Avoiding Conflict: How Regulating Broker Conflicts of Interest Affects Mutual Funds

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September 5, 2022

Abstract

How do regulatory efforts to alleviate broker conflicts of interest affect the mutual fund industry and investor outcomes? I address this question by studying a recent Department of Labor (DOL) intervention limiting the types of compensation brokers could receive from individual retirement plans (IRAs). I find that this regulation had immediate effects on investment flows and fund offerings. Monthly flows to mutual funds with conflicted broker compensation arrangements decreased relative to those without such arrangements, and the flow-performance sensitivity of these funds became less convex. Moreover, investment companies transitioned away from offering investments with conflicted broker compensation and became less active. At the same time, I find no changes in funds' risk-adjusted performance, and on a value-weighted basis, funds managed under broker compensation arrangements perform similarly to those managed without these arrangements. Thus, while my results suggest that conflicts of interest drive fund flows and that mitigation efforts may alter capital allocation, improvements to overall investor welfare are limited.

JEL Codes: G11, G12, G14, G23

Keywords: Brokers, Fiduciary, Mutual Funds, Conflicts of Interest, Flow-performance Sensitivity, Investor Sophistication

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1. Introduction

Regulators and industry practitioners often scrutinize conflicts of interests between financial advisors and the clients they serve. Particularly concerning are mutual fund distribution channels that directly link advisor and broker compensation to the funds they recommend, raising the question of whether these compensation-based incentives misalign brokers' interests with those of their clients. Empirical research suggests the answer is "yes." Consistent with brokers neglecting their clients' best interests and investors bearing substantial agency costs, brokers tend to favor and recommend high-commissioned mutual funds, and these funds often underperform alternative funds.[1]

While regulators seemingly take for granted that their efforts to stifle conflicts of interest benefit investors, there is little direct evidence of how such interventions affect the mutual fund industry and investor outcomes. As such, an empirical examination of these effects can improve our understanding of regulatory- and market-based solutions to the conflicts of interest problem. In this paper, I exploit a Department of Labor (DOL) regulation targeting broker compensation arrangements to examine how efforts to align brokers' interests with those of their clients affect mutual fund offerings, investment, management, and investor welfare.

In 2016, the Department of Labor (DOL) issued a new standard of care over individual retirement accounts (IRAs) called the "Fiduciary Rule". Under the Fiduciary Rule, which targeted financial products such as mutual funds with loads and 12b-1 fees, brokers transacting in IRAs would no longer be able to recommend investments that directly affected their level of compensation unless they could prove that their recommendations were solely based upon the best

[1] See Carhart (1997), Elton et al. (2004), Hortacsu and Syverson (2004), Bergstresser et al. (2009), Hackethal et al. (2012), Mullainathan et al. (2012), Christoffersen et al. (2013), Del Guercio and Reuter (2014), Anagol et al. (2016), Hoechle et al. (2018), Egan (2019), Chalmers and Reuter (2020), and Cooper et al. (2020).

interest of their clients. Practically, the regulation sought to alleviate conflicts of interest between brokers and their clients that can arise when brokers favor one investment over another due to its underlying compensation arrangements, not its benefit to investors.

I first examine how the regulatory change affected various choices within the mutual fund industry. Specifically, I study the investment offerings made available by the mutual fund industry and the investment flows of funds most affected by the Fiduciary Rule. The former reflects the choices of mutual fund companies and managers. The latter are a product of decisions made jointly by brokers and their clients. Critical to my analysis is the identification of investment opportunities affected by conflicts of interest, henceforth "conflicted" share classes or funds, and those that are not, henceforth "clean" share classes or funds. Following prior work (Sun, 2014; Barber et al., 2016), I designate share classes with underlying broker compensation (commission loads and 12b-1 fees greater than 25 basis points) as conflicted and most affected by the Fiduciary Rule. Conversely, I designate share classes without commission loads and 12b-1 fees over 25 basis points as clean.

Using a sample of actively managed domestic equity mutual funds from 2012 through February 2018, the month before the 5th Circuit Court of Appeals vacated the Fiduciary Rule, my analysis reveals a stark change in the mix of products offered by the mutual fund industry. After the Fiduciary Rule was announced, the number of conflicted share classes began to decrease, while the number of other share classes steadily increased. Two distinct behaviors drove this trend. First, funds switched their share classes away from conflicted status. Second, on net, funds introduced new share classes without conflicted status and closed conflicted share classes. In fact, the number of conflicted share classes declined every quarter after the rule was announced.

I next turn to the decisions of brokers and investors. It is unclear whether the rule changed investment behavior as brokers could still sell these funds in IRAs if they could prove that engaging in this "conflicted" advice satisfied their clients' best interests. To satisfy the best interest requirement, brokers were subjected to increased legal liability and the burden of documenting such recommendations. Analysis of conflicted and clean share *classes* within a fund reveals significant changes to flows after the Fiduciary Rule was issued. Specifically, I find that flows to conflicted share classes decreased by approximately 78 to 94 basis points per month relative to flows to clean share classes in the same fund. Expanding the analysis to the *fund* level, mutual funds with only conflicted classes experienced significantly less flow than funds with only clean classes after the Fiduciary Rule was issued, suggesting that some brokers could not or were unwilling to accept the legal liability and burden of proof required under the best interest standard of care.

Flow-performance sensitivities also changed around the Fiduciary Rule. I find that before the rule, flows to conflicted funds were more sensitive to positive and negative past unadjusted returns comparable clean funds, suggesting that flows to conflicted funds tend to chase past unadjusted returns and are more convex than those to clean funds. After the Fiduciary Rule was issued, the sensitivity differences between conflicted and clean funds significantly decreased. This result is interesting in light of prior literature that has attributed the convex return chasing pattern to investor unsophistication.[2] However, since the regulation more likely changed broker advice than investor preferences, the flow-performance convexity and return chasing-behavior others have documented in the past may be partly attributable to conflicts of interest than to unsophisticated investor demand.

[2] See Kim (2011), Ferreria et al (2012), Barber et al. (2016), Miguel and Su (2019), and Huang et al. (2021).

Taken together, my results indicate that the Fiduciary Rule significantly changed industry-wide and broker-client behavior by transitioning away from investments with underlying broker compensation. In a narrow sense, these outcomes reflect those sought by regulators, as the policy change explicitly targeted conflicts in the broker-client relationship. More broadly, regulators' central charge was to protect investors and improve welfare. Indeed, referencing prior academic studies while the rule was being drafted, the Council of Economic Advisors' report (CEA) and the Department of Labor's Regulatory Impact Analysis report (RIA) cited the underperformance of broker-sold mutual funds as a main driver for the Fiduciary Rule, implying that these funds are harmful to investor welfare.

In the second half of my study, I examine how the Fiduciary Rule affected investor outcomes. Prior work argues that investors spend too much on active management, underscoring the widely recognized view that active management outperformance tends not to persist and fees often erode any performance advantages over the market that they may have. For example, French (2008) finds that investors bear a cost of 0.67% per year trying to beat the market through active management. Considering these findings, I examine changes in the degree of active management and the expenses associated with these funds. To do so, I create separate fund-of-funds portfolios that invest exclusively in either conflicted or clean share classes. Using Active Share as a proxy for managerial activeness (Cremers and Petajisto, 2009), I find that the clean and conflicted portfolios both become less active during the fiduciary period, with the conflicted portfolio having the most dramatic decrease in activeness. I also find that expense ratios for both portfolios gradually decreased and that the clean portfolio's total assets consistently increased throughout the period, whereas the conflicted portfolio's assets leveled off during the fiduciary period. These results, coupled with a steady increase in assets invested in index funds, are consistent with an

industry-wide shift toward more passive management. Because active management often underperforms passive management and the literature suggests investors spend too much on active management, an aggregate move toward indexing suggests improved investor outcomes.

Second, I study the net-of-fee performance of the fund-of-funds portfolios. I find that the conflicted portfolio significantly underperforms the clean portfolio by approximately half a percentage point per year using equal-weighted risk-adjusted returns, consistent with prior literature and the regulation's claims.[3] However, the underperformance of equal-weighted returns largely persists during the fiduciary period, questioning a common assumption that broker conflicts of interest drive mutual fund manager incentives and underperformance (Del Guercio and Reuter, 2014). Moreover, when using value-weighted risk-adjusted returns, I find no significant underperformance from the conflicted portfolio – before or after the rule change. This result indicates the economic effects of the existence of conflicted funds is small irrespective of regulatory policy. Put another way, conflicted funds do underperform on average, but the value-weighted results link this underperformance to a relatively small fraction of aggregate wealth, muting their adverse economic effects. These results suggest that the assertions made by the CEA and RIA may have been overstated and indicates that brokers do not systematically direct capital in ways that systematically underperform comparable alternative investments.

Insofar as investment returns are viewed as a summary measure of investor outcomes, my results suggest that the regulation had little effect on investor welfare, underscoring three key observations. First, changes in managerial activeness do not seem to result in significant changes in performance between the conflicted and clean portfolios, consistent with recent evidence that

[3] For more information, refer to Appendix C and sections 3.2.3.4.3 & 3.2.3.4.4 of the RIA.

Active Share does not predict outperformance.[4] Second, prior research suggests that, because brokers direct flows based on underlying compensation arrangements, the underperformance of broker-sold funds may be tied to a lack of managerial incentives to generate alpha. My results question this assertion as well because the redirection of investor flows is unrelated to any measurable change in performance. Third, the well-documented underperformance of broker-sold funds appears in an equal-weighted, not a value-weighted portfolio, indicating that smaller conflicted funds may be driving the pattern of underperformance. When value-weighting returns, the significant underperformance disappears, questioning the basis for enacting the Fiduciary Rule. These performance results are consistent with a Berk and Green (2004) equilibrium in which capital is allocated in a way that drives net alpha to zero.

This paper contributes to the empirical literature on conflicts of interest in investment advice. One of the most consistent findings is that brokers are more likely to recommend high-commission products (Hackethal et al., 2012; Mullainathan et al., 2012; Christoffersen et al., 2013; Anagol et al., 2016; Hoechle et al., 2018; Egan, 2019; Chalmers and Reuter, 2020). Using a unique shock to broker conflicts of interest, I affirm that such conflicts matter empirically. I find that mutual fund investment flowed away from funds with underlying compensation arrangements, and mutual fund families responded by shifting their offerings toward those without these arrangements. Further, prior research shows that high commission recommendations often underperform comparable alternative investments (Bergstresser et al., 2009; Del Guercio and Reuter, 2014). My results indicate that this effect is largely driven by the equal-weighted returns

[4] See the recent article written by Robby Greengold and published by Morningstar on November 16, 2021 titled "It's hard to argue for high-active-share funds" as well as Frazzini et al. (2016), Cremers and Pereek (2017), and Lantushenko and Nelling (2021).

and not by value-weighted returns, which questions the size of the economic consequences tied to broker conflicts of interest.

