is further supported by the authors' showing that analyst forecasts become more accurate, are more likely to include recommendations, and are accompanied by larger stock price reactions.

Fang, Hope, Huang, and Moldovan show that the overall number of sell-side analysts decreased following the implementation of MiFID II.[132] Comparing a "treated"

& Zhang, Nobody is Proud of Soft Dollars: A Critical Review of Excess Brokerage Commissions in the United States and the Likely Impact of Pending MiFID II Reforms in the European Union Appendix A (draft of Oct. 22, 2017) (on file with authors). Moreover – and again outside the focus of this note – were the value of sell-side bundled research anywhere near the levels suggested by this study, then buy-side firms would undoubtedly be willing to pay for such research with hard dollars and their clients willing to shoulder any increase in asset manager fees to support such research services.

[130] Similarly, in the third row of Figure 2, the percentage of alpha captured by U.S. funds has been increasing almost linearly since 2016—66.6 percent, 77.9 percent, and 90.9 percent. If MiFID II's unbundling requirement had a substantial impact, one would expect a clearer trend break in 2018. This critique holds for Figure 5 as well, which is the AUM-weighted version of Figure 2. The first row of Figure 5, which shows the U.S. outperformance percentage in number of sectors went from 71.4 percent in 2016 to 64.4 percent in 2017 to 86.7 percent in 2018—a "U" shape. Again, the 2016 and 2018 statistics are similar, with an aberration in 2017. To be fair, the third row of Figure 5—percentage of outperformance captured—does show a larger jump from 2017 to 2018 than from 2016 to 2017. This is evidence in favor of the authors' point, though they are still ignoring larger macro trends, leading them to conclude that MiFID II has hurt European funds by hundreds of basis points.

[131] Mark H. Lang, Jedson Pinto & Edward Sul, *MiFID II Unbundling and Sell-Side Analyst Research* (June 2019), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3408198. Note that this information effect does not disaggregate small cap and large cap effects, an issue we explore elsewhere. As discussed below, the authors elsewhere identify the loss of analyst coverage as coming primarily from larger company coverage and not from small issuers, suggesting that whatever informational effects are reported may not come from SMEs.

[132] Bingxu Fang, Ole-Kristian Hope, Zhongwei Huang & Rucsandra Moldovan, *The Effects of MiFID II on Sell-Side Analysts, Buy-Side Analysts, and Firms* (July 2019), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3422155.

sample of 12,340 European firm-year observations with a "control" group of 11,986 U.S. and 2,629 Canadian firm-year observations, the authors find that analysts of lower quality dropped their coverage of European firms. Remaining analysts provide greater value on the margin, as their recommendations have greater information content and more impact on the market. The authors also find a substitution away from sell-side analysts to buy-side analysts.

Similarly, analyzing over 21,000 firm-year observations spanning 2014 to 2018, Guo and Mota show that MiFID II unbundling resulted in fewer research analysts covering large firms, with no decrease in coverage on small- or mid-cap firms.[133] Importantly, the reduction in coverage quantity was accompanied by an increase in coverage quality, as inaccurate analysts dropped out and better analysts stayed in. This supports the narrative that while the overall quantity of information has decreased, the remaining information is of higher quality.[134]

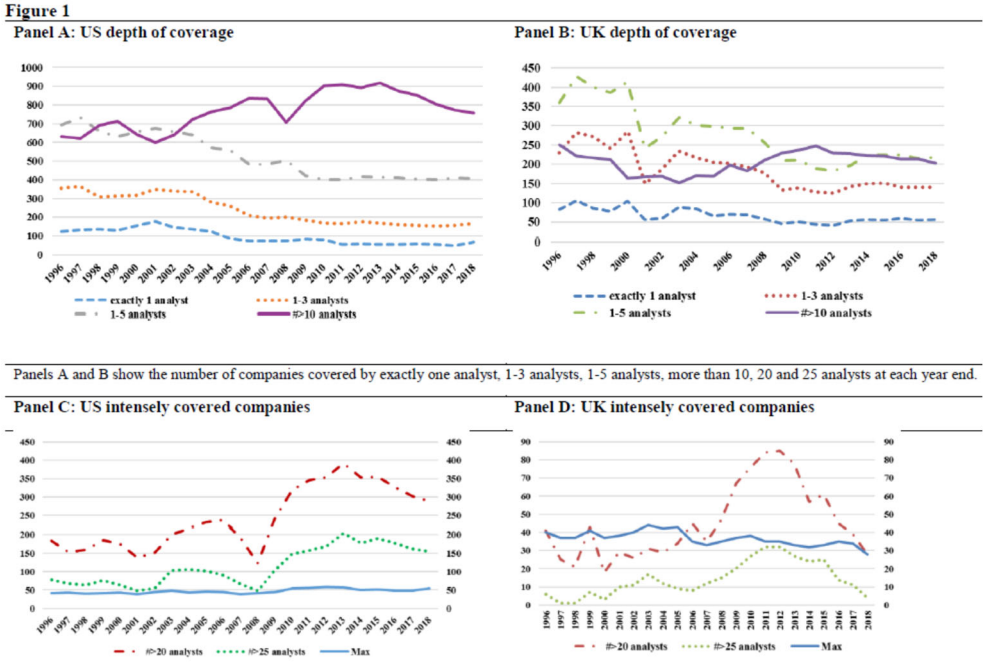
Nowhere is the importance of having a longer time series seen more clearly than in the article written by Alistair Haig, who constructed his own dataset that includes all companies which have been present in the FTSE All Share index since 1996.[135] The author's time series in Figure 1's Panel B are striking. (Figure 1 from his article is reproduced below for convenience.)

[133] Yifeng Guo & Lira Mota, *Should Information be Sold Separately? Evidence from MiFID II* (December 2019), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3399506.

[134] The authors point out that previous literature has shown a co-movement between coverage quality and quantity. In other words, coverage quality should decrease with a decline in coverage quantity. The authors justify the current difference by noting that MiFID II fundamentally alters how sell-side research is evaluated—"For the first time, research analysts have to work out the value of their research, which ties closely to the quality. Fighting for the limited resources from the buy-side, they compete more directly in the quality domain and their incentives to provide better research are enhanced, regardless of the total number of analysts." *Id.* at 9-10.

[135] Alistair Haig, An Early Assessment of the Informational Environment for Equity Investors Since the Announcement of New Rules on Paying for Research.

Figure 1



The number of U.K. firms that have coverage from exactly one analyst has been remarkably consistent since 2010. The same can be said about firms with one to three analysts, one to five analysts, and more than 10 analysts; however, the latter time series has been slightly trending downward since 2010. Additionally, in Figure 1's Panel D, the number of U.K. firms with greater than 20 analysts or greater than 25 analysts has been sharply trending downward since 2012. While the number of U.S. firms with greater than 20 analysts or greater than 25 analysts also has been trending downward—see Figure 1's Panel C—the negative slope is not as significant as that of the U.K counterpart. The time series presented by Haig are consistent with the evidence presented by the other academic studies, particularly related to aggregate coverage levels and the coverage of large firms. They also provide a perspective that strongly suggests there are macro factors at work over a longer period of time, ones that are unrelated to MiFID II's unbundling requirement.

Our own intuitive empirical research, presented in Appendix D, supports the recent academic studies. We analyze the impact of MiFID II implementation on the bid-ask spreads and price synchronicity of SMEs in the U.K. and European markets. For example, we compare the daily bid-ask spreads of 30 of the largest companies in the FTSE 100 Index to those of the 30 largest companies in the FTSE Small Cap Index, from January 2010 through December 2019. Over this decade, we find little deviation from trend around the MiFID II implementation date. Our price synchronicity analysis leads to the same conclusion. In sum, our analysis is consistent with the view that implementation of MiFID II has not been associated with a negative capital market effect on SMEs.

Last, but not least, we review the official sector's analysis. The U.K. Financial Conduct Authority (FCA) recently analyzed market developments between July 2018 and March 2019, using a survey of 40 buy-side firms, and 10 firm visits across the buy-side and sell-side.[136] The FCA also met five independent research providers and engaged with corporate issuers. The FCA presented several important findings, a few of which are presented below.

First, research budgets are shrinking. The FCA's survey found a material reduction of around 20 percent to 30 percent in the budgets that firms set for externally produced equity research. The FCA attributed this decline to a few factors: (i) Buy-side firms are paying less for research by having a more targeted approach to procurement and increased efficiency in the way they use research. (ii) Competition is driving down costs for written research. (iii) Most firms are adopting formal processes to set their research budgets, thereby improving cost discipline. Second, buy-side firms report that they are still getting the research they need, despite the lower budgets. This lends additional evidence to the argument that the amount of analyst research prior to MiFID II was sub-optimally high. The FCA argues that this implies most savings reflect greater competition and market efficiencies. Indeed, only a few firms suggested they had seen a reduction in research on SMEs. Finally, the FCA's internal analysis shows limited change in single-stock analyst coverage levels for smaller-cap listed U.K. companies since MiFID II was implemented. Trading volumes or spreads for U.K. Alternative Investment Market listed companies, which can indicate reduced liquidity or investor demand, also do not appear to be affected, according to the FCA.

All in all, it would be convenient to conclude that the industry studies argue for one interpretation whereas the non-industry studies argue for the opposite. A less cynical view, one demonstrated clearly and rigorously by the recent academic studies, is that the estimated impact of MiFID II depends on the sample size used for analysis as well as the time horizon. Based on the most recent, cutting-edge studies, it would be fair to say that MiFID II has lowered the aggregate level of analyst coverage as expected—especially as it relates to coverage of large companies, not SMEs—but also has increased the quality of analyst coverage.

V. PATHS FORWARD FOR SOFT DOLLAR REFORM IN THE UNITED STATES

[In the final part of this paper, we focus on ways in which developments in the European Union might be leveraged to reform soft dollar practices in the United States. Here we sketch out briefly various points of potential leverage that might be employed to disrupt the old equilibrium in U.S. markets, sustaining a high level of soft dollar utilization. The positions advanced in this section respond to developments in Europe and (hopefully) speak to a Securities and Exchange Commission prepared to focus primarily on disclosure reforms rather than a wholesale revisiting of section 28(e) itself, which would necessitate Congressional action.]

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[136] U.K. Financial Conduct Authority, *Implementing MiFID II – Multi-Firm Review of Research Unbundling Reforms* (September 9, 2019), available at https://www.fca.org.uk/publications/multi-firm-reviews/implementing-mifid-ii-multi-firm-review-research-unbundling-reforms.

A. SEC Mandates for Improved Disclosures

a. Better Disclosure in SAIs
b. Incorporating Soft Dollar Costs into Expense Ratios

[Perhaps the most straightforward solution would be for the SEC to reform its disclosure requirements to track evolving E.U. practices. The power to establish disclosure requirements for soft dollar practices is expressly delegated to the Commission and thus falls squarely within its jurisdiction. Among other things, that approach could include explicit disclosure of soft dollar payments at the account level similar to what Fidelity and a few other asset managers do today. In addition, textual disclosure of allocation rules (whether by trading volume or assets under management) would be helpful and perhaps some more explicit discussion of how soft dollar-financed research actually benefits the particular accounts in question. Another way to improve the efficacy of soft dollar disclosures would be to move them into total expenses (as reported in summary prospectuses and other short form disclosure format), which are more likely to be more salient to potential investors and incorporated into third party reviews.]

B. Sell-Side Obligations for Price Transparency and Best Execution

[Discuss how this might be done, perhaps as a modification of no-action relief, or perhaps as a separate mandate. Could be tied to best execution duties. Note that the Commission's 2019 no-action relief points in this direction. Industry pressure from certain institutional investors is also moving firms towards unbundling in practice.]

C. Roles for Mutual Fund Directors and other Asset Owners

a. Move to Account Level Budgeting (as opposed to trade-based allocations)
b. Voluntarily Enhance SAI Disclosures Along Lines of Fidelity Disclosure
c. Push More Research Costs into Hard Dollar Payments
d. Oversight of Best Execution of Investment Managers

[Even without SEC action, the mutual fund industry could start taking voluntary actions to improve soft dollar practices. The most likely candidates for leading action on this front would be the independent directors of mutual funds, a group that has long been critical of soft dollar practices but has, in the past, been incapable of taking correct measures, in large part because of the structural problems outlined in Part I above. With market changes in the E.U., however, independent directors could push towards the more explicit disclosure practices that Fidelity has championed as well as the MiFID II-like oversight arrangements that Firm GG adopted in 2017 (establishing an explicit budget by account; allocation of costs by net assets rather than trading volume; and prohibiting usage of soft dollars for index funds and quantitatively managed funds that do not require firm-specific research). To better align adviser management of research costs, independent directors could force advisers to absorb the cost of soft dollar expenses

above budget caps. Developments in the E.U. demonstrate that reforms of this sort are technically possible, thereby eliminating a good deal of industry obfuscation that stymied director-led reforms of soft dollar practices in the past.]