This paper also contributes to the ongoing debate over the fiduciary role of financial professionals. Several studies from law journals have discussed the legal fallout of such a ruling (Pratt, 2016; Schanzenbach and Sitkoff, 2016a, 2016b). Bhattacharya et al. (2020) finds that fiduciary duty raises risk-adjusted returns in annuities by 25 basis points. Similarly, Egan et al. (2020) show that after the Fiduciary Rule, sales of high-expense variable annuities dropped by over 50%. They assert that their findings provide evidence of conflicts of interest in the variable annuity market. In June 2020, the Department of Labor released a new Fiduciary Rule proposal. This proposal extends the fiduciary definition to IRA rollovers and proposes new exemptions to conflicted transactions.[5] Thus, the fiduciary issue continues to be timely. Overall, there is uncertainty around the regulatory framework for the broker-client relationship, and future iterations should heed both direct and indirect effects of past policy prescriptions. My paper seeks to help inform such decisions by being the first, to the best of my knowledge, to show the effects of the Fiduciary Rule on mutual funds.

The rest of the paper proceeds as follows: Section 2 provides institutional background details, Section 3 describes my sample and presents my main results, and Section 4 concludes.

2. Background

2.1. Overview of 2016 Fiduciary Rule

In early 2015, President Barack Obama put the entire financial advice industry on notice when he announced he was directing the DOL to move ahead on a proposal that would greatly

[5] DOL Fiduciary Rule – Evershed Sutherland - https://www.dolfiduciaryrule.com/#:~:text=In%20June%202020%2C%20DOL%20released,investment%20advice%20and%20principal%20transactions.

expand the investment-advice standards for brokers and advisors handling retirement accounts.[6] The Department of Labor's proposal and final ruling in April 2016 came to be known as the "Fiduciary Rule."[7]

The fiduciary standard of care in retirement plans is governed by the Employee Retirement Income Security Act of 1974 (ERISA), and it typically requires certain brokers over employer-sponsored retirement plans to act as fiduciaries. In other areas of retirement planning, brokers had to adhere to a less stringent standard of care called the suitability standard, which only required investments to be suitable to an investor's circumstance. The Fiduciary Rule, which initially was to go into effect on April 10, 2017, sought to expand the fiduciary responsibilities of brokers in the retirement industry. Most consequentially, the fiduciary duty laid out in ERISA would expand from traditional employer-sponsored retirement plans to individual retirement accounts (IRAs).

Under this expansion of fiduciary duty, brokers over IRAs would no longer be able to make recommendations that can directly affect the level of their compensation without committing a prohibited transaction. These prohibited transactions include investment recommendations that create compensation from commissions, 12b-1 fees, revenue sharing, trailing commissions, and forms of non-monetary compensation such as gifts and trips. Legally, this fell under the "but for" test that asks, "but for the recommendation, would the advisor have received compensation or have been entitled to greater compensation?"[8] Previously, brokers operating under a suitability standard only had to disclose possible conflicts of interest, not avoid such arrangements.[9]

[6] Sometimes advisor refers specifically to Registered Investment Advisor. In my context, I refer to advisor and broker as interchangeable terms for those who hold Series 7 licenses and can get compensated for the sale of investment products. For ease of interpretation, I will use the term "broker" throughout this paper.
[7] See Appendix A for a detailed timeline of the Fiduciary Rule.
[8] "Interesting Angles on the DOL's Fiduciary Rule #27" – Fred Reish – November 8, 2016 – National Law Review
[9] "What The Demise of the DOL Fiduciary Rule Means for You: 4 Questions to Ask Your Advisor Now" – Ron Carson – August 5, 2018 – Forbes

While prohibitive, the DOL offered an exemption to brokers recommending investments that included these compensation arrangements. The Best Interest Contract Exemption (BICE) required advisors engaging in this "conflicted" advice to satisfy the Best Interest standard of care. The Best Interest standard of care included three components. First, the prudent-person rule requires that the investment would be one that a knowledgeable and prudent investor would choose given the circumstances. Second, a requirement for individualization necessitates that the investment is based on an individual's risk preferences, objectives, and financial circumstances. Finally, a duty to loyalty requires that the recommendation is made without regard to the financial advisor.[10] While BICE allowed prohibited transactions, the burden to prove the Best Interest standard of care laid with those providing advice, which required extensive documentation and regulatory burden to show that their prohibited transaction met the criteria of prudent, individualized, and loyalty. However, those that charged flat advisory fees (e.g., 1% of assets under management) were mostly exempt from the prohibited transactions under the Fiduciary Rule and therefore were insulated from BICE. To comply with the regulation, brokers had two options: either move to a level-fee compensation structure or satisfy a prohibited transaction exemption such as BICE.

To no surprise, the Fiduciary Rule was contentious. The Obama administration and proponents of the rule argued that the burden of retirement savings was being assumed by individual Americans and ERISA needed to be updated to protect the interests of retirement savers. Research by the Investment Company Institute supports this assertion as IRA assets represented around 22% of total retirement assets in 2000 but grew to around 31% in 2015 when the ruling

[10] "Interesting Angles on the DOL's Fiduciary Rule #20" – Fred Reish – September 20, 2016 – National Law Review

was proposed.[11] Further, the White House Council of Economic Advisors (CEA) found that biased advice drained $17 billion per year from retirement accounts.[12] Advocates for the ruling pointed to such a number as an indication of excessive broker compensation and possible abuses in retirement accounts that needed to be regulated. Additionally, the Department of Labor published its Regulatory Impact Analysis report (RIA) laying out, in detail, the motivation behind the ruling.[13] Although a lower estimate than the CEA, the RIA found that the Fiduciary Rule should reduce investors' costs by approximately $3.76 billion annually. Their estimates include the assertion that broker-sold mutual funds typically underperform direct-sold funds, and they cite various studies supporting their claims.[14] Overall, some industry groups, such as the Financial Planning Coalition, supported the ruling and commended the DOL for taking steps to protect retirement investors.[15]

However, others stood against the ruling. While some large institutional players such as Vanguard and BlackRock asked for the rule to be delayed,[16] many brokers argued for the rule to be eliminated on the grounds that stricter fiduciary regulation would cost the financial services industry up to $5.7 billion over a 10-year period in the form of eliminated commissions and mutual fund fees.[17] Others argued that smaller independent financial advisors would not be able to comply with the new rule and be forced out of business. Finally, some asserted that the rule would

[11] According to the Investment Company Institute, as of Quarter 3, 2021, IRA assets represent 35% of the retirement market.
[12] The White House - FACT SHEET: Middle Class Economics: Strengthening Retirement Security by Cracking Down on Backdoor Payments and Hidden Fees.
[13] Department of Labor Regulatory Impact Analysis - https://www.dol.gov/sites/dolgov/files/ebsa/laws-and-regulations/rules-and-regulations/completed-rulemaking/1210-AB32-2/ria.pdf
[14] For more information, refer to Appendix C and sections 3.2.3.4.3 & 3.2.3.4.4 of the RIA.
[15] Financial Planning Coalition - https://www.dol.gov/sites/dolgov/files/EBSA/laws-and-regulations/rules-and-regulations/public-comments/1210-ZA25/00224.pdf
[16] "BlackRock and Vanguard Call for Delay to Fiduciary Rule" – Financial Times – March 26, 2017
[17] Department of Labor Regulatory Impact Analysis

drastically increase the cost to work with investors with smaller accounts and limit the types of investments available for investors.[18]

Consistent with these concerns, multiple studies and polling suggested that advisors raised account thresholds or limited services.[19] One such study, conducted by A. T. Kearney, a management consulting firm, recommended that financial advisors transition to fee-based services and evaluate new account minimums and that the ruling would lead broker-dealers to collectively stop serving $400 billion in low-balance retirement accounts by 2020. In addition, the Securities Industry and Financial Markets Association (SIFMA) commissioned a study in 2017 that found brokerage services were eliminated for many investors and assets were shifted to fee-only accounts, which demanded higher fees for higher levels of service.[20]

Some argued that the Fiduciary Rule would lead to other adverse outcomes for investors. In a report funded by Capital Group, Robert Litan of the Brookings Institution and Hal Singer of the Progressive Policy Institute argue that the Fiduciary Rule could deprive investors of the ancillary benefits that advisors provide.[21] Specifically, they argue that advisors help investors stay invested during times of market turmoil, engage in less market timing, and properly rebalance their portfolios. They cite Vanguard's 2014 Advisor Alpha report stating that the avoidance of market timing and efficient rebalancing provides 44.5 basis points of yearly return to investors. Finally,

[18] "What Regulation Best Interest Means for You and Your Financial Advisor" – Kelly Smith & Ben Curry – March 5, 2021 – Forbes

[19] Davis & Harman LLP – Proposed extention of transition period and delay of applicability dates - https://www.dol.gov/sites/dolgov/files/EBSA/laws-and-regulations/rules-and-regulations/public-comments/1210-ZA27/00025.pdf

"The Consequences of the Fiduciary Rule for Consumers" – Meghan Milloy – April 10,2017 - American Action Forum

[20] Deloitte Study on the DOL Fiduciary Rule – August 2017 – SIFMA

[21] "Good Intentions Gone Wrong: The Yet-To-Be-Recognized Costs of the Department of Labor's Proposed Fiduciary Rule" – Robert Litan and Hal Singer – July 2015 – Economists Incorporated

they argue that advisors help maximize investor savings through establishing a financial plan and encouraging full utilization of employer-sponsored plans.

The Fiduciary Rule faced legal scrutiny as well, leading to six litigations challenging the rule. The ruling survived three district courts and one court of appeals. However, in March 2018, the 5th Circuit Court of Appeals vacated the ruling finding, among other concerns, that the DOL overreached to regulate services and providers beyond its authority.[22] A few days later, the 10th Circuit affirmed this ruling, effectively killing the Fiduciary Rule and reinstating prior fiduciary law under ERISA.

2.2. Institutional Response

The Fiduciary Rule, uncertainty around its implementation, and increased scrutiny of financial advice left affected broker-dealers with two choices. They could either evaluate current practices and start transitioning toward compliance with the new era of fiduciary standards or continue engaging in prohibited transactions hoping the ruling would be overturned. While some broker-dealers undoubtedly took the latter position, many firms transitioned away from traditional forms of compensation and advisory services. For example, Morgan Stanley Wealth Management saw $18.8 billion in fee-based asset flows in Q1 of 2017, a 219% increase over Q1 of 2016.[23] Likewise, traditional broker-dealers such as Raymond James and Edward Jones saw fee-based accounts increase by 33% and 46%, respectively.[24] Edward Jones even introduced a new fee-based account called Guided Solutions that offered advisory services and portfolio management for a fee of a little over 1% of assets under management. Accounts like this removed the "conflicts of

[22] 5th Circuit Court Ruling – http://www.ca5.uscourts.gov/opinions/pub/17/17-10238-CV0.pdf
[23] Morgan Stanley Q1 2017 Statement - https://www.morganstanley.com/about-us-ir/finsup1q2017/finsup1q2017.pdf
[24] "DOL Fiduciary Rule Pushing Broker-Dealer Assets to Fee-Based Accounts, Away from Commissions" – Greg Iacurci – May 24, 2017 – Investment News.

interest" as advisors would no longer be compensated from fund loads, 12b-1 fees, or commissions. Likewise, investors would gain access to lower fee share classes such as institutional shares.