[As the foregoing discussion of FCA implementation of MiFID II suggests, the unbundling of commissions has an impact on the duty of best execution as it makes it easier to monitor the true execution costs of trades (at least in terms of commissions costs) and it also facilitates a more careful analysis of the kinds of trades being executed (e.g., high-touch or algorithmic) and ultimately to explore the market impact of trades (that is, the extent to which trades move market prices away from the trader), which is another critical component of best execution. To the extent that independent directors require their advisers to unbundle commissions and break out research costs, they will be in a much better position to monitor execution costs, effectively imposing a cleaner version of the duty of best execution.]

[While much of the discussion of soft dollars proceeds on an implicit assumption that investors in mutual funds and other managed accounts are unsophisticated retail investors, in fact a fair number of sophisticated parties play a role in structuring these investments. A good example is pension plan sponsors (that is, employers) who selected investment menus for 401(k) and 403(b) retirement savings plans. State-run 529 plans have similar characteristics. These "gatekeeper" entities and their consultants could also force reform of soft dollar practices along the lines currently being imposed under MiFID II. And, indeed, these entities are subject to fiduciary duties of their own with genuine litigation risks that could motivate careful scrutiny of soft dollar practices in mutual funds and other investment vehicles. Among other things, these gatekeepers could favor funds that adopted soft dollar and best execution practices along the lines outlined above. In addition, they could insist upon "Most Favored Nation" clauses in their arrangements with asset managers to ensure that soft dollar arrangements in their investment vehicles be at least as favorable as any other arrangement the asset manager works out with other clients.]

D. Encourage Various Third-Party Vendors to Collect and Utilize Better Trading Data

a. Morningstar in Funds Ratings
b. Trade-Monitoring Firms (like Abel Noser and ITG)

[Another potential source of leverage could come from third party vendors who support the asset management industry. On the investor side, firms like Morningstar could monitor more carefully the soft dollar practices of mutual funds and other investment vehicles, enhancing the ratings of firms that provide for more transparent disclosure (along the lines of Fidelity and Firm GG above). In addition, even if the SEC does not adjust its reporting requirements, Morningstar could supplement its own analysis of expense ratios to incorporate a soft dollar adjustment in a manner similar to what the FCA is requiring in U.K. markets. Firms like Abel Noser and ITG – which collect industry data on trading costs – could also start collecting more granular data on commissions, unbundling execution costs from soft dollar costs and further improving data sets to monitor compliance with duties of best execution.]

E. "Correcting" Legal Regimes which Encourage Bundled Costs

a. Exemption from Advisers Act (and Best Interest Standard)
b. Escape from NY Sales Tax on Research
c. Aligning RPAs and CSAs

[As mentioned above, several aspects of U.S. legal requirements may currently differentiate between MiFID-II mandated unbundling practices and current U.S. soft dollar arrangements, like CSAs and traditionally bundled commissions. There is currently considerable industry pressure for regulatory authorities to come up with some sort of practical accommodation. The most commonly discussed approach – and the one favored by industry lobbyists – is to grant MiFID-II compliant practices the same kind of favorable treatments that have been extended to CSAs. While alternative approaches are possible, a key consideration for regulatory authorities is to consider the extent to which any regulatory accommodations for industry interests might be structured in such a way so as to benefit U.S. investors as well. For example, to the extent that industry lobbyists assert that MiFID-II reforms are functionally similar to existing U.S. soft dollar practices, the SEC should consider conditioning any accommodations for MiFID-II on improved U.S. disclosures along the lines outlined above.]

F. Address Corporate Law Issues with Respect to:

a. Imposing Costs on Shareholders for Access to Corporate Officers
b. Failing to Comply with FINRA Reporting Requirements for Additional Compensation from IPO Allocation Practices

[Finally, European developments and recent academic work on the subject pose some interesting issues of corporate law. For example, several years ago U.K. authorities prohibited British securities firms from monetizing corporate access through soft dollar arrangements. The practice – which now accounts for roughly one quarter of all soft dollar payments – raises similar questions under U.S. law. To the extent that securities firms are being assigned the right to charge for corporate access as additional compensation for underwriting corporate securities, these arrangements should be reported and subject to oversight under current FINRA rules. In addition, the academic literature indicates that IPO allocations are still positively correlated with trading volumes of institutional investors, and this relationship suggests further potential FINRA violations. At a minimum, greater transparency with respect to corporate law issues would be valuable as there is considerable anecdotal evidence that corporations are not fully aware of the practices of securities firms in these areas and some academic literature identifying potential conflicts of interest.]

VI. CONCLUSION

[We anticipate a short concluding paragraph or two summarizing the general tenor of the reform recommendations of Part V and tying them back to the more theoretical points

about cross-border effects of MiFID II and the pathways to investor-oriented regulatory reforms in a global economy.]

Appendix A

Table of Contents

Appendix A

I. HYPOTHESIZED JUSTIFICATIONS FOR SOFT DOLLARS

The history surrounding the rise of soft dollar practices in the United States is well documented in the economics literature. Blume (1993) notes that commissions were fixed above competitive levels in the 1950s, which created a need for brokers to compete for clients by providing additional services to justify the above-market premiums.[137] One such service was, and remains, research. Other services include providing better corporate access and possibly facilitating the allocation of initial public offerings. Given the origin of this practice, one may reasonably ask why offering this additional service is still so prevalent in today's world of competitive markets involving investment managers and brokers. There are three main justifications for the existence of soft-dollar practices: (i) they improve fund performance; (ii) they provide a public good in terms of analyst research output; and (iii) they solve a principal-agent problem between the investor manager and the broker. This review argues that none of the three are convincing.

A. Enhanced Performance

The first justification for the existence of soft dollars is that investors benefit because soft-dollar services provide higher risk-adjusted returns on their portfolios. This could be true as a result of the obtained research and information. Or, soft dollars could provide lower advisory fees because the cost of research and other additional services that otherwise would be part of the total expense ratio is part of the brokerage commissions. This enhanced performance argument is theoretically sound but does not hold weight empirically. The empirical studies discussed in detail in Section II conclude that soft dollar practices do not improve risk-adjusted returns, on average.

B. Research as Public Good

Some argue that soft dollars provide a public good through increased analyst research. Without soft dollars—and with increased transparency of expenditures—investors will spend less than is socially optimal to discover information on certain firms, particularly small- and medium-sized firms. This decline in valuable research will, in turn, reduce overall market efficiency. The discussion in Section III notes that this public-good argument in support of soft dollars faces two significant hurdles. First, one would have to demonstrate that transparency of pricing leads to the suboptimal production of research. Second, one has to show there is no better way to promote more optimal levels of research than through soft dollars. While there is some indirect evidence to overcome the first hurdle, there is none to surmount the second.

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[137] *See* Marshall E. Blume, *Soft Dollars and the Brokerage Industry*, 49 FIN. ANALYSTS J. 36, 36 (1993).

C. Mitigation of Principal-Agent Problem

Third, there is a distinct theoretical view that soft dollars mitigate a principal-agent problem between the investment manager and the broker-dealer hired for trade executions. The agency problem arises from the assumption that the investment manager does not know the quality of trade executions *ex ante* and can only ascertain that quality after having experience with the good. The theory is that using soft dollars mitigates the information asymmetry because soft dollar usage assures good behavior on the part of the broker-dealer until performance information is revealed. However, the analysis in Section IV makes clear that payment without verification does not solve information asymmetry. The point of the "experience good" analogy is that the consumer can validate the quality of the good after experiencing it. In the context of soft dollars, investment advisers cannot verify the quality of broker trades ex post by paying any amount of soft dollars. They can only verify with the assistance of third parties. Therefore, one would be mistaken to view soft-dollar usage as a credible method to solve this agency problem.

II. SOFT DOLLARS DO NOT ENHANCE PERFORMANCE ON AVERAGE

A. Indirect Literature

A couple of recent articles, while not addressing soft dollar practices, can be read to support the hypothesis that soft dollar practices improve fund performance. For example, Bengtzen (2017) argues that the current regulatory infrastructure—specifically Regulation Fair Disclosure—cannot prevent the purchase of tainted alpha. Corporate managers can give valuable information to favored investors at a low expected cost to themselves.[138] Thus, soft dollars could theoretically improve returns via increased corporate access.

Jenkinson, Jones, and Suntheim (2017) show that banks give preferential treatment in IPO allocations to investors from whom they generate higher revenues, including brokerage commissions.[139] The authors take advantage of the fact that all banks operating in the U.K. were required to provide information on IPOs managed from their U.K. offices between January 2010 and May 2015.[140] Moreover, the banks had to provide information on the revenues they made each year from their investor clients.[141] Using a sample of 372 "books" from 19 banks on 220 IPOs,[142] the authors find evidence that investor revenues have a significant impact on IPO allocations. Top quartile investors, by revenue generation, receive allocations relative to the amount they bid that are around 60% higher than those received by investors who are not revenue-generating

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[138] See Martin Bengtzen, Private Investor Meetings in Public Firms: The Case for Increasing Transparency, 22 FORDHAM J. CORP. & FIN. L. 33 (2017).
[139] *See* Tim Jenkinson, Howard Jones & Felix Suntheim, *Quid Pro Quo? What Factors Influence IPO Allocations to Investors?* (June 21, 2017), *available at* https://ssrn.com/abstract=2785642.
[140] *Id.* at 10.
[141] *Id.* at 5.
[142] *Id.* at 10.

clients of the book-runner.[143] Importantly, "[t]he relationship between investor revenues and IPO allocations is not simply an artifact of some unobserved investor or investor-bank effect that involves information production. Consequently, [the authors'] results show that high revenues *per se* play a significant in driving IPO allocations and provide support for the quid pro quo hypothesis."[144] Therefore, soft dollars could potentially improve fund performance through paying for more favorable IPO allocations.

The problem with drawing a causal link between these two studies and the performance impact of soft dollars is twofold. First, soft dollars are spent on more than gaining greater corporate access and obtaining better IPO allocations; for example, expenditures are also made for research and conferences. Second, and more importantly, receiving a special deal on corporate access or a special deal on IPO allocations is exactly that: a special deal. There is only a finite amount of value quid-pro-quo deals to hand out as rewards to high-paying clients, and the process of distributing is based on individual relationships. Only the largest players—the clients viewed most favorably by the banks—will receive those unique opportunities to benefit in a quid-pro-quo fashion. The rest of the funds—the funds paying an average amount in commissions—will not receive favorable deals to the same extent because they are not viewed as the most valuable clients. Therefore, improving performance through these quid-pro-quo channels are unlikely to show up on average.

B. Direct Literature

The direct empirical analysis, on balance, does not suggest that soft dollar practices improve fund performance. Haslem (2016) reviews recent studies and concludes the studies show that shareholder assets are wasted through soft dollar arrangements. There is no increase in risk-adjusted fund performance or lower advisory fees.[145]

It is important to clearly note upfront that the state of empirical research in this area is not airtight because researchers face data limitations. With only one exception, the articles discussed below do not use actual data on soft dollars because of the lack of reporting by funds on their usage of soft dollars.[146] Researchers are therefore forced to use empirical methods to devise proxies for soft dollars. Researchers also have access to different slices of the fund data universe because of proprietary access to different fund databases. Moreover, their empirical investigations span different time periods; for instance, some researchers use fund data from only a single quarter while others look at several years. In sum, these articles do not use the same measure for soft dollars, do not use the same set of mutual fund data, and do not investigate the same time durations. With these caveats in mind, the weight of the evidence—including the sole article that

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[143] *Id.* at 7.
[144] *Id.* at 8.
[145] John A. Haslem, *Mutual Fund "Soft-Dollar" Arrangements: Analysis and Findings*, 19 J. WEALTH MGMT. 101, 105 (2016).
[146] In the ideal world, researchers could look at a bundled commission and divide it up into payments for research, payments for corporate access, payments for IPO allocation, etc. We are so far from the ideal, because researchers cannot even split the bundled commission into payment for pure execution cost and payment for everything else.

uses actual data on soft dollars from 1999 through 2003—suggests that soft dollars do not increase risk-adjusted fund performance.

It is well established that the use of soft dollars increases costs. In an article published in *The Journal of Finance*, Conrad et al. (2001) use proprietary data provided by the Plexus Group to analyze the volume and cost of orders given by institutional investors to soft-dollar brokers.[147] Their dataset covers $260 billion in equity trades by 38 institutions in the fourth quarter of 1994, the first quarter of 1995, the first quarter of 1996 and the second quarter of 1996; the dataset distinguishes between trades sent to soft dollar brokers and those sent to other types of brokers.[148] After controlling for differences in order characteristics, the authors find that soft dollar brokers execute smaller orders in larger market value stocks.[149] Allowing for differences in order characteristics, they also estimate the incremental implicit cost of soft-dollar execution at 29 (24) basis points for buyer- (seller-) initiated orders. For large orders, incremental implicit costs are 41 (30) basis points for buys (sells).[150] However, they document substantial variability in these estimates, and note that research services provided by soft-dollar brokers may at least partially offset these costs, though they have no evidence to definitively make that conclusion. Like numerous authors before and since, they understand that "[t]he paucity of data on soft-dollar payments is responsible for the lack of systematic evidence on the magnitude and impact of these payments."[151]

Horan and Johnsen (2008), whose theoretical claims are discussed in more detail later on, present contrary analysis suggesting that soft-dollar research provides a benefit to investors.[152] The authors argue that by paying the manager's research bill up-front, the broker posts a quality-assuring performance bond that efficiently subsidizes the manager's investment research.[153] Using a dataset provided by the Mobius Group that covers 1,038 portfolios during *a single quarter* (the first quarter of 1997), the authors find that the use of soft dollars is positively related to risk-adjusted performance. Like many of the empirical soft-dollar studies, this one does not identify money managers' receipt of bundled research directly, either through soft dollar arrangements or traditional institutional brokerage arrangements. Instead, the authors construct a soft-dollar proxy by assuming that bundling is proportional to "Premium Commissions per Managed Dollar (PCMD)," which is calculated as the average premium commission rate times annual turnover expressed as a percentage of portfolio value.[154]

Livingston and Zhou (2015) also show that premium brokerage commissions—that is, premium soft dollars plus pure execution costs—are positively associated with fund performance.[155] Using proprietary data from almost 2,000 funds spanning 2001 to

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[147] Jennifer S. Conrad, Kevin M. Johnson & Sunil Wahal, *Institutional Trading and Soft Dollars*, 56 J. FIN. 397 (2001).
[148] *Id.* at 398.
[149] *Id.*
[150] *Id.*
[151] *Id.* at 415.
[152] Horan & Johnsen, *supra* note ___, at 56.
[153] *Id.*
[154] *Id.* at 68.
[155] Miles Livingston & Lei Zhou, *Brokerage Commissions and Mutual Fund Performance*, 38 J. FIN. RES. 283 (2015).

2012,[156] the authors construct a measure called "commission per dollar traded." They note that previous studies on this topic use commission per dollar of assets, which they argue is an imprecise measure of the real value provided by commissions because it is driven by both the commission rate and the total amount of trading. Commission per dollar traded, on the other hand, adjusts for the level of trading activity.[157] They demonstrate that, as expected, brokerage commission per dollar of assets has no effect on fund performance, but commission per dollar traded has a positive impact.[158] Importantly, their study fails to disentangle the efficacy of different types of services provided by brokers. The authors *cannot* show whether the improved performance is due to better execution or to alternative services provided via soft dollars.[159] It could very well be the case that the soft dollars component yields no significant impact on performance—or even a negative impact—as is suggested by the next set of studies.

Most empirical studies paint a gloomy picture of soft dollars. In fact, empirical studies showing less-than-favorable outcomes for soft dollars have existed for over two decades. Authors like Livingston and O'Neal (1996) recognized that soft dollar arrangements could lead to an agency conflict between fund managers and fund investors.[160] After contacting 175 fund companies representing over 300 equity mutual funds, the authors received a prospectus, a current annual report, and the statement of additional information from 240 funds.[161] The fund data span the years 1989 to 1993.[162] The authors calculate average brokerage commissions on a per-trade basis and compare these with commissions available for execution-only transactions.[163] They find that the funds' expense ratios are positively correlated with commissions per trade, which is inconsistent with the hypothesis that mutual fund managers who pay soft dollars for research yield corresponding reductions in management fees.[164]

In an article published in *The Journal of Financial Economics*, Edelen et al. (2012) analyze the relationship between transparency of commissions and fund performance.[165] By transparency, the authors refer to the fact that fund managers can either expense their payments, which is relatively transparent, or bundle them with brokerage commissions like soft dollars, which is relatively opaque. The authors perform their empirical analysis using data from Morningstar as well as expense and brokerage commission data from N-SAR Semi-Annual Report filings with the Securities and Exchange Commission.[166] The sample runs from January 1996 through June 2009 and contains a robust 179,798 fund-month observations.[167] Importantly, fund disclosure

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[156] *Id.* at 287-88.
[157] *Id.* at 284, 288-89.
[158] *Id.* at 284.
[159] *See id.* ("Improved performance from premium brokerage commissions can be the result of better execution of orders *and/or* the provision of valuable information by brokers to funds paying a higher commission rate.") (emphasis added).
[160] Miles Livingston & Edward S. O'Neal, *Mutual Fund Brokerage Commissions*, 19 J. FIN. RES. 273 (1996).
[161] *Id.* at 278.
[162] *Id*.
[163] *Id.* at 277.
[164] *Id.* at 273.
[165] Roger M. Edelen, Richard B. Evans & Gregory B. Kadlec, *Disclosure and Agency Conflict: Evidence from Mutual Fund Commission Bundling*, 103 J. FIN. ECON. 308 (2012).
[166] *Id.* at 309.
[167] *Id.* at 311.

does not itemize commission payments, so the authors create a sophisticated procedure to estimate bundled payments. In a large sample, commissions can be statistically decomposed into components reflecting payment for trade execution and (bundled) payments for other services by regressing the total commission payment on fund characteristics that affect trade-execution costs. The residual, or excess, commission from this regression model is the authors' proxy for bundled payments for other services.[168] The authors conclude that the return impact of opaque payments is significantly more negative than that of transparent payments.[169]

Edelen et. al (2012) take the additional step of examining the impact of disclosures on investor behavior. The authors "find significant differences in investors' response to bundled versus expensed payments. . .. [I]nvestor flows are more positively related to bundled payments for distribution than for expensed payments. This result obtains despite the fact that bundled payments are more detrimental to performance. Thus, the agents of investment management—fund managers—appear to garner more benefit from opaque, bundled payments for distribution than from transparent payments."[170] This shows that "opacity in payment disclosure has a substantial effect on investors' response to and monitoring of agency conflicts, and that the magnitude of those conflicts is highest when opacity inhibits monitoring."[171] In other words, the authors' results demonstrate the existence of significant agency costs because: (i) mutual fund expenditures are less efficient when paid using opaque commission bundling rather than transparent expensing, and yet (ii) investor flows are more positively related to bundled distribution payments despite larger negative impacts on performance.[172]

In a recent article, Erzurumlu and Kotomin (2016) use *actual* data on soft dollars to measure the impact of soft dollars on fund performance.[173] It is worth emphasizing that this is the first study to use such data as opposed to indirect estimates of soft dollars. The authors operate under the premise that purchasing additional services with soft dollars can result in one of two benefits to the fund's shareholders: (i) higher risk-adjusted returns on their portfolios as a result of the obtained research and information, or (ii) lower advisory fees because the cost of research and other additional services that otherwise would be part of the total expense ratio is part of the brokerage commissions. Not consistently achieving at least one of these benefits indicates that the soft dollar arrangements, on average, lead to a reduction in the shareholders' wealth.[174] The authors utilize soft dollar and total brokerage commission data to create a survivorship bias-free sample of 391 actively managed US-based equity mutual funds from 1999 through 2003.[175] The information about soft dollar commissions, total brokerage commissions, and board members is collected from the funds' SAIs. The rest of the data is collected from the funds' N-SARs.[176] The authors find that higher soft dollar and total brokerage

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[168] *Id.* at 309.
[169] *Id*.
[170] *Id*.
[171] *Id*.
[172] *See also* Haslam, *supra* note ___, at 103-05.
[173] Yaman Ö. Erzurumlu & Vladimir Kotomin, *Mutual Funds' Soft Dollar Arrangements: Determinants, Impact on Shareholder Wealth, and Relation to Governance*, 50 J. FIN. SERV. RES. 95 (2016).
[174] *Id.* at 96.
[175] *Id.* at 101–02.
[176] *Id.* at 102.

commissions are, unfortunately, associated with higher advisery fees but not with higher risk-adjusted fund returns. These findings suggest that mutual fund shareholders do not benefit, on average, from the research and the information supplied by third parties such as brokers.[177]

In addition, Erzurumlu and Kotomin (2016) investigate the link between governance and soft dollars. The authors find that boards with higher median tenures of directors are associated with lower soft dollar commissions and turnover.[178] This implies that shareholders might benefit from the experience of the directors who have more familiarity with the fund.[179] Notably, the authors also show (i) a positive correlation between more highly compensated boards and higher soft dollar fees, and (ii) a positive correlation between boards with higher proportions of directors with finance backgrounds and higher advisery fees, soft dollar commissions, and total brokerage commissions, as well as higher turnover costs.[180] Based on this finding, the authors conjecture that a higher proportion of directors with finance backgrounds might exacerbate agency conflicts.[181]

At this point, one may ask how these results could possibly be true: "If these investment managers receive research materials courtesy of soft dollars, shouldn't they be able to use them in *some* way to improve performance?" First, it is unclear whether investment managers actually read the research materials provided by their brokers.[182] Second, even if managers did read the research materials and used them to inform their investment decisions, it is not obvious that the research quality is any good. Consider the literature on the underwhelming performance of actively managed funds. Going back at least two decades, financial scholars have published articles documenting the lack of success of these funds; the majority underperforms the market after taking into account expenses. For example, Carhart (1997) uses data on over 1,800 equity funds from 1962 through 1993 to demonstrate that their performance is lacking[183]: "Although the top-decile mutual funds earn back their investment costs, most funds underperform by about the magnitude of their investment expenses. The bottom-decile funds, however, underperform by about twice their reported investment costs."[184] Following up on this debate over a decade later, Fama and French (2010) analyze roughly 1,300 mutual funds from 1984 to 2006 and arrive at the same conclusion.[185] Soft-dollar practices were prevalent during both time periods. If investment managers are indeed relying upon the research they acquire via soft dollars, they might want to reconsider their strategy.

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[177] *Id.* at 118.
[178] *Id.* at 117.
[179] *Id*.
[180] *Id.* at 117-18.
[181] *Id*.
[182] *See* FT View, *Brokers Should Bin the Bundles of Research Notes*, Financial Times (Feb. 3, 2016), *available at* https://www.ft.com/content/871f77f6-ca75-11e5-be0b-b7ece4e953a0 ("Investment banks generate vast volumes of research, very little of which is ever read. Of the £3bn spent in 2012 by UK investment managers on dealing commissions, roughly £1.5bn was notionally kicked back in the form of investment reports. Yet fund managers often throw these into the bin without even reading the headline.").
[183] Mark M. Carhart, *On Persistence in Mutual Fund Performance*, 52 J. FIN. 57, 58–59 (1997).
[184] *Id.* at 80.
[185] *See* Eugene F. Fama & Kenneth R. French, *Luck Versus Skill in the Cross-Section of Mutual Fund Returns*, 65 J. FIN. 1915, 1941 (2010) ("[M]utual fund investors in aggregate realize net returns that underperform CAPM, three-factor, and four-factor benchmarks by about the costs in expense ratios.").

III. THE PUBLIC-GOOD ARGUMENT IS NOT EMPIRICALLY SIGNIFICANT AND NOT CONSIDERATE OF COSTS

Although the bundling of commissions may not yield a performance boost, as discussed in the previous section, they may provide a public good that enhances social welfare. The idea is based on the premise that soft dollars are partially used to fund useful analyst reports. The unbundling of commissions could lead to a lower amount of funding for those reports. With fewer analyst reports, there could be a loss of information about certain companies, most concerningly small- and medium-sized companies. If that were indeed the case, then the unbundling of commissions could make capital markets less efficient and lead to a social welfare loss.[186] Notably, this public-good argument in support of soft dollars faces two hurdles. First, one would have to demonstrate that transparency of pricing leads to the suboptimal production of useful research. Second, one has to show there is no better way to promote more optimal levels of research than through soft dollars.

A recent study in *The Journal of Finance* can be read to provide indirect evidence to overcome the first hurdle. Merkley et al. (2017) investigate the importance of sell-side equity analysts as a collective industry and find that changes in the number of analysts covering an industry negatively impact capital markets through worse forecast quality.[187] Drawing from over 12 million analyst reports between 1990 and 2010,[188] the authors argue that declines in the number of analysts covering an industry leads to higher forecast errors and greater optimism bias.[189] Specifically, a one-unit decline in the number of analysts in an industry results in a 1.0 percent increase in aggregate absolute forecast error and a 1.4 percent increase in aggregate optimism bias.[190] This evidence suggests that fewer sell-side analyst staff—either due to tighter government restrictions or downsizing by large investment banks—can have negative externalities for market participants.