While commission revenues for broker-dealers were in decline prior to the ruling, according to *InvestmentNews* Research, 2016 saw the largest decrease in commission revenues since 2011, down 3.7 percentage points from 2015.[26] While this trend in commissions was felt across the industry, a similar shift in mutual fund compensation occurred. For example, LPL Financial saw its mutual fund revenue increase from $497 million in 2012 to $610 million in 2014. However, by the end of 2017, LPL's mutual fund revenue was $534 million, down 12% from 2014. This reduction may reflect LPL Financials' experimentation with a mutual fund only (MFO) IRA,[25] which lowered and standardized commissions across 20 mutual fund companies. Surprisingly, after the ruling was vacated in early 2018, LPL increased mutual fund revenue to $616 million at year-end.[26] This interesting trend highlights the ever-changing, quick-adapting nature of the investment industry during the Fiduciary Rule years of 2015 through early 2018. For example, in October 2016, Merrill Lynch took a hardline stance and became the first major firm to announce concrete plans to comply with the Fiduciary Rule and eliminate all commissions on IRAs.[27] However, as the Trump administration pushed for a review and possible revision of the rule in 2017, Merrill Lynch backed off from this position slightly, allowing IRA commissions in certain products and transactions.[28]

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[25] "LPL Financial Announces Details and Fund Companies For Its Industry-First Mutual Fund Only Platform" – LPL Financial – July13, 2017.
[26] Investment News LPL Revenue Breakdown - https://careers.investmentnews.com/adviser-center/profile/72?U=Revenue&Y=2018.
[27] "Merrill Lynch Eliminates Commission IRA Business in Response to DOL Fiduciary Rule" – Greg Iacurci – October 6, 2016 – Investment News.
[28] "Merrill Lynch Will Allow IRA Commissions in Some Circumstances Under DOL Fiduciary Rule" – Greg Iacurci – May 11, 2017 – Investment News.

Ultimately, how this ruling affected the mutual fund industry is an open empirical question and largely unexplored. Anecdotally, some mutual funds sought to comply with the ruling by changing sales loads and introducing new share classes such as "Clean Shares" or "Class T Shares."[29] This paper seeks to bridge this knowledge gap by examining how conflicts of interest mitigation through the Fiduciary Rule affected mutual fund offerings, investment, management, and investor welfare.

3. Results

3.1. Industry Structure, Composition, and Fund Flow

I begin my analysis by examining whether actively managed mutual fund investment options changed during the fiduciary period. I obtain monthly mutual fund data from the CRSP mutual fund database from January 2012 to February 2018.[30] Following Ben-David et al. (2020) and Dannhauser and Pontiff (2019), I eliminate ETFs, ETNs, and index funds from my sample. I restrict my sample to domestic equity funds with a CRSP objective code beginning with "ED". I include fund characteristics, such as fund identifiers, front loads, rear loads, total net assets (TNA), raw returns, expense ratios, and 12b-1 fees, among other variables.

Next, I identify share classes affected by the Fiduciary Rule according to their associated broker compensation. Like Sun (2014) and Barber et al. (2016), I designate share classes with broker compensation as those with front and rear loads and/or 12b-1 fees greater than 25 basis points. By law, the 12b-1 fee cannot exceed 1% and has two components: (1) the service fee and (2) the marketing and distribution fee.[31] The service fee is used to cover administrative costs for

[29] "Past, Present, and Future of the DOL Fiduciary Rule" – Gonzalez et al. – February 8, 2018 – K&L Gates
[30] I start my sample after 2011 because SEC regulatory changes in mutual fund fee disclosures that began in 2012 (Badoer et al., 2020). Furthermore, I stop my main sample in February 2018, the month before the rule was vacated.
[31] Morningstar - https://admainnew.morningstar.com/webhelp/glossary_definitions/mutual_fund/mfglossary_12b_1_Current.html

the fund, such as prospectus preparation, and it is capped at 25 basis points. The marketing and distribution fee is used to compensate brokers and firms for the selling and distribution of their products, and it is capped at 75 basis points. Therefore, any 12b-1 fee greater than 25 basis points must have a marketing and distribution component. I refer to classes with these arrangements as "conflicted", following the terminology used by the DOL's RIA. Likewise, I designate share classes without loads and 12b-1 fees over 25 basis points as "clean".[32]

To keep the analysis simple and give an accurate picture of the changes in the mutual fund industry, I initially drop only observations that are missing a ticker, a *crsp_fundno* identifier, or monthly total net assets. Table 1 shows the summary statistics for conflicted and clean share classes. Panel A reports statistics from December 2014, the year before President Barack Obama announced that the Department of Labor would review the broker recommendation standards. There are 10,094 unique share classes from 3,278 actively managed domestic equity funds. Clean share classes tend to be larger with a mean total net assets of $461 million compared to the mean of $249 million for conflicted share classes. Additionally, conflicted share classes tend to be older, receive less flows, are more likely to be a retail share class,[33] and have higher expense ratios. Because expense ratios includes 12b-1 fees, the mean 12b-1 fee represents over a third of the mean expense ratio for the conflicted share classes. Interestingly, with the removal of the 12b-1 fee, the mean expenses of the conflicted share class are still approximately 10 basis points higher than that of the clean share class.

[32] I do not drop those share classes with 12b-1 fees under 25 basis points. I believe the inclusion of these share classes biases me against finding results. In untabulated results, I exclude these funds in my analysis and find that my results are robust.

[33] Share classes are often designated as either retail or institutional. Institutional share classes often have lower fees and higher investment minimums. It is not appropriate to consider retail share classes exclusively for retail investors and institutional share classes exclusively for institutional investors. In fact, according to the Investment Company Institute, approximately 90% of institutional share classes were held by retail investors at the end of 2014. These are primarily held in employer-sponsored retirement plans.

Panel B reports statistics from December 2016, the end of year after the Department of Labor officially issued the Fiduciary Rule. Both conflicted and clean classes saw slight decreases in expense ratios, from 1.493% to 1.435% and 0.881% to 0.821%, respectively. Conflicted share classes also saw a mean decrease in 12b-1 fees of 1.7 basis points, explaining approximately 30% of the decrease in expense ratios seen by conflicted share classes. The average monthly flows to conflicted classes decreased from 49.9 basis points per month in December 2014 to 1.4 basis points in December 2016. At the same time, clean share classes saw an increase in their mean monthly flow, which is likely driven by the increase in newly adopted share classes. In later analyses, I eliminate the impact of newly introduced share classes and further evaluate changes in flow. Finally, the total number of share classes and funds both increased to 10,473 and 3,326, respectively. However, the mix of share classes does shift in favor of the clean share classes. In Panel A, there were 4,923 conflicted share classes. By December 2016, that number decreased to 4,699. Likewise, there were 5,171 clean share classes in December 2014. That number increased to 5,774 by the end of 2016.

Further examining these changes, Figure 1 shows the total number of actively managed domestic share classes per quarter. The first red line in the figure corresponds to the first quarter of 2015 when President Barack Obama announced in February 2015 that the Department of Labor would eventually be issuing new fiduciary guidance. The second red line in the figure corresponds to the second quarter of 2016 when the Fiduciary Rule was officially issued in April 2016. The figure shows that the total number of unique share classes increased prior to the announcement from President Obama and the rate of change decreased during the fiduciary period, topping off with a little over 10,500 unique conflicted and clean share classes.[34]

[34] Share classes correspond to *crsp_fundno* in the CRSP mutual fund dataset. It represents a unique ticker that is available to investors.

Highlighting a stark change in the mix of products offered by the mutual fund industry, Figure 2 plots the number of conflicted and clean share classes and shows that the number of clean share classes steadily increased during the fiduciary period while the number of conflicted share classes began to decrease steadily after the rule announcement. The decreased rate of change in share class offerings in Figure 1 appears to stem from a reduction in share classes with broker compensation arrangements.

Two effects can potentially drive the transition away from conflicted offerings displayed in Figure 2: share classes changing their compensation arrangements and the net addition or deletion of share classes. Examining the first effect, Figure 3 shows changes in compensation arrangements by looking at the number of share classes that switched from conflicted to clean and those that switched from clean to conflicted. Consistent with a regulatory push away from broker compensation arrangements, most classes in my sample that transitioned moved away from conflicted status. These transitions seemed to be concentrated during the 4th quarter of the years following the 2015 announcement. Most of the transitions away from broker compensation occurred in the 4th quarter of 2016 after the Fiduciary Rule was officially issued.

To address the second effect, Figure 4 shows the net addition of conflicted and non-conflicted share classes. This is computed by taking the difference between total class additions and total class deletions in a quarter. I designate a class addition by documenting whether the age of the class is less than or equal to one month. I do this by taking the current month of observation and subtracting the first month of observation available in the CRSP monthly return dataset. I designate a class deletion by documenting whether the class disappears from the sample and does not have any fund returns. The last available month in the CRSP monthly return dataset represents the deletion month. The figure shows that conflicted classes had net negative additions primarily

during the fiduciary period while clean classes largely remained with pre-period trends, further supporting evidence that the mutual fund industry moved away from compensation arrangements.

Taken together, the results are consistent with the mutual fund industry moving away from share classes with broker compensation and toward share classes without broker compensation. This trend was seemingly exacerbated during the fiduciary period when more share classes transitioned away from conflicted compensation arrangements and more clean share classes were added. Thus, if mutual funds are viewed as a financial product supplied to meet the demand of investors and brokers, regulatory-driven changes in demand from brokers and investors would be reflected in the types of investments available in the market. Therefore, to study the joint investment decisions made by brokers and their clients, I now study mutual fund flows around the Fiduciary Rule.

Whether the Fiduciary Rule affected mutual fund investment is an empirical question. On one hand, the Fiduciary Rule directly targeted the sale of mutual funds with compensation arrangements which would incentivize brokers to direct less money toward these funds. On the other hand, if brokers believed their recommendations were above reproach and would satisfy BICE, flow behavior should largely remain unchanged. Furthermore, because of the legal challenges facing the Fiduciary Rule, some brokers may have resisted changing investment behavior, leaving flows unchanged.

I calculate monthly flows at the share class level as in Sirri and Tufano (1998):

$$FLOW_{f,t} = \frac{TNA_{c,t} - TNA_{c,t-1} * (1 + R_{c,t})}{TNA_{c,t-1}}, \quad (1)$$

where $TNA_{c,t}$ is share class c's total net assets in month t, and $R_{,c,t}$ is the class' monthly unadjusted return. This measure represents the percentage growth in TNA independent of monthly return. I make additional data qualifications to clean the sample and establish consistently populated

controls. I require all share class observations to have non-missing returns and monthly total net assets greater than or equal to $5 million. I also require non-missing current and lagged expense ratios, turnover, and calculated percentage flow, and I eliminate extreme flows that are less than -90% and greater than 1,000%. I keep only those funds with multiple share classes, both conflicted and clean. To mitigate potential incubation bias, I only keep classes that have 12 months of prior returns (Evans, 2010). This leaves 259,671 class-month observations for 2,616 and 3,078 clean and conflicted classes in 1,325 funds from 2012 through February 2018, the month before the rule was vacated.

Similar to Evans and Sun (2020), I initially conduct my analysis at the share-class level instead of at the fund level. I believe that this methodology is appropriate for two reasons. First, practically, brokers do not sell mutual funds at the fund-level as much of the academic literature defines it. They typically sell a specific ticker of a fund to an investor. Second, different share classes of the same fund have different fee structures, clienteles, and return history. By conducting the analysis at the share-class level, I can exploit these variations in share classes within fund, negating potential confounding effects of from the fund manager, family, or portfolio.