This indirect evidence, however, does not satisfy the burden of proof on the first requirement. There is little evidence to support the claim that sell-side firms use the vehicle of bundled commissions to invest significantly in research output, as opposed to spending the money on corporate access, IPO allocations, and conferences. There is even less evidence to suggest that sell-side firms use bundled commissions to invest significantly in research on easy-to-miss, small- or medium-sized firms. Those firms are the ones for which private investors, of their own accord, may not pay as much to learn about given fully transparent costs. The available data shows that soft-dollar expenditures go to purchases that do not fall into this category. In a recent survey,

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[186] Put another way, without analyst reports on companies, information on those companies remains private. Private information that is not revealed provides no social benefit. Without soft dollars, there would be an underinvestment in research production via analyst reports. *See* Jack Hirshleifer, *The Private and Social Value of Information and the Reward to Inventive Activity*, 61 AM. ECON. REV. 561 (1971).

[187] *See* Kenneth Merkley, Roni Michaely & Joseph Pacelli, *Does the Scope of the Sell-Side Analyst Industry Matter? An Examination of Bias, Accuracy, and Information Content of Analyst Reports*, 72 J. FIN. 1285 (2017).

[188] *Id.* at 1291.

[189] *Id.* at 1288.

[190] *Id.* at 1288.

Greenwich Associates reported that only 11 percent of soft-dollar fees were spent on individual company studies and stock-specific ideas or recommendations in the first quarter of 2015; the figure was a mere 8 percent in the first quarter of 2014.[191] In the first quarter of 2015, the other soft dollars were allocated to expenditures like: direct access to companies' management (24 percent), analyst service (21 percent), research conferences and industry seminars (14 percent), sales (11 percent), economic analysis and portfolio strategy advice (7 percent), data services (6 percent), industry studies (3 percent) and other (3 percent). While this does not disprove the public-good hypothesis, it does suggest that the transparency of pricing will probably not lead to substantial, suboptimal production of research.

To overcome the second hurdle, one has to show there is no better way to promote more optimal levels of research than through soft dollars. This is likely insurmountable. Even if bundled commissions do generate some amount of public good, hidden charges on retail investors is not the appropriate way to finance that public good.

There is no doubt that the existence of soft-dollar practices creates an agency problem. Recall from the previous section that Edelen et. al (2012) show: (i) mutual fund expenditures are less efficient when paid using opaque commission bundling rather than transparent expensing, and yet (ii) investor flows are more positively related to bundled distribution payments despite larger negative impacts on performance. This significant agency cost is summed up by a quote in Haslem (2011): "soft dollars [is] when you use other people's money to buy something for yourself. A hard dollar payment is when you take it out of your own pocket."[192] Mutual fund advisers can bypass expensing research in management fees when using soft dollars, and brokers on the receiving end are not required to deliver the lowest cost or highest quality of trade execution. Thus, use of soft dollars allows fund advisers and brokers to potentially benefit at the expense of the investor.

This social cost is relevant because it subtracts from the potential social benefit of public-good research. (The next section describes and then refutes an idiosyncratic view that soft dollars actually *mitigate* principal-agent costs.) It is a well-established fact in economics that the optimal production of a good occurs when, generally speaking, marginal cost equals marginal benefit. The production of a public good is no different.[193] Thus, a proponent of soft-dollar practices cannot point solely to the production of research and claim victory. Furthermore, there is no mechanism to ensure that soft

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[191] *See* John G. Colon, *Business as Usual? Eying Fundamental Change in Payment for Research*, Greenwich Report (2015). Greenwich Associates "conducted in-person and telephone interviews regarding U.S. equity investing with 243 U.S. equity portfolio managers and 321 U.S. equity traders between November 2014 and February 2015." The figures are based on "148 respondents in 2014 and 169 in 2015."

[192] John A. Haslem, *Issues in Mutual Fund Soft-Dollar Trades* (Aug. 26, 2011), *available at* https://ssrn.com/abstract=1917025 (quoting testimony of Morton Klevan, U.S. Department of Labor, PWPA Advisory Council, Working Group on Soft Dollars and Directed Brokerage, November 13, 1997) (internal quotations omitted).

[193] Indeed, there is a literature on the provision of public goods that spans decades. *See, e.g.*, Thomas Aronsson & Olof Johansson-Stenman, *When the Joneses' Consumption Hurts: Optimal Public Good Provision and Nonlinear Income Taxation*, 92 J. PUB. ECON. 986 (2008); John Douglas Wilson, *Optimal Public Good Provision with Limited Lump-Sum Taxation*, 81 AM. ECON. REV. 153 (1991); Theodore Groves & John Ledyard, *Optimal Allocation of Public Goods: A Solution to the "Free Rider" Problem*, 45 ECONOMETRICA 783 (1977); Paul A. Samuelson, *The Pure Theory of Public Expenditure*, 36 REV. ECON. & STAT. 387 (1954).

dollars are used to promote *valuable* research as opposed to useless research.[194] Therefore, it is better to have a direct subsidy for research that is financed transparently through general revenues or through a broad-based levy on trading.

IV. SOFT DOLLARS DO NOT MITIGATE PRINCIPAL-AGENT PROBLEMS

In addition to the academic work discussed above, there is a distinct theoretical justification of soft dollars that warrants attention: the view that soft dollars *mitigate* a principal-agent problem between the investment manager and the broker-dealer hired for trade executions. Horan and Johnsen (2008) argue that: "soft dollar bundling effectively reduces the agency problems that plague portfolio managers and their executing brokers. One critical incentive problem is the difficulty a manager has assessing quality in a noisy market; that is, securities execution is an experience good."[195] The underlying idea behind this "experience good" analogy is that the consumer does not know its quality *ex ante*. The consumer can only find out the quality after experiencing the good.[196] Common examples include restaurants, wine, health care, cosmetic products, and so forth. The following analysis aims to show the reader that purchasing trade execution using soft dollars does not fit in their framework of experience goods.

Consider the following diagram of parties involved in a soft-dollars transaction:

Investor —(1)— Investment Adviser —(2)— Broker-Dealer

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[194] *See* FT View, *Brokers Should Bin the Bundles of Research Notes*, Financial Times (Feb. 3, 2016), *available at* https://www.ft.com/content/871f77f6-ca75-11e5-be0b-b7ece4e953a0 ("Investment banks generate vast volumes of research, very little of which is ever read. Of the £3bn spent in 2012 by UK investment managers on dealing commissions, roughly £1.5bn was notionally kicked back in the form of investment reports. Yet fund managers often throw these into the bin without even reading the headline.").

[195] Stephen M. Horan & D. Bruce Johnsen, *Can Third-Party Payments Benefit the Principal? The Case of Soft Dollar Brokerage*, 28 INT'L. REV. Law L. & ECON. 56, 63 (2008) (internal quotations omitted); *see also* D. Bruce Johnsen, *Using Bond Trades to Pay for Third-Party Research* (Jul. 2010), George Mason Law & Economics Research Paper No. 10-33, *available at* https://ssrn.com/abstract=1647277 (describing the way in which soft dollars mitigate agency problems); D. Bruce Johnsen, *Integrative Social Contract Theory and Institutional Brokerage Commission Rebates* (Feb. 2010), George Mason Law & Economics Research Paper No. 10-11, *available at* https://ssrn.com/abstract=1558526 (using Integrative Social Contract Theory to show that "institutional brokerage rebates, often condemned as kickbacks, payola, or commercial bribery, likely benefit mutual fund investors once the problem of brokerage quality assurance is recognized"); D. Bruce Johnsen, *Directed Brokerage, Conflicts of Interest, and Transaction Cost Economics* (Apr. 2008), George Mason Law & Economics Research Paper No. 08-24, *available at* https://ssrn.com/abstract=1125419 (claiming that soft-dollar practices assure quality brokerage because execution quality is an "experience good" and "a broker must expect to receive a stream of premium portfolio commissions in excess of his execution costs" to have the proper incentives); D. Bruce Johnsen, *The SEC's 2006 Soft Dollar Guidance: Law and Economics* (Apr. 2008), George Mason Law & Economics Research Paper No. 08-25, *available at* https://ssrn.com/abstract=1125486 (arguing that the then-SEC Chairman Christopher Cox's proposal to repeal the soft-dollars safe harbor is "hopelessly misguided" because soft dollars are a solution to assure the quality of experience goods); Stephen M. Horan & D. Bruce Johnsen, *Does Soft Dollar Brokerage Benefit Portfolio Investors: Agency Problem or Solution?* (Mar. 2004), George Mason Law & Economics Research Paper No. 04-50, *available at* https://ssrn.com/abstract=615281 (stating that soft dollars represent a "contractual solution to the agency problem that aligns the incentives of investors, managers, and brokers where direct monitoring mechanisms are inadequate"); Stephen M. Horan & D. Bruce Johnsen, *Portfolio Management, Private Information, and Soft Dollar Brokerage: Agency Theory and Evidence* (Jul. 1999), George Mason Law & Economics Working Paper No. 00-15, *available at* https://ssrn.com/abstract=131463 (arguing that soft dollars could be "a method of reducing agency costs by encouraging optimal research and enforcing property rights to private information by bonding the quality of broker executions").

[196] *See* Phillip Nelson, *Information and Consumer Behavior*, 78 J. POL. ECON. 311 (1970).

The investor invests in a portfolio managed by the investment adviser. This is relationship (1) in the above diagram. The investment adviser hires the broker-dealer to execute trades, which corresponds to relationship (2). From first principles, we know there are two principal-agent relationships in this system: the investor is the principal when buying a service from the investment adviser; and the investment adviser is the principal when buying trading services from the broker-dealer. Horan and Johnsen argue that soft dollars can mitigate the information asymmetry present in relationship (2).[197]

To evaluate the strength of this theory, one must first inquire into the premise of their argument. How severe is the information asymmetry problem between an investment manager like Fidelity and a broker-dealer like JPMorgan? Put another way, how many broker-dealers interact with investment managers like Fidelity? There are only a handful of sizeable players in the market: Bank of America, Citigroup, Goldman Sachs, JPMorgan, Morgan Stanley, Wells Fargo, etc. Investment managers like Fidelity probably interact with a dozen or two of these broker-dealers. To be sure, in a market with hundreds or thousands of similar sellers, it is difficult for a one-time buyer to find out whether or not the product is of suitable quality; however, the degree of difficult is greatly reduced when a repeat buyer deals with a dozen repeat sellers. [198]

Understandably, when a broker-dealer executes a trade, its client is concerned about the price and the trade impact. One may counter that trade impact is incredibly difficult to measure, so even repeat buyers in a specialized market cannot be certain they are receiving the best deal. While perfect knowledge may be impossible to acquire, there is an entire industry of third-party vendors that provide evaluations on trade executions.[199] The Securities and Exchange Commission also provides verification of this sort.[200]

Nevertheless, assume for the sake of argument that these third-party vendors are no good at their job or that they do not provide information at sufficiently frequent time intervals. In fairness to Horan and Johnsen, their statement only says that soft dollars mitigate the information asymmetry problem when there is no information verification.[201] The information asymmetry point still fails. Consider the following thought experiment: Suppose investors cannot see the return on their funds. Suppose further the advisers tell the investors: "You have to pay 2x in order to find a high-quality investment adviser like us, whereas you would normally pay 1x. But once you pay the 2x, you will receive 1x back in the form of a college tuition fund for your children."

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[197] *See* Horan & Johnsen, *supra* note _____, at 64 ("Depending on the discount rate and the time it takes managers to discover cheating (in part, a function of market volatility), a perpetual stream of rents of three cents per share can have a higher present value than a short-term stream of rents of four cents per share. The premium six cent per share commission therefore effectively assures high-quality executions."). In other words, soft-dollar usage assures good behavior on the part of the broker-dealer until performance information is revealed.

[198] *Compare* D. Bruce Johnsen, *The SEC's 2006 Soft Dollar Guidance: Law and Economics*, George Mason Law & Economics Research Paper No. 08-25, *available at* https://ssrn.com/abstract=1125486 (explaining the efficacy of soft dollars through the following hypothetical: "Imagine a fund adviser facing an indefinite series of identical trading rounds. . . . At the beginning of each quarter he must *select an unfamiliar broker* to execute a million-share block trade, which will yield a gross gain per quarter of 10 cents per share, or $100,000, before deducting transaction costs") (emphasis added).

[199] Simply Google "rank trade execution quality."

[200] *See* Securities and Exchange Commission, *Fast Answers: Best Execution* (accessed Feb. 28, 2017), *available at* https://www.sec.gov/answers/bestex.htm ("SEC rules require broker-dealers to provide quarterly reports on routing of customer orders and require markets to supply monthly reports on execution quality.").

[201] Horan & Johnsen, *supra* note ____, at 64.

How exactly does that ensure the investment adviser is high quality? The low-quality advisers can similarly say: "Pay us 2x and get 1x back." The investor would never know.

Analogously, investment advisers cannot confirm that their trades were properly executed by the broker-dealers. The broker-dealers can tell the advisers: "You'll have to pay 2x in order to find a high-quality broker-dealer like us, whereas you would normally pay 1x. But once you pay the 2x, you will receive 1x back in the form of research." Again, this scheme does nothing to alleviate the information asymmetry problem. Fidelity cannot tell whether each trade conducted by JPMorgan is properly executed or poorly executed. This is true irrespective of the price paid by Fidelity for each trade. Even if Fidelity pays 6 cents per trade instead of 3 cents, JPMorgan can still cheat Fidelity. In fact, all the "low-quality" dealers can play the same game. The problem exists independent of the payment scheme because there is no quality verification.

In sum, payment without verification does not solve information asymmetry. The point of the "experience good" analogy is that the consumer can validate the quality of the good after experiencing it. In this context, however, investment advisers cannot verify the quality of broker trades ex post by paying any amount of soft dollars. They can only verify with the assistance of third parties. Therefore, one would be mistaken to view soft-dollar usage as a sufficient, credible method to solve this agency problem.

Appendix B

Table of Contents

Appendix B

THE REGULATION OF SOFT DOLLARS IN THE E.U. AND U.K.

I. THE EUROPEAN UNION PERSPECTIVE: MARKETS IN FINANCIAL INSTRUMENTS DIRECTIVES I AND II

The Markets in Financial Instruments Directive (MiFID I)[202] was passed by the E.U. in 2004.[203] MiFID I "is a cornerstone of the regulation of financial markets in the European Union . . . It regulates, inter alia, the authorisation and the supervision of investment firms, the requirements for the provision of investment services and activities, the authorisation and supervision of trading venues and the requirements for trading activities of financial instruments across the EU."[204] Article 19 of MiFID I regulates "the conduct of business obligations when providing investment services to clients."[205] Specifically, Article 19 states that "Member States shall require that, when providing investment services . . . , an investment firm act honestly, fairly and professionally in accordance with the best interests of its clients,"[206] and that "the Commission shall adopt implementing measures to ensure that investment firms comply with the principles set out therein when providing investment or ancillary services to their clients."[207]

In order to implement specific provisions of MiFID I (including article 19), the E.U. adopted an implementing directive in 2006.[208] Article 26 of this implementing directive relates to "inducements," which are defined broadly as any fee, commission, or nonmonetary benefit. Under article 26(b), investment firms do not act honestly, fairly, and professionally in accordance with the "best interest" of a client if they pay or are paid any inducement in connection with the provision of an investment or ancillary service, other than enumerated exceptions. One such exception is an inducement (i) where the "existence, nature and amount" of the inducement (or the method of

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[202] Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on Markets in Financial Instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and Repealing Council Directive 93/22/EEC, 2004 O.J. (L 145) 1 [hereinafter MiFID I].

[203] A brief (and simplistic) primer on the structure of the E.U. is likely helpful. The E.U. has a bicameral legislature, consisting of the European Parliament and Council of the European Union. Members of the European Parliament are directly elected by citizens of each member state. The Council of the European Union represents the executive governments of the E.U.'s member states. The European Commission is the E.U.'s executive body and consists of one member from each E.U. state. The Commission President is proposed by the European Council, which is comprised of the heads of state of E.U. member states and voted on by the European Parliament. For a more detailed introduction, see *EU Institutions in Brief*, EUROPEAN UNION (last visited Nov. 6, 2016), https://europa.eu/european-union/about-eu/institutions-bodies_en.

[204] EUROPEAN SECS. & MKTS. AUTH, ESMA/2014/549, CONSULTATION PAPER: MIFID II/MIFIR 10 (2014) [hereinafter *ESMA Consultation Paper*].

[205] MiFID I, *supra* note 202, art. 19.

[206] *Id.* art. 19(1).

[207] *Id.* art. 19(10).

[208] Commission Directive of 10 August 2006 implementing Directive 2004/39/EC of the European Parliament and of the Council as Regards Organisational Requirements and Operating Conditions for Investment Firms and Defined Terms for the Purposes of that Directive, 2006 O.J. (L 241) 26.

calculating that amount where it cannot be determined *ex ante*) is clearly and comprehensively disclosed to the client prior to the provision of the service; and (ii) where payment of the inducement is "designed to enhance the quality of the relevant service to the client and not impair compliance with the firm's duty to act in the best interests of the client."[209] Additionally, the implementing directive required E.U. member states to allow investment firms to disclose the "essential terms" of such arrangements in summary form, provided the investment firm will answer client inquiries when asked.[210]

On October 2011, the European Commission (the E.U.'s executive body) adopted proposals for the review of MiFID I. On January 14, 2014, the European Parliament and the Council of the European Union reached a compromise text. These amendments (MiFID II) were approved by the European Parliament on April 15, 2014, were approved by the Council of the European Union on May 13, 2014, and were published in the Official Journal of the European Union on June 12, 2014.[211] MiFID II sought to strengthen and clarify the protections for investors contained in MiFID I. Specifically, recitals[212] 74 and 75 of MiFID II set out a rigid standard: "all fees, commissions and any monetary benefits paid or provided by a third party must be returned in full to the client as soon as possible after receipt of those payments by the firm and the firm should not be allowed to offset any third-party payments from the fees due by the client to the firm."[213] Regarding disclosure, inducements "should be allowed only as far as the person is aware that such payments have been made on that person's behalf and that the amount and frequency of any payment is agreed between the client and the investment firm and not determined by a third party."[214] Article 24 of MiFID II implements these broad guidelines. When an investment firm provides investment advice on an independent basis or portfolio management to a client, it shall not accept or retain inducements provided by any third party in relation to the provision of the service to the client. However, "*[m]inor non-monetary benefits* that are capable of enhancing the quality of service provided to a client and are of a scale and nature such that they could not be judged to impair compliance with the investment firm's duty to act in the best interest of the client" are permissible, provided the investment firm provides adequate disclosure.[215] Further, investment firms do not act in their clients' best interests when they accept inducements, unless the inducement (a) "is designed to enhance the quality of the relevant service to the client; and (b) does not impair compliance with the investment firm's duty to act honestly, fairly and professionally in accordance with the best interest of its clients."[216] Additionally, the nature of the payment must be disclosed to the client.

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[209] *Id.* art. 26(b)(i)–(ii).
[210] *Id.* art. 26.
[211] Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on Markets in Financial Instruments and Amending Directive 2002/92/EC and Directive 2011/61/EU, 2014 O.J. (L 173) 349 [hereinafter MiFID II]; *see ESMA Consultation Paper*, *supra* note 204, at 10.
[212] "Recitals" are introductory statements of purpose — similar to those in the U.S. context employed by legislatures.
[213] MiFID II, *supra* note 211, at recital 74.
[214] *Id.* at recital 75.
[215] *Id.* art. 24(7)(b), 24(8).
[216] *Id.* art. 24(9)(a)–(b).

Like MiFID I, certain articles of MiFID II needed to be specifically addressed in another directive. Each E.U. member state must pass domestic laws or regulations addressing soft-dollar practices that would comply with the "delegated directive." The European Commission requested that the European Securities and Markets Authority (ESMA), an E.U.-level financial regulatory institution, provide advice on this delegated directive. In May 2014, ESMA published its draft "technical" advice and solicited comments. In response, the European Commission requested input in clarifying four areas.

First, when can an investment firm fulfill the requirement not to accept and retain inducements? ESMA believed this issue was straightforward: "If independent investment advice or portfolio management is provided, investment firms are not allowed to accept and retain fees, commissions or any monetary and non-monetary benefits paid or provided by a third party."[217]

Second, when can "minor non-monetary benefits" be received? ESMA advocated to interpret this exemption strictly and to provide a non-exhaustive list of minor nonmonetary benefits. Specifically regarding research, "ESMA considers that any research that involves a third party allocating valuable resources to a specific portfolio manager would not constitute a minor non-monetary benefit and could be judged to impair compliance with the portfolio manager's duty to act in their client's best interest."[218] ESMA clarified that it does not view it as an "inducement" for an adviser to purchase research from a third party, but this purchase would need a clear, separate contractual agreement.

Third, when do inducements meet the requirement of "enhancing the quality of the relevant service to the client?"[219] ESMA recommended that the European Commission introduce a non-exhaustive list of factors that advisers should consider. These factors may include: whether the inducement is used to pay for "goods or services that are essential for the recipient firm in its ordinary course of business," whether it provides for a higher quality service above regulatory minimums, whether it directly benefits the firm without a benefit to the client, and if the inducement is ongoing, whether it is related to the provision of an ongoing service to the client.

Fourth, what is the required disclosure? ESMA advocated for requiring clear disclosure of nonmonetary benefits, ex-post information on payments where ex ante information is not possible, and an annual report on the actual amount of payments paid or received.[220]

ESMA published its final technical advice in December 2014. It noted that many commentators argued that research cannot be an inducement because it is in the interest of clients — only research at a discount could qualify as an inducement. One frequently cited solution to these conflicts was CSAs between portfolio managers and brokers. While ESMA agreed that CSAs can address some conflicts, it concluded that they "often do not entirely address the conflicts of interests at stake. CSAs still enable amounts charged for research by the investment firm to be determined by the volume of

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[217] *ESMA Consultation Paper*, *supra* note 204, at 120.
[218] *Id.* at 121.
[219] *Id.* at 120.
[220] *Id.* at 123.

transactions to the investment firm with the executing broker."[221] ESMA proposed that MiFID II implementing measures should permit investment firms to accept third-party research only where (i) the investment firm pays for it directly from their own funds or (ii) the payment comes from a "ring-fenced" account (also termed a "Research Payment Account" or RPA) funded by specific charges to their clients.[222] If the investment firm chooses to purchase research from a client-funded account, ESMA recommended "a number of more detailed requirements on the governance of this account and spending."[223] Finally, ESMA recommended requiring investment firms who offer execution of orders and research services to price and supply those services separately. ESMA believed this requirement "would ensure transparency in the market, allowing investment firms to better demonstrate their compliance with the inducements requirements and wider conflicts of interest provisions, and allow competent authorities to more easily detect any poor practices."[224] As will be discussed in more detail below, this final technical advice caused financial regulators in the United Kingdom to believe that CSAs (as they were then commonly used) would not be permitted under this new regime.

ESMA's final "technical advice" was a proposal for the text of the required delegated directive. On April 7, 2016, the E.U. passed a delegated directive[225] and adopted much of ESMA's technical advice. However, it deviated from the advice in some important ways. Recitals 26–30 of the delegated directive laid out its purposes and general guidelines. One recital stated that an RPA "should only be funded by a specific research charge to the client which should only be based on a research budget set by the investment firm *and not linked to the volume and/or value of transactions executed on behalf of clients*."[226]

Articles 12 and 13 provide the framework that member states must implement. Under article 12, "investment firms providing investment advice on an independent basis or portfolio management shall not accept non-monetary benefits that do not qualify as acceptable minor non-monetary benefits."[227] These minor nonmonetary benefits include:

- Generic (or personalized) information about a financial instrument or investment service;
- Commissioned material from corporate issuers where the third party is paid by the issuer to distribute the material;
- Participation in conferences or seminars on the benefits of specific financial instruments or investment services;
- *De minimis* hospitality; and
- Other minor nonmonetary benefits which member states deem capable of "enhancing the quality of service provided to a client" and which are "unlikely

[221] European Secs. & Mkts. Auth, ESMA/2014/1569, Final Report: ESMA's Technical Advice to the Commission on MiFID II and MiFIR 133 (2014) [hereinafter *ESMA Final Technical Advice*].
[222] Id.
[223] *Id.* at 133.
[224] *Id.* at 134.
[225] Commission Delegated Directive, C (2016) 2031 (2016) [hereinafter *EU 2016 Delegated Directive*].
[226] *Id.* at recital 27.
[227] *Id.* art. 12(1)–(2), at 25–26.

> to impair compliance with an investment firm's duty to act in the best interest of the client."[228]

Disclosure of these minor nonmonetary benefits may be generic.