To test the effects of the Fiduciary Rule on fund flows to broker-compensation funds, I use the following difference-in-differences model:

$$FLOW = \beta_1 Conflicted + \beta_2 Conflicted \times Fiduciary + X + FEs + \varepsilon, \quad (2)$$

where *FLOW* is the monthly percentage class flow calculated by using equation 1. The variable *Conflicted* is a dummy variable that equals one for those share classes with conflicted compensation arrangements (commission load and/or 12b-1 fee greater than 25 basis points) and zero, otherwise. *Fiduciary* is a time dummy denoting April 2016 through February 2018, before the rule was vacated in March 2018. X is a vector of control variables that includes the prior

month's natural log of TNA, prior month's expense ratio, prior month's turnover, the natural log of current age measured in months, and prior monthly flow. *FEs* include fixed effects controlling for fund-month and fund family.

Table 2 shows the results of the regression in equation 2. In column 1, the conflicted dummy variable loads negatively, suggesting that conflicted share classes received 65.2 basis points less flows than non-conflicted share classes. The interaction with *Fiduciary* indicates that after the Fiduciary Rule was officially issued, conflicted share classes received approximately 75.9 basis points less flow than non-conflicted share classes. In column 2, I include controls which flips the sign on the conflicted dummy in the pre-period, showing that flow is sensitive to variables like prior flow, expense ratio, and size. This is primarily driven by the inclusion of expense ratio as a control. The conflicted indicator is highly correlated with lagged expense ratios with a correlation coefficient of 0.59. However, the interaction with *Fiduciary* remains significantly negative, meaning that the reduction in flow directed toward conflicted classes is not purely driven by expense ratios and other class characteristics.[35]

The fixed effects in columns 1 and 2 are at the fund-month level. Practically, these results can be interpreted as flows to conflicted share classes in fund *f* at month *t* compared to non-conflicted share classes within the same fund and month. The results in columns 3 and 4, which include fund family fixed effects to control for any time-invariant family characteristics that could be correlated with flows and Fiduciary Rule exposure, are largely consistent with the results in columns 1 and 2.

[35] In untabulated results, I include share class fixed effects and the results largely hold. To create share class indicators, I group share classes together based upon the share class reported in CRSP. For example, Class B1 and B5 are grouped into a "B" share class group. CRSP has over 820 unique share class names. I group these share classes into 120 unique class groups based upon share class name.

To ensure my difference-in-differences results do not violate the parallel trends assumption, I run time series regressions for my share class sample. I regress monthly flows on an interaction of a conflicted indicator variable and a quarterly indicator variable and include fund-month fixed effects. Additionally, I set my base quarter to Q1 2016, the quarter prior to the Fiduciary Rule issuance. Figure 5 plots the coefficients of the quarterly interactions. While there does seem to be one significant quarter in the pre-period where conflicted classes received less flow than clean classes, most differences in the pre-period are insignificantly different from zero. However, after the rule was issued, flows to conflicted funds trended down and Q1 2017 saw a large drop. Upon further investigation, this was simultaneously a result of increased flows to clean classes and decreased flows to conflicted classes. Such a result suggests that the industry may have implemented policies that transitioned toward clean classes and away from conflicted classes at the beginning of the year. My results remain robust when I exclude Q1 2017 as flows to conflicted classes were also significantly negative in later quarters.

I next examine the effects of the Fiduciary Rule issuance on flows at the fund level, which shows the effects of efforts to mitigate conflicts of interest in the cross-section of mutual funds. This test distinguishes whether the changes in flows are merely within-fund transitions away from conflicted share classes or are also cross-sectional transitions away from fund structures with conflicted arrangements. The former would be inconsequential to fund managers as clean share classes may be largely unaffected or may present another option for brokers to sell after the rule, muting the total fund outflow experienced at the fund-level. The latter would represent total flows to the fund-level, which is critically important to the fund family and manager as revenue is primarily driven by fund size. From my base sample, I aggregate total net assets up to the fund level and calculate the value-weighted return, turnover, and expense ratio. I calculate fund-level

flows with equation 1 using the value-weighted returns and total fund assets, and I require the same data qualifiers as in the share class analysis. Following prior work, I keep only funds where 75% of their assets are either conflicted or clean, emphasizing fund structures primarily affected and unaffected by the Fiduciary Rule. [36] This leaves me with 135,599 fund-month observations for 1,261 conflicted and 2,114 clean funds from 2012 through February 2018.

Table 3 shows the equation 2 regression with variables aggregated to the fund level. Columns 1 and 2 include fund investment objective-month fixed effects. While the pre-period monthly flows to conflicted funds are significantly less than clean funds, flows to conflicted funds become more significantly negative after the Fiduciary Rule issuance. Specifically, in column 2, flows to conflicted funds are 0.43 percentage points less than flows to non-conflicted funds after the rule issuance. In columns 3 and 4, fund family fixed effects are added, and the results largely persist.

The changes to mutual fund flows may be accompanied by changes to flow-performance sensitivities as broker-sold funds have been shown to be more sensitive to past unadjusted returns (Bergstresser et al., 2009; Del Guercio and Reuter, 2014; Barber et al., 2016). Furthermore, in the absence of compensation incentives, brokers and investors who invest through them may react differently to relative mutual fund returns. For example, broker recommendations may be more sensitive to the worst performing funds in order to preserve account values for their clients. To examine changes in flow-performance sensitivity, I examine the flow convexity for both conflicted and clean funds. Flow-performance convexity is the propensity of flows in the top end of the return distribution to be more sensitive to performance than flows in the middle and bottom end of the return distribution. I separate performance into Low, Mid, and High regions to capture nonlinear

[36] See Bergstresser et al. (2009), Del Guercio and Reuter (2014), and Barber et al. (2016).

flow-performance relation.[37] Following Sirri and Tufano (1998), in each month, I assign a fractional performance rank (*RANK*) ranging from 0 to 1 to funds according to their cumulative raw returns from months t-12. The fractional rank at month *t* for fund *i* in the bottom performance quintile is defined as *Low* = min (*Rank*,0.2), in the three medium performance quintiles as *Mid* = min (0.6, *Rank – Low*), and the top performance quintile as *High* = *Rank – Mid – Low*.

Table 4 shows the results of separate regressions for conflicted and clean funds after interacting the *Low*, *Mid*, and *High* variables with the *Fiduciary* indicator variable. In the pre-period, flows to conflicted funds in the highest quintile are significantly more sensitive than flows to clean funds in the same quintile. These results suggest that conflicted funds have a stronger propensity to chase past positive returns than comparable active funds without broker compensation arrangements. However, during the fiduciary period, the differences between conflicted and clean funds at the top end of the return distribution almost completely vanishes, suggesting conflicted funds are becoming less convex and are engaging in less return chasing of funds with high past returns. Return chasing and flow-performance convexity have often been attributed to the unsophistication of investors (Kim, 2011; Ferreria et al., 2012; Barber et al., 2016; Miguel and Su, 2019, Huang et al., 2022). Specifically, the more unsophisticated the flow, the more convex the relation of flows to past performance. Table 4 suggests that conflicts of interest and broker incentives, rather than unsophisticated investor demand, are driving some part of the commonly observed convexity in mutual fund flows.

Taken together, Tables 2 and 3 show that share classes and funds designated as conflicted by the Fiduciary Rule received significantly less flow than alternative clean investments, and Table 4 shows that differences in flow-performance sensitivities of these investments are partly reduced

[37] See Ippolito (1992), Gruber (1996), Chevalier and Ellison (1997), Sirri and Tufano (1998), Huang et al., (2007), and Huang et al., (2022)

after the rule was issued. While investment in mutual funds is a joint decision between brokers and clients, it is not entirely clear how the Fiduciary Rule changed the preferences of investors without changes to the types of investments made available and recommended by brokers. Therefore, the results presented are most consistent with brokers changing their investment practices because they could not or were unwilling to accept the legal liability and burden of proof required under the best interest standard of care. Less flow indicates less demand for funds with compensation arrangements, and the industry-wide changes reflect this demand change as the investment options supplied moved toward those without compensation arrangements.

3.2. Mutual Fund Investor Outcomes

The prior section presents evidence that fiduciary regulations on conflicted advice had real effects on the investment options available in the market and fund flows. This represents a clear goal of the regulation – to direct investor capital away from investments with costly broker compensation, which may cause conflicts of interest. However, it is less clear if outcomes reflect the main charge to regulators, which was to improve investor welfare. Both the CEA and RIA reports cited the underperformance of broker-sold mutual funds as a main driver for the Fiduciary Rule. Therefore, any capital directed away from broker-sold mutual funds should benefit investors in the form of higher returns.

The reports cited various academic studies to support their claims, including Bergstresser et al. (2009), Christoffersen et al. (2013), and Del Guercio and Reuter (2014). Christoffersen et al. (2013) show that flows are significantly related to a fund's sales load and that investment returns decrease by around 50 basis points for every 1% of load-share directed toward unaffiliated brokers. Likewise, both Bergstresser et al. (2009) and Del Guercio and Reuter (2014) find underperformance in broker-sold funds compared to direct-sold funds. Bergstresser et al. (2009)

attribute the underperformance to two possible reasons, either the broker-distributed channel provides investors with non-tangible benefits or there are conflicts of interest between brokers and their clients. Consistent with the conflicts of interest channel, Del Guercio and Reuter (2014) assert that this underperformance is driven by a lack of fund manager incentive to generate alpha because flows to broker-sold funds are driven by other factors such as underlying broker sales incentives rather than past risk-adjusted returns.

Whether mitigating conflicts of interest changed overall investor welfare is an empirical question that I attempt to address in two ways. First, I study aggregate changes in how money is managed by fund managers. Second, I study how fund performance changes after the Fiduciary Rule was issued. To do this, I separate share classes into two groups: conflicted share classes and clean share classes. I then aggregate each group up on a value-weighted and equal-weighted basis to create a conflicted and clean fund-of-funds portfolio. To study the aggregate changes in how money is managed, I examine quarterly-level expenses and active share.

Figure 6 shows both the equal-weighted and value-weighted expense ratio for the conflicted and clean fund-of-funds portfolios. The figure indicates that the announcement and issuance of the Fiduciary Rule had little impact on overall expense ratios. However, clearly the trend in fee reduction continued during the fiduciary period as both portfolios saw a drop of approximately 10 basis points from Q1 2012 through Q1 2018, which is an overall benefit to investors. While differences in 12b-1 fees largely account for the difference in expense ratios between the two portfolios, the clean portfolio continues to have lower fees when 12b-1 fees are excluded.

Next, I use active share as a proxy for managerial activeness and differentiation from index funds (Cremers and Petajisto, 2009).[38] Figure 7 shows the equal-weighted and value-weighted changes in active share. Both the clean and conflicted portfolio see reductions in activeness during the fiduciary period. When looking at the value-weighted active share, the decrease is starker for the conflicted portfolio and converges with clean portfolio levels by Q1 2018. This result indicates that active funds are becoming more passively managed, which coupled with decreasing fees, may be in the best interest of those currently invested in those funds as prior literature indicates that too much is spent on active management and investors would be better off investing passively (French, 2008).

To highlight the trend toward passive management, I show total net assets (TNA) invested in the clean and conflicted portfolios compared to total assets invested in index funds. I identify index funds using the *index_fund_flag* in the CRSP mutual fund database and other name filters described in Dannhauser and Pontiff (2019) and Ben-David et al. (2020).[39] After dropping missing returns, expenses, turnover, and classes under $5 million in total net assets, I am left with 495 unique index funds throughout my sample. I aggregate total end-of-quarter TNA for all three portfolios and present the results in Figure 8. Both clean and index portfolios show increases in TNA, while the conflicted portfolio levels off during the fiduciary period. The increase in index-invested assets and decrease in activeness within both clean and conflicted active management suggest an overall shift toward passive management in the mutual fund industry during this time, which is arguably a positive outcome for investors when coupled with lower fees.