Article 13 addresses inducements in relation to research. Under this article, "the provision of research by third parties to investment firms providing portfolio management . . . to clients shall not be regarded as an inducement" is the research is paid for by (a) direct payments from the investment firm or (b) payments from an RPA. If the payments are from an RPA, a number of additional conditions must be met. First, the RPA must be funded by a specific research charge to the client that is (a) "based on a research budget set by the investment firm for the purpose of establishing the need for third party research" and (b) not linked to the volume of transactions executed.[229] Second, "investment firms [must] set and regularly assess a research budget."[230] This budget must be based on the need for third-party research, subject to appropriate controls and senior management oversight, have a clear audit trail of payments, and demonstrate how the amounts paid were determined based on quality criteria.[231] Third, the investment firm must be responsible for the RPA.[232] However, the firm may delegate administration of the RPA to a third party.[233] Fourth, the investment firm must "regularly assess the quality of the research purchased based on robust quality criteria."[234] In order to satisfy this requirement, "investment firms shall establish all necessary elements in a written policy and provide it to their clients."[235] The firm must also determine and disclose to clients how it will fairly allocate costs across various portfolios it may own.[236]

Additionally, when an RPA is used, an investment firm must disclose (i) *ex ante* information regarding the budgeted amount for research and the amount of the estimated research charge and (ii) annual information on the total costs incurred for third-party research.[237] The total amount of research charges may not exceed the research budget,[238] and the firm shall agree on the amount of the research charge with clients.[239] The European Commission also accepted ESMA's advice to require investment firms providing execution to price such execution separately by "identify[ing] separate charges for these services that only reflect the cost of executing the transaction."[240]

While ESMA's final technical advice suggested CSAs would not be allowed, article 13(3) provides otherwise. It states that "[e]very operational arrangement for the collection of the client research charge, where it is not collected separately *but alongside a transaction commission*, shall indicate a separately identifiable research charge and fully comply" with the above requirements.[241] This provision was not a part of ESMA's

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[228] *Id.* art. 12(3), at 26.
[229] *Id.* art. 13(1)(b)(i); *id.* art. 13(2).
[230] *Id.* art. 13(1)(b)(ii).
[231] *Id.* art. 13(6).
[232] *Id.* art. 13(1)(b)(iii).
[233] *Id.* art. 13(7).
[234] *Id.* art. 13(1)(b)(iv).
[235] *Id.* art. 13(8).
[236] *Id*.
[237] *Id.* art. 13(1)(c).
[238] *Id.* art. 13(4).
[239] *Id.* art. 13(5).
[240] *Id.* art. 13(9).
[241] *Id.* art. 13(3) (emphasis added).

final technical advice, and the inclusion of this language suggests that the E.U. ultimately will allow some form of CSAs to continue. Otherwise, it is difficult to understand why this provision was inserted. The Financial Conduct Authority (FCA) in the United Kingdom had been supportive of the elimination of CSAs.

A. The U.K. Perspective: Difficulties in CSA Regulation and On-Going MiFID II Implementation

The Financial Services Authority (FSA), a former financial regulator in the United Kingdom, published a report in April 2003[242] that identified significant concerns with respect to dealing commissions.[243] Among the specific concerns were a lack of transparency and accountability, the potential for opaque arrangements to hide conflicts of interest, and a lack of effective competition for those services bundled with execution.[244] The FSA was originally planning on "unbundling" non-execution services, meaning requiring separate contracts for execution services and non-execution services, but it ultimately decided to proceed with an industry-led solution. This solution resulted in three changes from the previous regime. First, new rules in the Conduct of Business Sourcebook (COBS) that limited the range of goods and services that investment managers can buy with dealing commissions to "execution" and "research" goods and services. Second, enhanced disclosures by investment managers to clients on the costs of execution and research. Third, encouraging investment managers and brokers to seek and provide clear payment and pricing mechanisms, such as CSAs.[245]

In November 2012, the FSA published a report highlighting problems with respect to soft-dollar accounts. The report found that although firms spent millions of pounds of customers' money buying execution and research services from brokers, "[o]nly a few firms [the FSA] visited exercised the same standards of control over these payments that they exercised over payments made from the firms' own resources."[246] Poor practices included paying for research services by directing business to brokers on a trade-by-trade basis, failing to review on a regular basis whether products and services purchased may be purchased with client funds, and inadequate disclosure. These findings spurred the newly created FCA to take action.

The FCA released a Consultation Paper outlining certain findings in November 2013. This Consultation paper proposed reforms to COBS and solicited feedback.[247] One of the more troubling findings from the FCA's investigation involved payments for corporate access. The FCA found that firms were using soft-dollar accounts to get access to company management or obtaining preferential access to IPOs. The FCA concluded

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[242] *See generally* Fin. Services Auth., CP 176, Bundled Brokerage and Soft Commission Arrangements (2003).
[243] A note on terminology: "dealing commission" refers to the payment made from the investment adviser to the broker. A CSA will typically specify what amount of the dealing commission will be spent on execution and what amount will be spent on research. The U.K. does not generally use the phrase "soft dollar," and the question is usually framed as whether a good or service can be paid for out of the "dealing commission."
[244] *See* Fin. Conduct Auth., CP13/17, Consultation on the Use of Dealing Commission Rules 11 (2013) [hereinafter *FCA 2013 Consultation Paper*].
[245] *Id.* at 12.
[246] Fin. Servs. Auth., Conflicts of Interest Between Asset Managers and Their Customers 7 (2012) [hereinafter *FSA 2012 Report*].
[247] *See generally FCA 2013 Consultation Paper*, *supra* note 244.

that "[b]ased on available evidence . . . , we estimate that UK investment managers may have made aggregate annual payments for corporate access of up to £500m from client dealing commissions in 2012."[248] Although it should have been obvious that these payments do not qualify as research or execution, the FCA felt the need to define corporate access and add it to the list of examples of goods and services that cannot be paid for through dealing commissions.[249]

The proposed reforms included clarifying the COBS provisions that set out the criteria for exempt research, creating a presumption that goods or services that do not meet the criteria are not exempt, defining and providing guidance for corporate access, and providing guidance on mixed-use items. Overall, the FCA believed that its proposal would "clarify and reinforce the existing rules and the intention behind the original regime," not "impose new requirements on firms."[250] The FCA published its responses to feedback and the final amendments to COBS in May 2014.[251] Overall, the FCA went with the main elements of its original proposals, but made some small tweaks. [252]

COBS provides that an investment firm must act honestly, fairly, and professionally in accordance with the best interests of its client.[253] Under COBS 2.3.1, a firm performing investment services for a client must not accept or pay a fee, commission, or nonmonetary benefit on behalf from a third party unless it does "not impair compliance with the firm's duty to act in the best interests of the client" and discloses the fee or method of calculating the fee.[254] Under COBS 11.6, an investment manager must not accept any good or service in addition to the execution of its customer orders if it: (a) executes the order through a broker or other person, (b) passes on the person's charges to its customers, and (c) is offered the good or service in return for the charge in (b).[255] However, this prohibition does not apply where: (a) the "investment manager has reasonable grounds to be satisfied that the good or service receive in return for the charge[] . . . will reasonably assist the investment manager in the provision of its services to its customers,"[256] (b) the exchange of the good or service for the charge "does not, and is not likely to, impair compliance with the duty of the investment manager to act in the best interests of its customers,"[257] and (c) the good or service is either (i) directly related to execution or (ii) "amounts to the provision of substantive research."[258] For a good or service to be directly related to execution, it must be (a) linked to the "arranging and conclusion" of a specific transaction or series of transactions, and (b) provided between when the adviser makes the trading decision and when the transaction is concluded.[259] For a good or service to amount to "substantive research," it must (a) add value to the investment or trading decisions by providing new insights that inform

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[248] *Id.* at 15.
[249] *See id.* at 16.
[250] *Id.* at 18.
[251] *See generally* Fin. Conduct Auth., PS14/7, Changes to the Use of Dealing Commission Rules: Feedback to CP13/17 and Final Rules (2014) [hereinafter *FCA 2014 Policy Statement*].
[252] *See id.* at 5.
[253] Code of Business Sourcebook § 2.1.1 (2016) [hereinafter COBS].
[254] § 2.3.1.
[255] § 11.6.3(1).
[256] § 11.6.3(3)(1)(a) (emphasis omitted).
[257] § 11.6.3(3)(1)(b) (emphasis omitted).
[258] § 11.6.3(3)(1)(c)(i)–(ii).
[259] § 11.6.4.

the investment manager, (b) represent original thought in the consideration and assessment of new and existing facts, (c) have intellectual rigor, and (d) present the investment manager with meaningful conclusions.[260]

COBS also regulates the necessary disclosure in addition to the substantive requirements regarding dealing commissions. Under COBS 2.3.1, a firm performing investment services for a client must not accept or pay a fee, commission, or nonmonetary benefit on behalf from a third party unless it does "not impair compliance with the firm's duty to act in the best interests of the client" and "the existence, nature and amount of the fee, or, where the amount cannot be ascertained, the method of calculating that amount, is clearly to the client, in a manner that is comprehensive, accurate and understandable, before the provision of the service."[261] COBS 11.6 complements this more general requirement and demands two types of disclosure: prior disclosure and periodic disclosure. Prior disclosure should include adequate disclosure of the firm's policy relating to the receipt of goods and services through dealing commissions, and should explain why the firm might find it necessary or desirable to use dealing commissions to purchase goods and services.[262] Periodic disclosure must be at least annual and must disclose the details of the goods and services that relate directly to the execution of trades and those that are attributable to the provision of substantive research.[263]

Not even three months after finalizing its amendments to COBS and just one month after MiFID II was first published, the FCA in July 2014 published a Discussion Paper outlining recent supervisory findings and recommending unbundling research from dealing commissions.[264] Overall, it believed that unbundling "would be the most effective option to address the continued impact of the conflicts of interest created for investment managers by the use of a transaction cost to fund external research."[265]

FCA found that investment firms paid roughly £3bn to brokers per year in dealing commissions, £1.5bn of which was spent on research.[266] While there had been some improvement since 2006 with respect to dealing commissions, the FCA still found a number of questionable practices that "support[ed] the case for structural change."[267] First, the FCA found that dealing commissions spent on research remained linked to the volume of trades. "While it is reasonable that the amount paid for execution will fluctuate with the number and size of trades executed, the amount paid for research should not. It should instead represent the perceived value of the research used by the investment manager."[268] The FCA also found that most firms used a "broker voting process." In this process, the investment firm ranks brokers based on the manager's view of the value of the research services provided, and rewards brokers that are ranked highly

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[260] § 11.6.5(1).
[261] § 2.3.1(a); § 2.3.1(b).
[262] § 11.6.12, .14.
[263] § 11.6.15,.16, .18.
[264] *See generally* Fin. Conduct Auth., DP 14/3, Discussion on the Use of Dealing Commission Regime: Feedback on our Thematic Supervisory Review and Policy Debate on the Market for Research [hereinafter *FCA 2014 Discussion Paper*].
[265] *Id.* at 6.
[266] *Id.* at 5.
[267] *Id.* at 6.
[268] *Id.* at 23.

with more trades. This ranking process provides no insight into the monetary value of services provided.[269] On the broker side, most brokers targeted "client profitability," meaning they sought to maximize the amount of commissions received in return for the research provided.[270]

Overall, while the FCA recognized the possibility of incremental reform through better disclosure, clearer standards, and better internal governance, it was convinced that more drastic change was necessary. As it stated, "[t]he lack of significant improvements since 2006, despite more recent supervisory scrutiny, indicates this approach is unlikely to be effective."[271]

FCA published feedback on its Discussion Paper in February 2015.[272] By this time, ESMA had put out its final technical advice, and FCA's response to this advice was extremely positive. The FCA interpreted ESMA's proposals as meaning that "[r]esearch would no longer be paid for in transaction fees that have no correlation to the quantity and value of research received and consumed."[273] It advised that investment firms get ahead of the curve by starting to consider "how they may need to change their controls now and should not wait until 2017 if changes are needed."[274]

After the EU passed the delegated directive in April 2016, FCA produced a new Consultation Paper analyzing the proposal and outlining future implementation in September.[275] Specifically, the FCA proposed a new COBS section that would replace COBS 11.6. As a result of the new delegated directive, the FCA stated that "MiFID II . . . allows the firm to collect a client research charge alongside a transaction charge or cost."[276] However, research charges accrued in this way must "accrue into a separate RPA used by the firm for the particular budget that the portfolio is subject to."[277] This requirement would necessitate changes to current CSA accounts. The FCA believed that any payment system linked to transactions must ensure that charges are immediately placed into an RPA after the associated transaction, the RPA account is "ring-fenced" and separately identifiable from any third-party assets, payments from the RPA are in the name of the investment firm, and the investment firm is able to deduct funds in a way that allows it to match the budget set for the group of client portfolios and rebate funds if significant amounts are unspent.[278] FCA also stated that "[f]irms who provide both execution and research services will have to identify separate charges for their services. This means a broker will no longer be able to charge a bundled execution rate, which the portfolio manager agrees and passes on to their clients as trading costs. . . . Brokers may need to review their business model to develop charging models and service agreements with investment firms for the supply of research."[279] While the

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[269] *See id.* at 24.
[270] *Id.* at 26.
[271] *Id.* at 43.
[272] *See generally* Fin. Conduct Auth., FS15/1, Feedback Statement on DP14/3 — Discussion on the Use of Dealing Commission Regime [hereinafter *FSA 2015 Feedback Statement*].
[273] *Id.* at 9.
[274] *Id.* at 17.
[275] *See generally* Fin. Conduct Auth., CP16/29, Markets in Financial Instruments Directive II Implementation — Consultation Paper III [hereinafter *FCA 2016 Consultation Paper*].
[276] *Id.* at 29.
[277] *Id.* at 29.
[278] *Id*.
[279] *Id.* at 32.

reforms do not fully eliminate payments tied to execution, they do result in significant changes to current practice.

II. COMPARING THE U.S., U.K., AND E.U. APPROACHES

This section will focus on comparisons three areas: the scope of permissible goods and services that can be paid for with soft dollars, the cost allocation and budgeting process, and disclosure.

A. Scope of Permissible Goods and Services

The goods and services that the United States and the United Kingdom allow fall under two broad categories: execution and research. Broadly speaking, the United Kingdom is more restrictive in the types of goods and services it allows under both of these categories than the United States.

In the United Kingdom, the research provided must be "substantive" and represent original thought, have intellectual rigor, and present the asset manager with meaningful conclusions.[280] In the United States, section 28(e)(B) allows "analyses and reports" on a variety of topics, and SEC guidance has allowed aggregations of existing data to qualify as research. These differences mean that a number of items that are allowed in the United States are not allowed in the United Kingdom. For example, trade analytics, trading software, and "other products that depend on market information to generate market research"[281] are allowed in the United States, whereas none of these are allowed in the United Kingdom. COBS § 11.6.6 flatly states that post-trade analytics do not relate to the execution of trades.[282] COBS also provides a non-exhaustive list of items that do not meet the requirements, which includes "services relating to the valuation or performance measurement of portfolios," computer hardware, connectivity services, seminar fees, corporate access services, subscriptions for publications, travel, accommodation, entertainment, order and execution management systems, office administrative computer software, and publicly available information.[283] Further, COBS § 11.6.7 states that "price feeds or historical price data that have not been analysed or manipulated in order to present the investment manager with meaningful conclusions" do not qualify as substantive research.[284] While the United Kingdom has flatly banned seminars and corporate access, in the United States, "[m]eetings with corporate executives to obtain oral reports on the performance of a company are eligible because reasoning or knowledge will be imparted at the meeting . . . [and] [s]eminars or conferences may also be eligible under the safe harbor if they truly relate to research."[285]

Under MiFID I, "investment research" was "research or other information recommending or suggesting an investment strategy . . . concerning one or several

[280] COBS §11.6.3(c)(ii); *id.* § 11.6.5.
[281] SEC 2006 Guidance, *supra*, note 55, at 41,987.
[282] COBS § 11.6.6.
[283] § 11.6.8.
[284] *Id.* § 11.6.7 (emphasis omitted).
[285] *Id.* at 41,985–87.

financial instruments or the issuers of financial instruments, including any opinion as to the present or future value or price of such instruments, intended for distribution channels or for the public."[286] No definition of "investment research" was given under MiFID II. We will likely have to wait and see until MiFID II is implemented in each country to see how the scope of allowable items changes. In general, categories of allowable items include research and minor nonmonetary benefits. Notably, a "brokerage services" or "execution" category is not included. This would suggest that items such as trade analytics and trading software will not be allowed.

B. Cost Allocation and Budgeting

The United States and the United Kingdom have similar legal requirements on the types of payments that will be allowable, but regulators in the United Kingdom have been more aggressive in encouraging asset managers to unbundle commissions. In the United States, bundled commissions are allowed. They are also allowed in the United Kingdom, but since 2006 the FSA and the FCA have encouraged asset managers to enter into CSAs. As will be analyzed later, unbundled commissions in the United States may create complications for broker-dealers under the Advisers Act. Direct payments are allowed and encouraged in the United Kingdom, while this practice would have the same implications for registration in the United States. While neither the United States nor the United Kingdom require asset managers to create an annual budget, regulators in the United Kingdom have encouraged budgets as a best practice.

MiFID II is a strong departure from these approaches. Most notably, it demands that asset managers create a budget for research. This budget must be set in advance, and the amount budgeted must not be related to the volume of transactions. Further, bundled commissions are not allowed. Specifically, investment firms that provide execution and research services must separately price the execution portion. Investment firms are only allowed to pay for research in two ways: out of their own account or through an RPA. Research charges alongside transaction commissions may be credited to an RPA, but the charge must still comply with all of the above requirements. This tension between allowing research charges based on transaction commissions but not allowing the amount budgeted to depend on the volume of transactions might mean that firms will use CSAs up to the point where they create credits equal to their RPA, then switch to execution-only pricing.

C. Disclosure

Disclosure in the United States is relatively weak. Instead of providing specific numbers reflecting soft-dollar payments, investment advisers must disclose what factors they consider when selecting broker-dealers and the factors they consider when they determine whether commissions are reasonable. Item 12 is intended to give investors "sufficient information," but the SEC did not mandate many specifics with respect to what that information must be — it instead relied on the investment adviser's

[286] Comm. of Eur. Secs. Regulators, Consultation Paper, Understanding the Definition of Advice Under MiFID 7 (2009), https://www.esma.europa.eu/sites/default/files/library/2015/11/09_665.pdf.

background fiduciary duty. Disclosure requirements in the United Kingdom are stronger, but not radically so. Where asset managers have CSAs, COBS 2.3.1 demands that "the existence, nature and amount of the fee" be disclosed.[287] When research cannot be separately priced, "the method of calculating that amount" must be clearly disclosed to the client "in a manner that is comprehensive, accurate and understandable, before the provision of the service."[288] Additionally, firms must make an annual disclosure of the soft dollar arrangements they have entered into, which must include details of the goods or services that relate to execution or substantive research,[289] only requires data where CSAs are actually used.

Disclosure requirements under MiFID II are much stronger. First, firms must agree on a research charge with clients in advance. They must disclose the amount budgeted for research and the estimated research charge. They must also disclose internal policies relating to how they will assess the quality of research and how they will allocate costs for this research across funds. Most importantly, they must disclose annual information on the total costs actually incurred for third-party research. This disclosure on actual ex post costs is not required in either the United States or the United Kingdom, but mirrors what the SEC proposed in 1994. The SEC proposal at that time arguably went further than MiFID II by requiring that advisers display individualized data with respect to each broker-dealer, while MiFID II appears to only require the total costs incurred.

[287] COBS § 2.3.1(b).
[288] *Id*.
[289] § 11.6.16.

Appendix C

Table of Contents

Appendix C

EMPIRICAL ANALYSIS OF IMPACT OF MIFID II ON SME COMPANIES

I. ANALYSIS OF BID-ASK SPREADS AFTER MIFID II IMPLEMENTATION

This analysis compares the bid-ask spreads of large and small companies before and after the implementation of MiFID II in January 2018. We first downloaded the daily bid and ask data of 30 of the largest companies, by market capitalization, in the FTSE 100 Index as well as the daily bid and ask data of 30 of the largest companies, by market capitalization, in the FTSE Small Cap Index.[290] Table 1 shows the stock tickers of the companies used in our FTSE sample.

Table 1: Tickers of Companies Used in Sample (LN Equity)

FTSE 100	FTSE Small Cap
RDSA	HYVE
HSBA	MGNS
BP	LWI
GSK	FORT
AZN	IEM
DGE	CHG
BATS	BIFF
RIO	SONG
ULVR	OTB
GLEN	AVON
RB	SAIN
LLOY	NCC
PRU	SLS
VOD	BBH
BHP	MRCH
REL	DFS
RBS	JLEN
NG	JESC
AAL	LIO
BARC	XPP
CPG	EWI
LSE	MUT
CCL	NBPE
TSCO	SAGA
CRH	ATT

[290] The market capitalization rankings of FTSE companies can be found at websites such as http://www.stockchallenge.co.uk/ftse.php.

EXPN	SPI
STAN	CSH
ABF	VEC
BT.A	HLCL
LGEN	TFIF

Second, we calculated the daily bid-ask spread for each of the FTSE companies using this formula:

$$\frac{Ask - Bid}{Ask}$$

This means that, for each trading day, we had 30 bid-ask spreads for the FTSE 100 companies and 30 bid-ask spreads for the FTSE Small Cap companies. Third, for each trading day, we calculated the *median* bid-ask spread of the FTSE 100 companies and the median bid-ask spread of the FTSE Small Cap companies. Because of the noise of the daily series, we then smoothed the daily median series by using a monthly rolling average. The results are presented in Figures 1 and 2 below. The daily time series runs from January 2010 through December 2019.

Figure 1: Median Bid-Ask Spread the FTSE 100 Companies in Sample

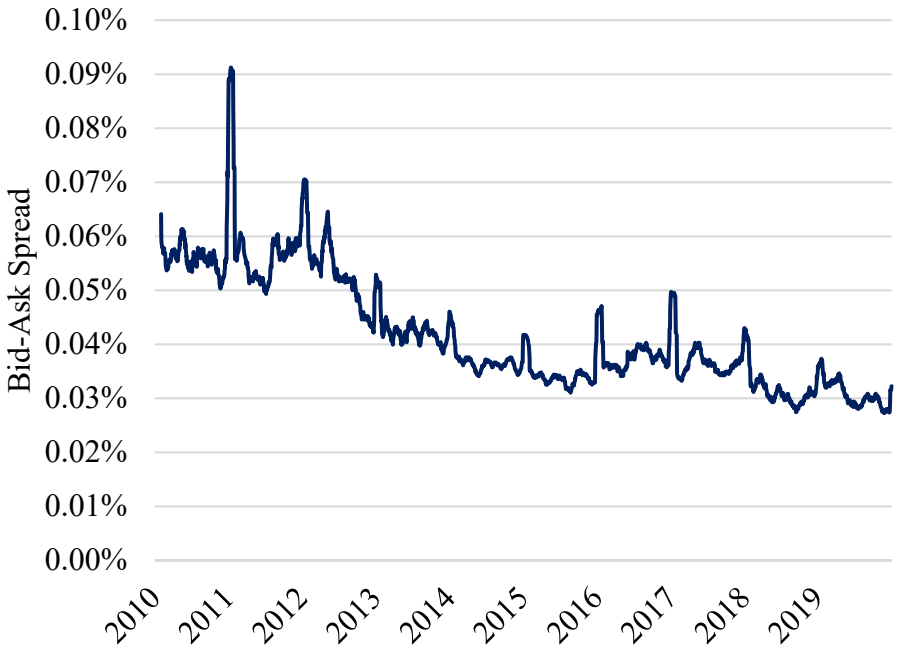


Figure 2: Median Bid-Ask Spread of the FTSE Small Cap Companies in Sample

Here are a few highlights:

- Unsurprisingly, the median bid-ask spread of the FTSE 100 companies is much smaller than the median bid-ask spread of the FTSE Small Cap companies. The difference is an order of magnitude (roughly 0.03 percent versus 0.4 percent).
- The median bid-ask spread of the FTSE 100 companies appears to have decreased slightly in January 2018, though it has jumped back up in recent months.
- The median bid-ask spread of the FTSE Small Cap companies decreased significantly in January 2017; that was one year before the implementation of MiFID II.
- The median bid-ask spread of the FTSE Small Cap companies rose in late-2018 and early-2019, fell in mid-2019, and remains below its average since 2014.

In Figure 3 below, we normalized the two series in Figures 1 and 2 to January 2, 2018—the day before MiFID II went into effect. This means that the two time series equal "1.0" on January 2, 2018. We see that the median bid-ask spread of the FTSE Small Cap companies remains below its average since 2014. Figure 4 shows the same series as Figure 3 but imposes an "average" dashed line to illustrate the point.