[38] Active share data is downloaded directly from Martijin Cremers website: https://activeshare.nd.edu/data/
[39] I use *index_fund_flag* indicators of "B" and "D" and I use the supplementary code provided by Ben-David et al. (2020).

I next examine changes in mutual fund performance around the Fiduciary Rule. To do this, I form a long-short trading strategy by buying the conflicted portfolio and shorting the clean portfolio. I create the long-short portfolio by differencing the returns of the portfolios each month, where portfolio returns are calculated by value (or equal) weighting each holding based upon their monthly TNA.

Table 5 shows the results for the conflicted and clean portfolios run separately, as well as the spread portfolio. All portfolio returns are risk adjusted using the Carhartt (1997) four-factor model. The first three columns show equal-weighted portfolios. The intercept in Column 3 largely confirms the underperformance of broker-sold funds documented by the RIA and prior literature. The conflicted portfolio significantly underperforms the non-conflicted portfolio by 4.1 basis points per month. Interestingly, this underperformance persists and is not significantly changed after the Fiduciary Rule is issued and vacated, questioning whether broker compensation arrangements incentivize managers to underperform.

Column 6 shows the value-weighted alpha differences between the conflicted and non-conflicted portfolios. Surprisingly, although the coefficient is negative, there is no statistical underperformance of the conflicted portfolio. The value-weighted portfolio considers where investors' capital is actually invested and more generally addresses overall investor welfare, which directly questions the RIA and the interpretation of the prior studies cited. On average, funds with broker compensation arrangements tend to underperform. However, when adjusting for the funds that investors are concentrating their investments, presumably with the help of brokers, there is no underperformance.

Insofar as investment returns are viewed as a measure of investor outcomes, my results suggest that conflict of interest mitigation does little to change the performance of active

management and highlights three key observations. First, when coupled with the results in Figure 8, relations between managerial activeness and performance seem to be questionable, consistent with prior studies showing that active share does not predict outperformance (Frazzini et al., 2016; Cremers and Pereek, 2017; Lantushenko and Nelling, 2021). Second, Del Guercio and Reuter (2014) suggest that underperformance from broker-sold funds is driven by a lack of incentives for managers to generate alpha. Presumably, the lack of incentive arises because flows are less sensitive to past risk-adjusted returns and are driven by other factors such as broker conflicts of interest. The Fiduciary Rule presents a setting to test how the conflicts of interest channel affects managerial incentives to generate alpha as flows to funds were less tied to broker compensation arrangements. My results suggest that the Fiduciary Rule had little impact on both an equal-weighted and value-weighted basis, questioning the extent to which broker conflicts of interest and managerial incentives to generate alpha are related.

Finally, my results suggest that the underperformance of broker-sold funds documented by the RIA and prior literature are driven by equal-weighted returns, which indicates that smaller conflicted investments may be driving the underperformance. When adjusting for the funds in which investor capital is concentrated, the significant underperformance disappears. This suggests that brokers may allocate capital efficiently across funds, which presents a very different view of brokers than the one presented by the CEA and RIA, underscoring that one of the main motivations of the Fiduciary Rule may have been built upon questionable premises. The underperformance of broker-sold funds seems to be mitigated when adjusting for the funds with the most assets, directly challenging the assertion that brokers were directing investor capital in ways that systematically caused their clients to underperform.[40] Consistent with a Berk and Green (2004) equilibrium, my

[40] Fund returns do not consider the cost of the sales load. The presence of a sales load would increase total costs to an investor. However, as Bergstresser et al. (2009) notes, these costs paid by investors may reflect other intangible

results suggest that capital is directed into both clean and conflicted funds to the point in which the difference in net alpha is insignificantly different from zero. If investors would have moved from the conflicted fund portfolio to the non-conflicted portfolio, there would have been a negligible difference in terms of value-weighted risk-adjusted returns and differences of less than 50 basis points per year in equal-weighted risk-adjusted returns.

3.3. Robustness

One advantage of my identification strategy is that the Fiduciary Rule was challenged in court and ultimately vacated in early 2018. This allows me to examine the reversal of the rule back to an environment where brokers could freely sell these products again. I extend my sample to include the vacated period from March 2018 through December 2019.[41] Tables 6 and 7 respectively present the flows around the Fiduciary Rule issuance and its subsequent vacation at the share class and fund level.

I find that monthly flows to conflicted share classes remain significantly negative after the Fiduciary Rule was vacated, but these magnitudes are less than what was observed after the rule was issued. Specifically, in column 1, flows to conflicted share classes were 29.9 basis points less than flows to clean share classes. However, this is less than half of the 75.9 basis point decrease observed after the rule was issued, a slight reversal. Similar trends are seen at the fund level. Across all specifications, the vacated period interaction is negative, but it is only significant when controlling for fund-family fixed effects.

benefits received by the investor from the broker relationship. My results indicate that risk-adjusted underperformance may not be a cost born by investors for a broker's service.

[41] I stop my analysis at the end of 2019 to avoid possible confounding effects from the Covid-19 pandemic in early 2020.

These suggests that some brokers may have resumed directing flows to conflicted investments, but not to the extent that occurred prior to the ruling. Some brokers and firms may have transitioned to other forms of compensation to accommodate the Fiduciary ruling and did not immediately revert to pre-period practices. Anecdotally, this seems plausible as many firms moved toward more fee-based accounts. For example, according to Morgan Stanley's 2017 Q1 financial statement, their wealth management division saw a 219% increase in fee-based asset flows in the year after the Fiduciary Rule was issued. Ultimately, such transitions may have persisted even after the rule was vacated.

4. Conclusion

Identifying the effects of conflicts of interest on the mutual fund industry is empirically difficult as the motivations behind fund, broker, and investor decisions are often unobservable and endogenous. To address this, I use the 2016 DOL Fiduciary Rule as a shock to broker compensation incentives to examine the effects of regulatory scrutiny on conflicts of interest in the mutual fund industry.

I find that flows to share classes and funds with broker compensation arrangements significantly decrease relative to those without compensation arrangements, suggesting that conflicts of interest affect the way capital is invested. Consistent with this, I find that flows to conflicted funds become significantly less convex after the Fiduciary Rule indicating that the flow-performance relationship may be partly driven by broker conflicts of interest. Additionally, consistent with mutual funds acting as suppliers responding to regulatory-driven broker and client demand, the mutual fund industry adjusted to the Fiduciary Rule by transitioning their investment offerings away from broker compensation arrangements and becoming less active. In spite of these changes, I find that risk-adjusted performance does not change after the Fiduciary Rule, suggesting

that broker conflicts of interest may not drive fund managers' incentives to generate alpha. Consistent with prior literature, I find that funds with broker compensation arrangements have lower equal-weighted risk-adjusted returns than those without compensation arrangements. However, when comparing value-weighted risk-adjusted returns, I find no significant underperformance, which indicates that brokers mostly direct client assets to funds that do not underperform.

Taken together, my results offer a mixed picture of the effects of regulation designed to address conflicts of interest. On the one hand, the regulation altered the behavior it directly targeted. The flow of client funds and the mix of products offered by mutual fund companies both changed. On the other hand, the extent to which investors benefited from these changes is less clear. On a value-weighted basis, compensation arrangements do not appear to have a meaningful effect on the performance of funds either before or after the rule. More broadly, my results illuminate the difficulty in evaluating the efficacy of intervention, and regulators should continue to heed a myriad of tradeoffs, goals, and outcomes as they draft future policy.

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Appendix A
Fiduciary Rule Timeline

Date	Description
February 23, 2015	President Barack Obama announces that the Department of Labor will begin the process in developing a new fiduciary rule.
April 14, 2015	The Department of Labor (DOL) proposed possible rule and opened for comment.
April 8, 2016	The DOL officially issues the final Fiduciary Rule. Initial enforcement date is April 10, 2017.
January 6, 2017	Rep. Joe Wilson (R-SC) introduced bill to delay rule for two years.
February 3, 2017	President Trump asks DOL to conduct an economic and legal analysis for the rule.
April 4, 2017	Applicability Date delayed from April 10, 2017 to June 9, 2017.
June 9, 2017	Final rule fully applicable. All prohibited transaction relief available with limited transition conditions for financial institutions relying on BICE. Transition relief ends on January 1, 2018.
August 30, 2017	Proposal released to extend transition relief to July 1, 2019.
November 27, 2017	Transition relief extended to July 1, 2019.
March 15, 2018	5th Circuit Court vacates rule.
March 16, 2018	DOL suspends enforcement of final rule pending review.

Appendix B
Variable Definitions

Monthly Flow (%)	$FLOW_{f,t} = \frac{TNA_{f,t} - TNA_{f,t-1} * (1 + R_{f,t})}{TNA_{f,t-1}}$
Monthly Flow ($) / Net Flows	$Net\_FLOW_{f,t} = TNA_{f,t} - TNA_{f,t-1} * (1 + R_{f,t})$
Comp Fund	This is a dummy variable that equals one if the share class includes a load or a 12b-1 fee greater than 25bps and zero otherwise.
Ln (Fund Age)	Natural log of fund age measured in months. This is based on the first time a specific *crsp_fundno* appears in the CRSP mutual fund data.
Ln (TNA)	Natural log of the sum of monthly total net assets within *crsp_fundno* for class-level and *crsp_cl_grp* for fund-level analysis. Total net assets are measured by *mtna* in the CRSP mutual fund data.
Expense Ratio	This is the variable *exp_ratio* in the CRSP mutual fund data. The expense ratio is set to zero if missing. Value-weighted across share classes for fund-level anaysis.
Unadjusted Return	This is the variable *mret* in the CRSP mutual fund data. For class-level analysis, *mret* is the variable used. For fund/portfolio-level analysis, the return is value-weighted across share classes within fund/portfolio.
Retail Class Ratio	The percentage of retail share classes relative to total share classes. Total share classes include both retail and institutional share classes. Retail share class designation corresponds the *retail_fund* indicator in the CRSP mutual fund data.
High	Following Sirri and Tufano (2008), I assign a fractional performance rank (RANK) ranging from 0 to 1 to funds according to their cumulative raw returns from months t-12. The fractional rank at month *t* for fund *i* in the bottom performance quintile is defined as High = Rank – Mid – Low.
Mid	Following Sirri and Tufano (2008), I assign a fractional performance rank (RANK) ranging from 0 to 1 to funds according to their cumulative raw returns from months t-12. The fractional rank at month *t* for fund *i* in the middle performance quintiles is defined as Mid = min (0.6, Rank – Low),
Low	Following Sirri and Tufano (2008), I assign a fractional performance rank (RANK) ranging from 0 to 1 to funds according to their cumulative raw returns from months t-12. The fractional rank at month *t* for fund *i* in the bottom performance quintile is defined as Low = min (Rank,0.2)

Appendix C
DOL Regulatory Impact Analysis Underperformance Citations (Figure 3-17)