Figure 3: Normalized Median Bid-Ask Spread

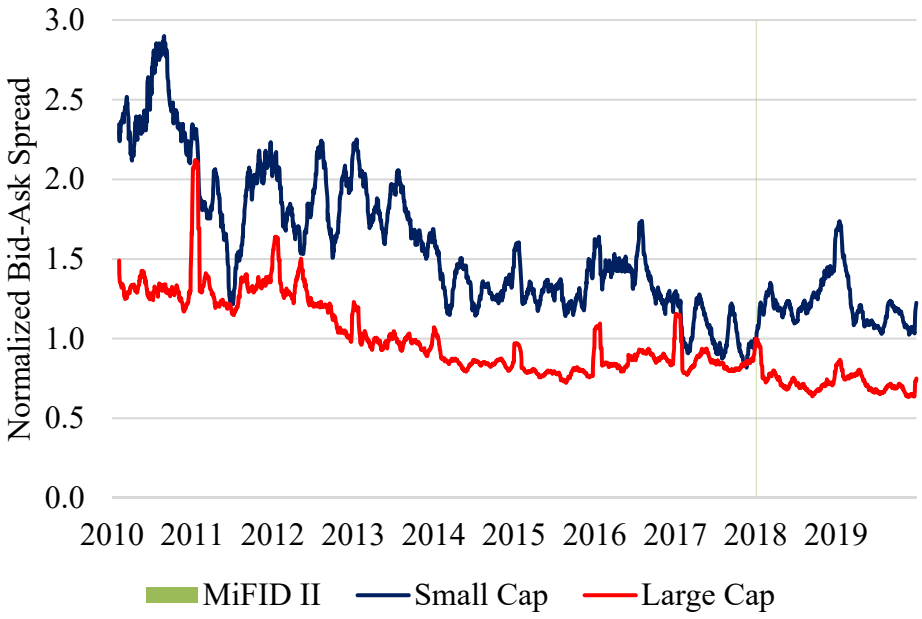
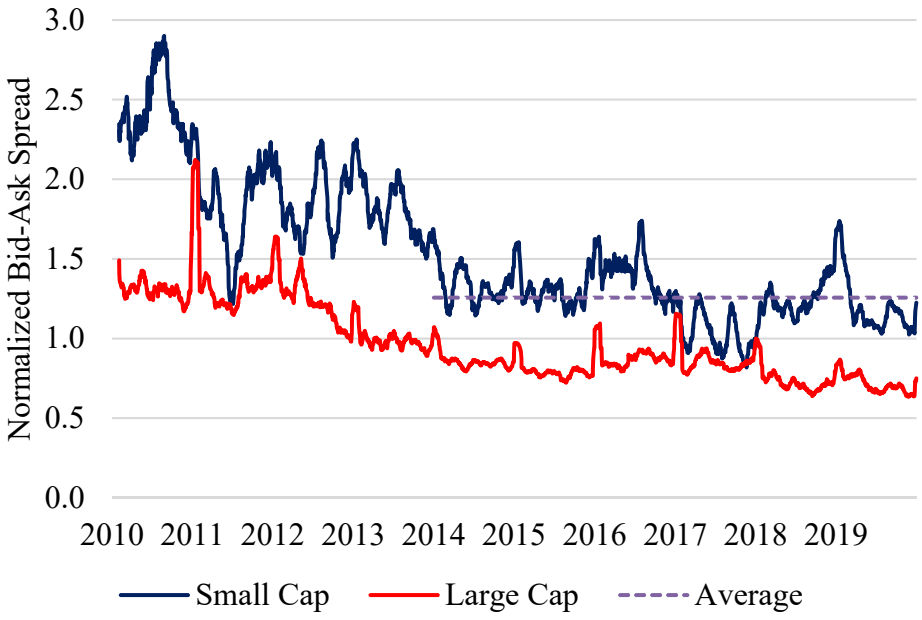


Figure 4: Normalized Median Bid-Ask Spread with Average



Next, we conduct the same experiment, but replacing "FTSE 100" with "Euro Stoxx 50" and replacing "FTSE Small Cap" with "Stoxx Europe Small 200."[291] The new sample is shown below:

Table 2: Tickers of Companies Used in Sample

Euro Stoxx 50	Stoxx Europe Small 200
MC FP Equity	PUM GY Equity
SAP GY Equity	ARGX BB Equity
OR FP Equity	PST IM Equity
FP FP Equity	CPR IM Equity
ABI BB Equity	NIBEB SS Equity
AIR FP Equity	METSO FH Equity
SAN FP Equity	PROX BB Equity
SIE GY Equity	IMCD NA Equity
ALV GY Equity	PSPN SW Equity
ITX SM Equity	SK FP Equity
ASML NA Equity	BARN SW Equity
VOW GY Equity	BOL FP Equity
DTE GY Equity	EKTAB SS Equity
SAN SM Equity	FABG SS Equity
KER FP Equity	REC IM Equity
BAS GY Equity	BALDB SS Equity
DAI GY Equity	VACB SW Equity
BNP FP Equity	MF FP Equity
ENEL IM Equity	SIM DC Equity
CS FP Equity	BION SW Equity
SU FP Equity	PRX NA Equity
ENI IM Equity	ASM NA Equity
BN FP Equity	MOR GY Equity
MUV2 GY Equity	KESKOA FH Equity
BMW GY Equity	ORNBV FH Equity
PHIA NA Equity	AMUN FP Equity
INGA NA Equity	AFX GY Equity
AI FP Equity	HELN SW Equity
ISP IM Equity	KGX GY Equity
ORA FP Equity	HUH1V FH Equity

The bid-ask trends for the Euro Stoxx 50 and the FTSE 100 are quite similar. (Compare Figures 1 and 5.) However, the bid-ask trends for the Stoxx Europe Small 200 and the FTSE Small Cap are not close, most likely because the former contains much

[291] The market capitalization rankings of Euro Stoxx 50 companies can be found at websites such as: https://markets.businessinsider.com/index/market-capitalization/euro_stoxx_50. The companies in our Stoxx Europe Small 200 sample are selected based on their component contribution to the index, which can be found at websites such as: https://www.stoxx.com/index-details?symbol=SCXR.

larger firms than the latter. (Compare Figures 2 and 6.) Indeed, the median bid-ask spread of the former hovers around 0.1 percent whereas the median bid-ask spread of the latter hovers around 0.4 percent.

Figure 5: Median Bid-Ask Spread of the Euro Stoxx 50 Companies in Sample

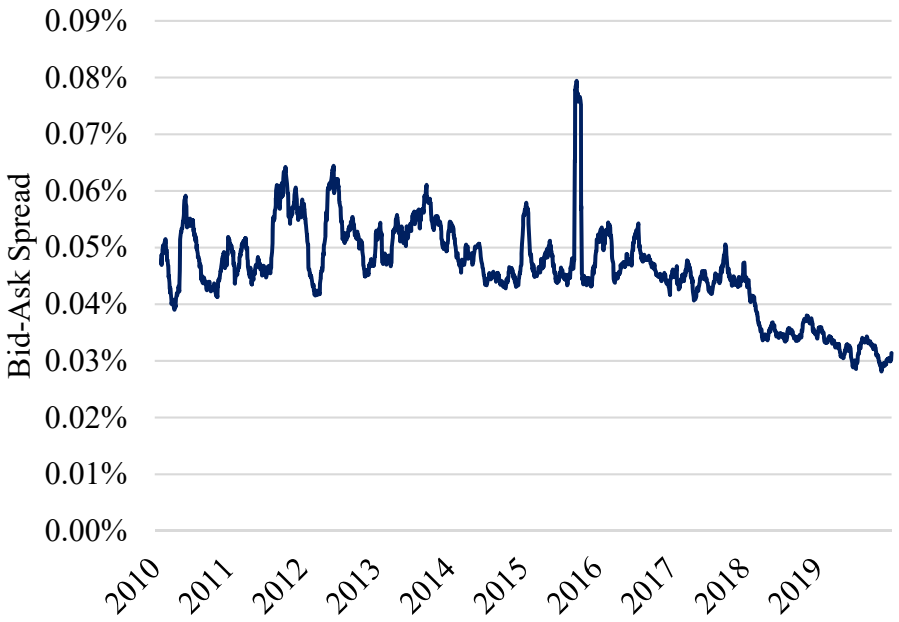
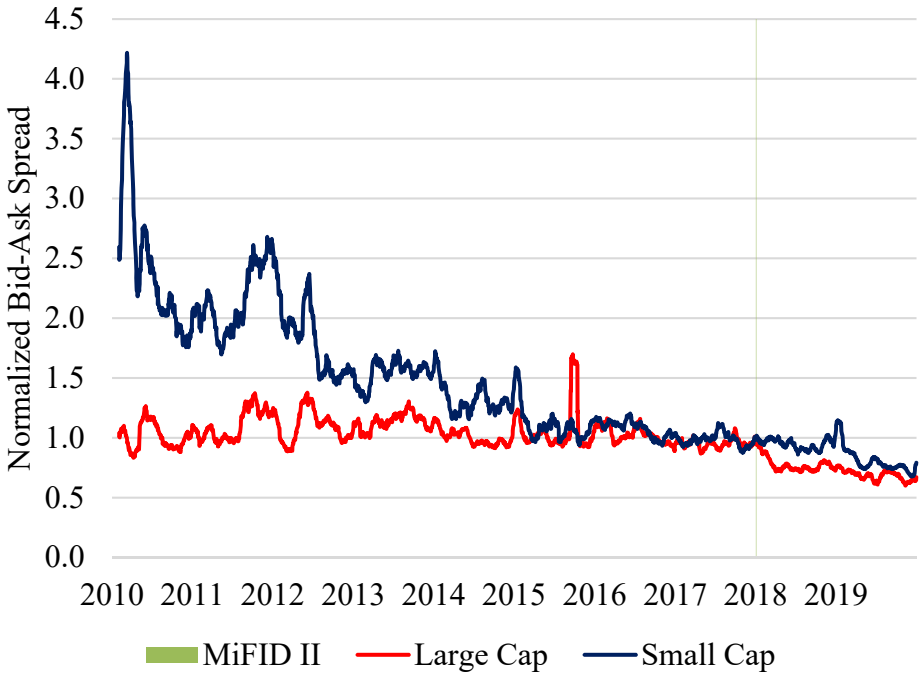


Figure 6: Median Bid-Ask Spread of the Stoxx Europe Small 200 Companies in Sample

Figure 7: Normalized Median Bid-Ask Spread



II. Analysis of Price Synchronicity after MiFID II Implementation

This analysis compares the share price synchronicity of companies in the FTSE 100 versus that of companies in the FTSE Small Cap, and of companies in the Euro Stoxx 50 versus that of companies in the Stoxx Europe Small 200. The analysis utilizes data of 30 of the largest companies in each of the samples.

A simple version of share price synchronicity can be derived by running the following regression and obtaining the R^2:

$$r_{i,t} = \alpha + \beta r_{m,t} + \varepsilon_{i,t}$$

In this econometric specification, $r_{i,t}$ is the return of stock i on trading day t (e.g., the return of HSBC on January 3, 2018) and $r_{m,t}$ is the return of market index m on trading day t (e.g., the return of the FTSE 100 Index on January 3, 2018). We run this regression using daily data within a particular calendar year. We use the FTSE 100 Index return for the FTSE 100 companies in the sample, and we use the FTSE Small Cap Index return for the FTSE Small Cap companies in the sample. Table 1 presents the results.

Table 1: FTSE Price Synchronicity

Calendar Year	FTSE 100 R^2	FTSE Small Cap R^2
2010	0.3874	0.1340
2011	0.4858	0.1858
2012	0.3543	0.1087
2013	0.3420	0.0971
2014	0.2775	0.1227
2015	0.4049	0.1229
2016	0.3034	0.1498
2017	0.1846	0.0520
2018	0.2863	0.1157
2019	0.2548	0.0874

The story told by the price synchronicity measure is similar to the story told by the bid-ask spread. Within both the FTSE 100 sample and the FTSE Small Cap sample, there appears to be a significant dip in 2017 (a full year before MiFID II's implementation) followed by a rebound in 2018. In addition, the price synchronicity measures for both samples are in line with their recent averages since 2014.

The results are similar for the Euro sample. There were significant declines in both the Euro Stoxx 50 sample and the Stoxx Europe Small 200 sample in 2017, a full year before MiFID II, followed by a rebound in 2018.

Table 2: Euro Price Synchronicity

Calendar Year	Euro Stoxx 50 R^2	Stoxx Europe Small 200 R^2
2010	0.5528	0.2709
2011	0.5719	0.4284
2012	0.4769	0.2450
2013	0.4555	0.1682
2014	0.5098	0.1873
2015	0.6405	0.2808
2016	0.5631	0.2826

2017	0.3540	0.1226
2018	0.4010	0.2165
2019	0.3955	0.1762