Paper	Sample	Methodology	Annual Impact
Bergstresser, Chalmers, and Tufano (2009)	Domestic equity, foreign equity, bond, and money market mutual funds; 1996-2004	Compares annual performance – prior to distribution fees – of broker-sold funds with direct-sold funds	Broker-sold domestic equity funds underperform by 0.27-0.88 percentage points on an asset-weighted basis and by 0.93-2.50 percentage points on an equal-weighted basis. Broker-sold foreign equity *over-perform* by 1.45-3.26 percentage points on an asset-weighted basis, but underperform by 1.13-2.08 percentage points on an equal-weighted basis.[362] Broker-sold bond funds underperform by 0.14-0.90 percentage points on an asset-weighted basis and by -0.10-0.45 percentage points on an equal-weighted basis.
Bullard, Friesen, and Sapp (2008)	Domestic equity mutual funds; 1991-2004	Investigates how load and no-load fund investor returns compare to a buy-and-hold strategy	Load funds underperform a buy-and-hold strategy by 1.82 percentage points, more than double the underperformance for no-load investors.
Chalmers and Reuter (2014)	Oregon University System's defined contribution retirement plan accounts; 1996-2007	Estimate the causal impact of brokers on their clients' portfolio	Broker clients underperform self-directed investors by 1.54 percentage points.
Christoffersen, Evans, and Musto (2013)	Mutual funds with front-end-loads; 1993-2009	Investigates the effect of load sharing and revenue sharing on performance	Investment returns decrease by about 50 basis points for every 100 basis points of load-share for mutual funds that pay load-shares exclusively to unaffiliated brokers.
Del Guercio, Reuter, and Tkac (2010)	Domestic equity mutual funds, 1996-2002	Compares returns for broker-sold funds with comparable direct-sold funds	Broker-sold actively-managed funds underperform direct-sold funds by approximately 1 percentage point.
Del Guercio and Reuter (2014)	Domestic equity mutual funds, 1992-2004	Compares returns for index funds with actively managed funds in the direct channel and comparable funds in the broker channel	Direct-sold actively managed funds do not underperform index funds, but broker sold actively managed funds underperform index funds by approximately 1 percentage point.
Friesen and Sapp (2007)	Domestic equity mutual funds, 1991-2004	Investigates how load and no-load fund investor returns compare to a buy-and-hold strategy	Load funds underperform a buy-and-hold strategy by about 2 percentage points, approximately double the underperformance for no-load investors.
Hackethal, Haliassos and Jappelli (2011)	Customers of a large German brokerage firm and customers of a large German commercial bank; 2003-2005	Compares net returns of advised and self-managed accounts	Annual returns for advised accounts are lower by approximately more than 4 percentage points.
Morey (2003)	Domestic equity mutual funds; 1993-1997	Compares performance of load and no-load funds before and after adjusting returns for loads paid.	Load funds underperform no-load funds by 0.4-0.8 percentage points, prior to adjusting for loads. After adjusting returns for loads paid, load funds underperform no-load funds by 1.3-2.0 percentage points.[363]

Figure 1
Total Number of Actively Managed Domestic Equity Share Classes

This figure shows the total number of share classes per quarter from Q1 2012 through Q1 2018. The first red dashed line represents the quarter in which President Barack Obama announced that the Department of Labor would be issuing a rule regarding a fiduciary standard of care. The second red dashed line represents the quarter in which the Department of Labor officially issued the Fiduciary Rule.

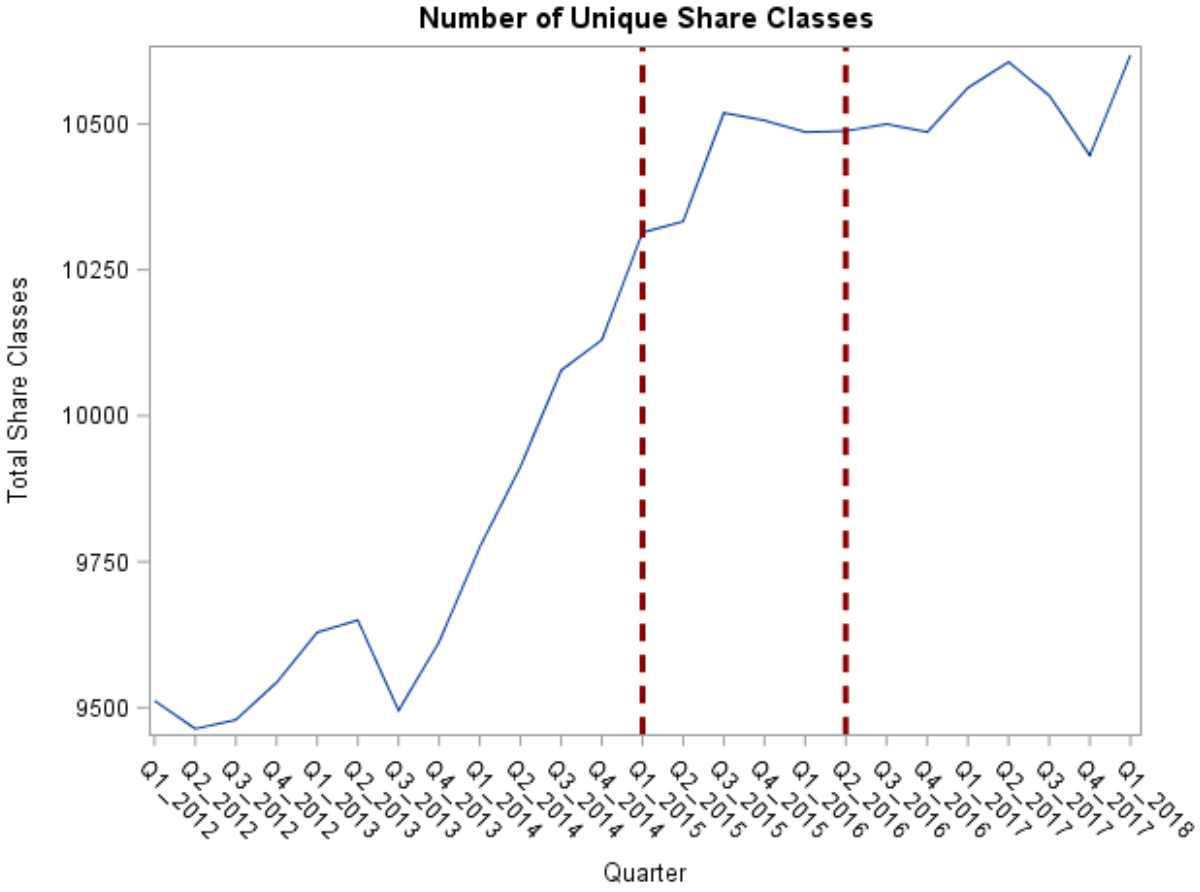


Figure 2

Number of Actively Managed Domestic Equity Share Classes by Conflicted Status

This figure shows the total number of share classes per quarter from Q1 2012 through Q1 2018 separated by conflicted (green line) and non-conflicted (red line) status. The first red dashed line represents the quarter in which President Barack Obama announced that the Department of Labor would be issuing a rule regarding a fiduciary standard of care. The second red dashed line represents the quarter in which the Department of Labor officially issued the Fiduciary Rule.

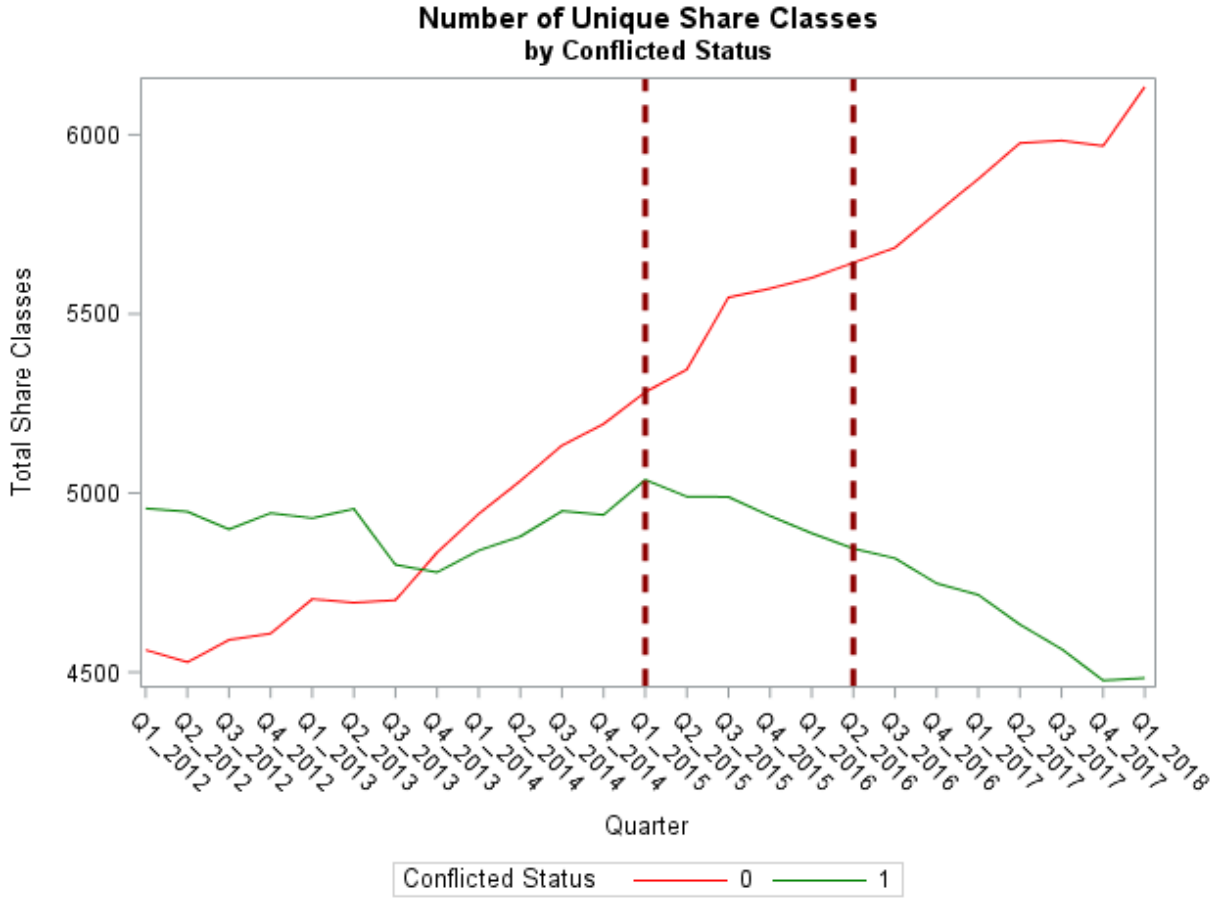


Figure 3
Number of Share Classes that Switched Conflicted Status

This figure shows the total number of share classes per quarter from Q1 2012 through Q1 2018 that switched from conflicted to non-conflicted (red line) and from non-conflicted to conflicted (green line). The first red dashed line represents the quarter in which President Barack Obama announced that the Department of Labor would be issuing a rule regarding a fiduciary standard of care. The second red dashed line represents the quarter in which the Department of Labor officially issued the Fiduciary Rule.

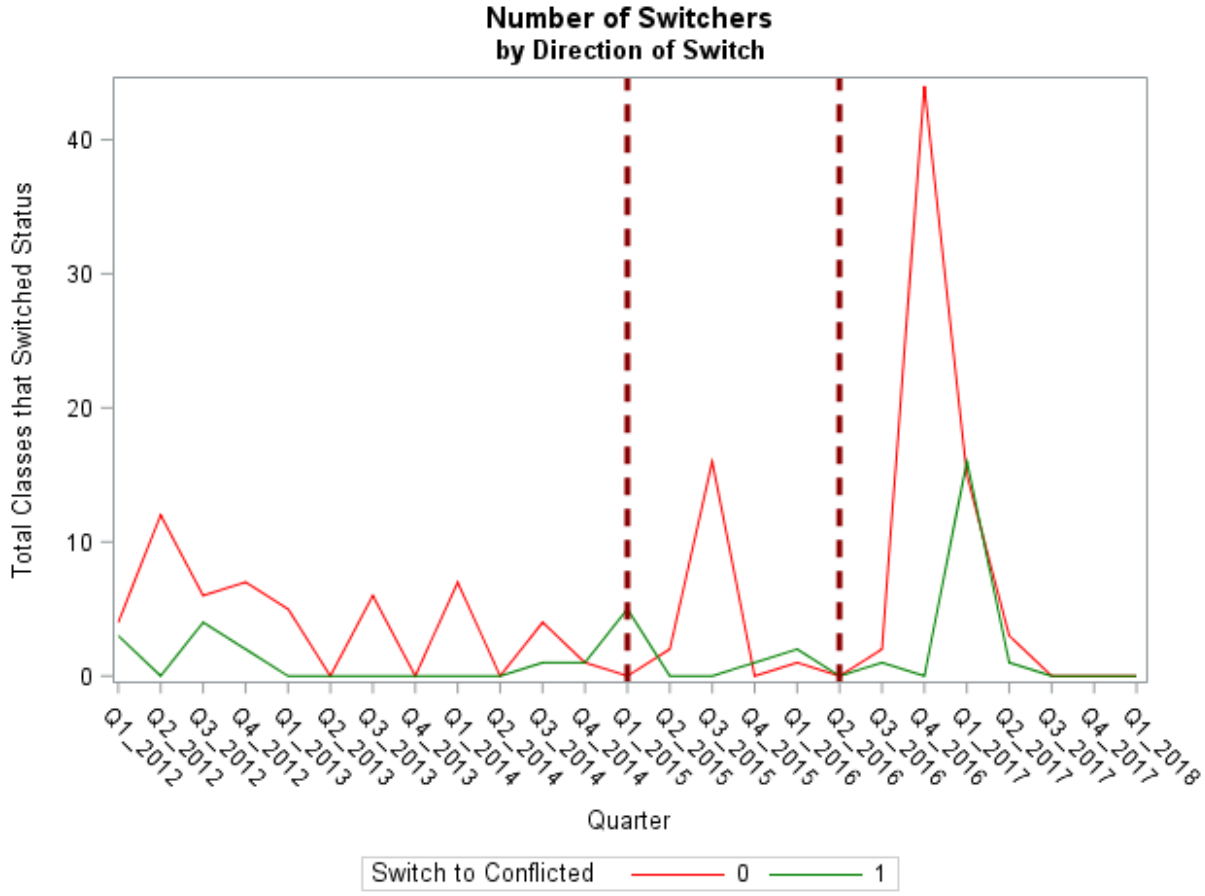


Figure 4
Net Additions of Share Classes by Conflicted Status

This figure shows the net additions per quarter from Q1 2012 through Q1 2018. The red line represents the additions minus deletions of non-conflicted share classes. The green line represents the additions minus deletions of conflicted share classes. The first red dashed line represents the quarter in which President Barack Obama announced that the Department of Labor would be issuing a rule regarding a fiduciary standard of care. The second red dashed line represents the quarter in which the Department of Labor officially issued the Fiduciary Rule.

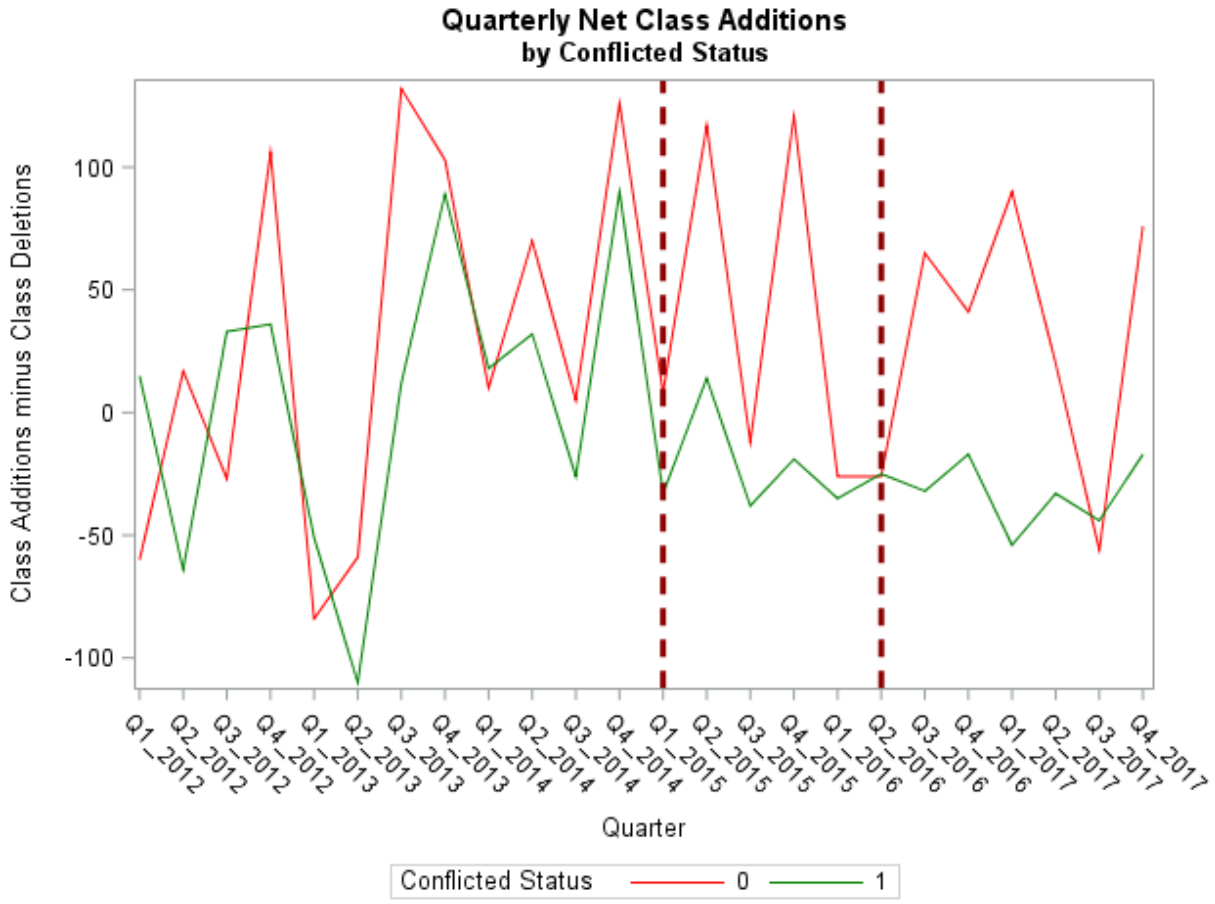


Figure 5
Trends of Quarterly Flows

This figure shows the coefficients of the regression of quarterly dummy variables interacted with a conflicted indicator on monthly fund flow for both the clean and conflicted share classes. The shaded region represents the time period after the Fiduciary Rule was issued. Regressions in include fund-month fixed effects and standard errors are clustered at the fund level. Confidence Intervals are at 90% and the base period is Q1 2016, the quarter before the rule was issued.

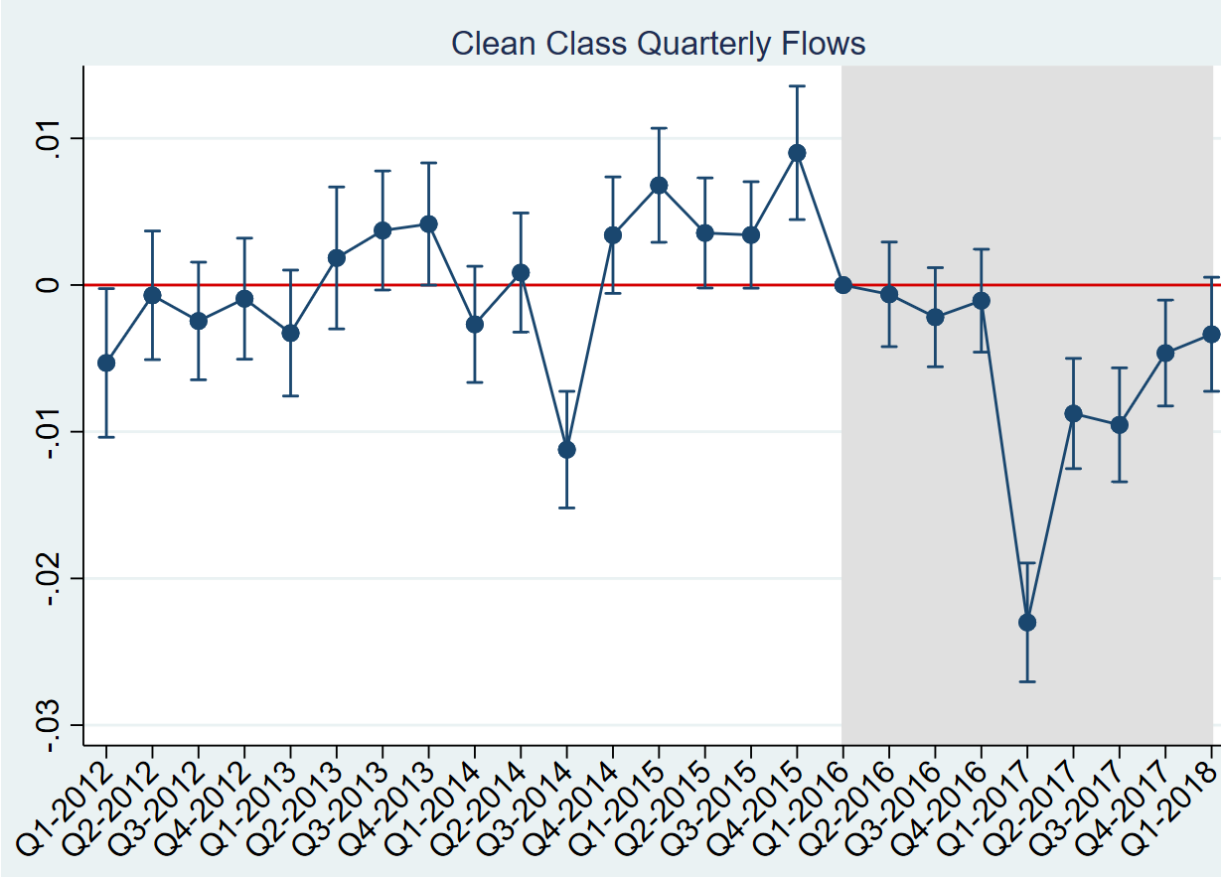
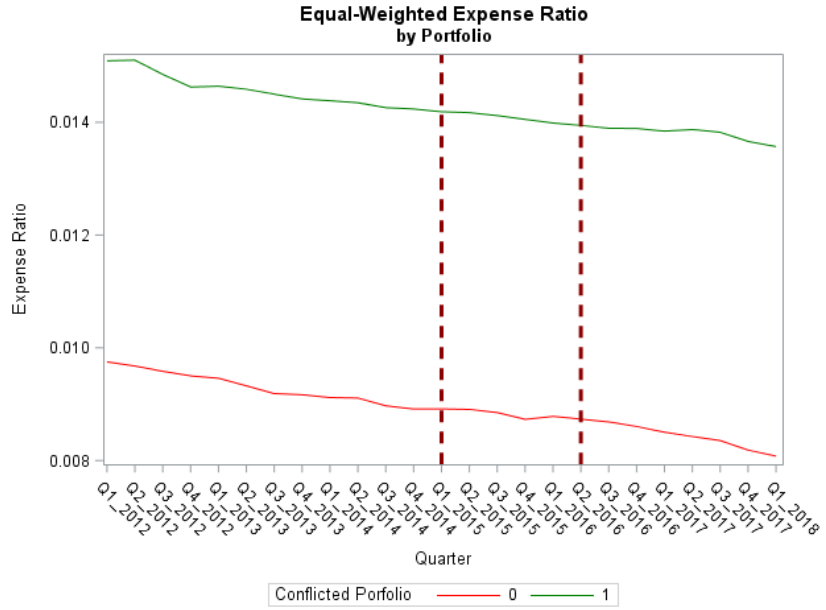


Figure 6
Expense Ratio

This figure shows the equal-weighted and value-weighted expense ratio per quarter from Q1 2012 through Q1 2018. The red line represents the expense ratio of clean share classes. The green line represents the expense ratio conflicted share classes. The first red dashed line represents the quarter in which President Barack Obama announced that the Department of Labor would be issuing a rule regarding a fiduciary standard of care. The second red dashed line represents the quarter in which the Department of Labor officially issued the Fiduciary Rule.



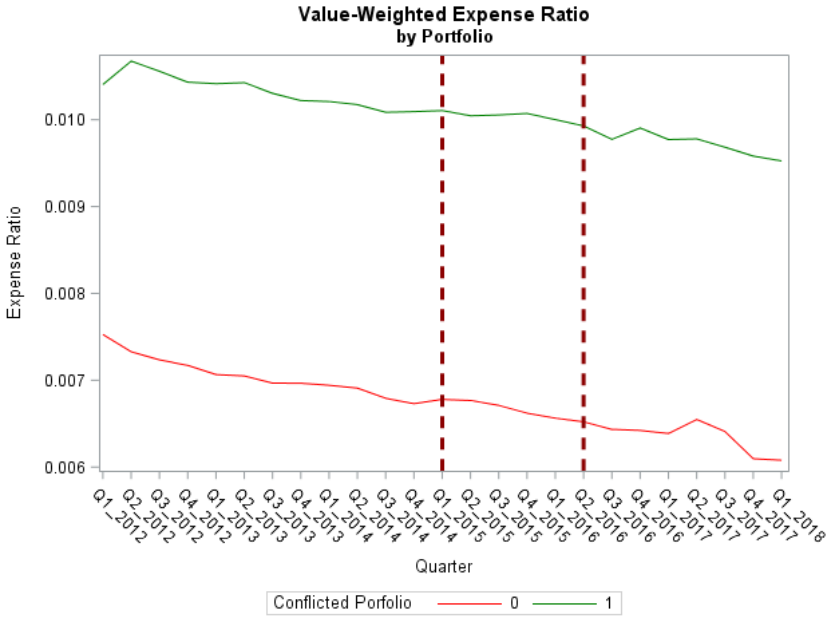
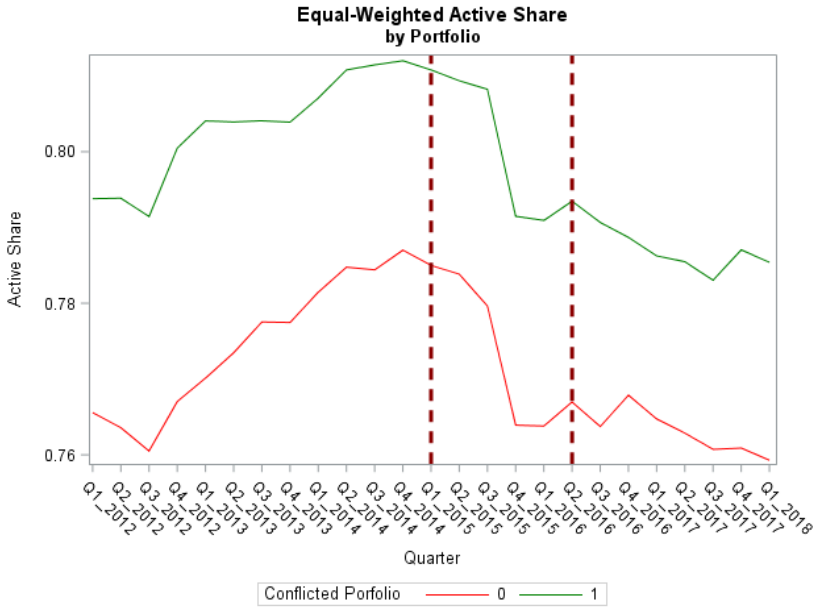


Figure 7
Active Share

This figure shows the equal-weighted and value-weighted active share (Cremers and Petajisto, 2009) per quarter from Q1 2012 through Q1 2018. The red line represents the active share of clean share classes. The green line represents the active share conflicted share classes. The first red dashed line represents the quarter in which President Barack Obama announced that the Department of Labor would be issuing a rule regarding a fiduciary standard of care. The second red dashed line represents the quarter in which the Department of Labor officially issued the Fiduciary Rule.



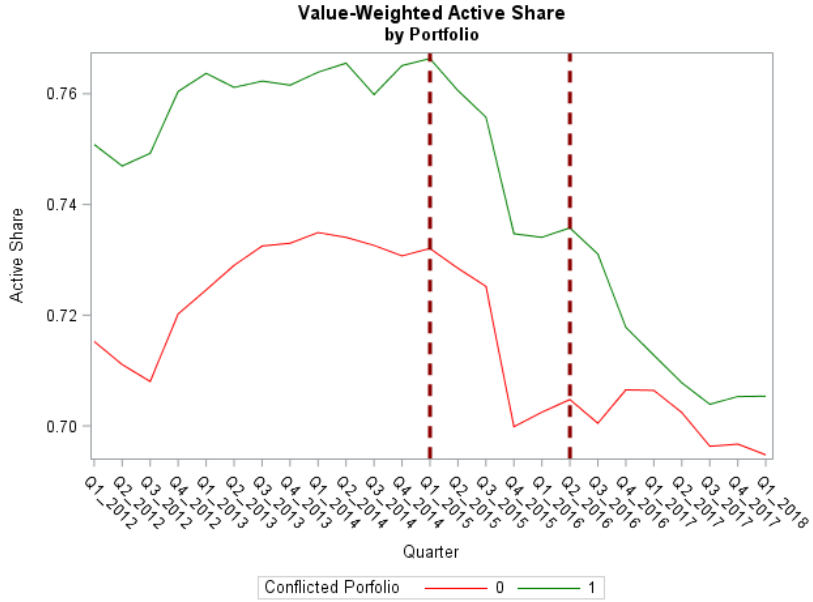


Figure 8
Total Net Assets for Conflicted, Clean, and Index Portfolio

This figure shows the total net assets per quarter from Q1 2012 through Q1 2018. The red line represents the index fund portfolio, the green line represents the clean portfolio, and the blue line represents the conflicted portfolio. The first red dashed line represents the quarter in which President Barack Obama announced that the Department of Labor would be issuing a rule regarding a fiduciary standard of care. The second red dashed line represents the quarter in which the Department of Labor officially issued the Fiduciary Rule.

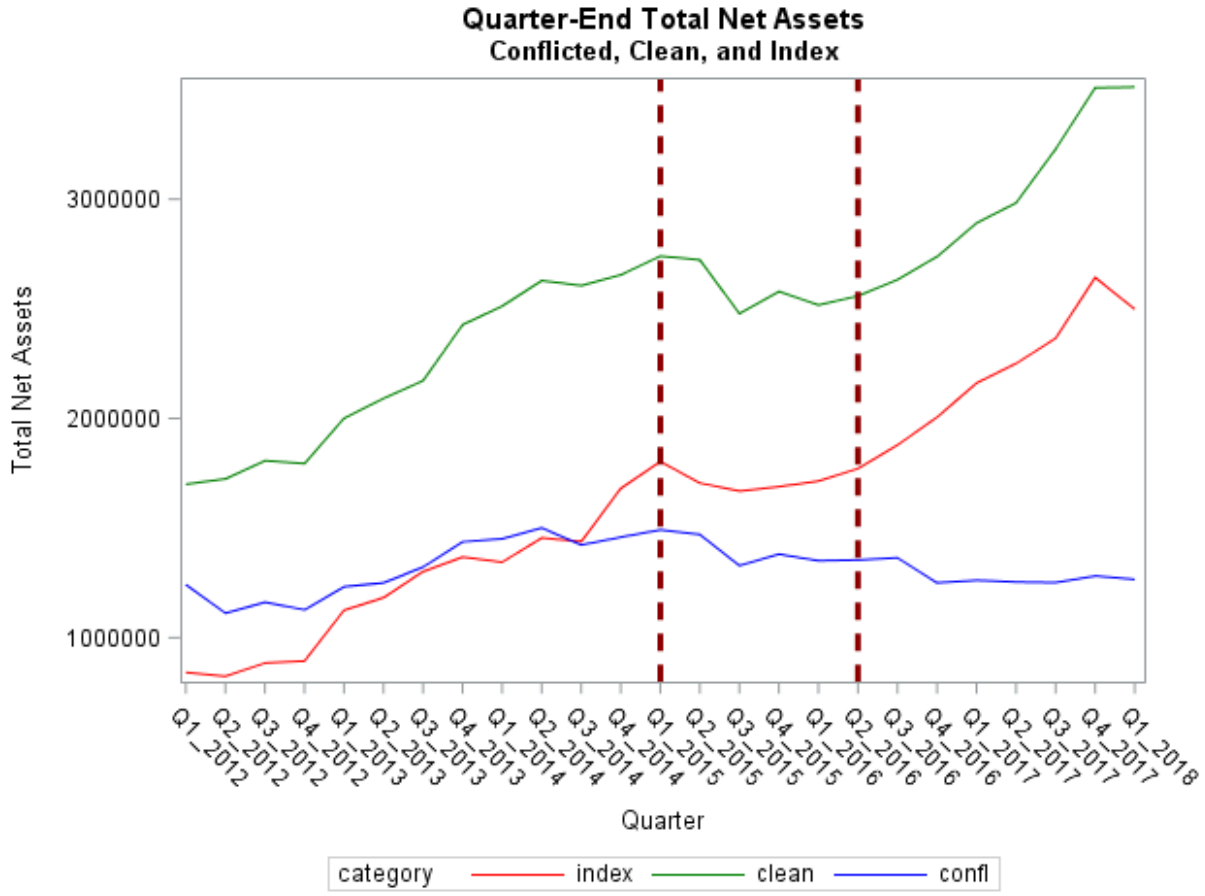


Table 1
Summary Statistics

This table shows the summary stats of the sample of actively managed domestic mutual fund share classes downloaded from the CRSP mutual fund database. The data are snapshots of conflicted and clean share classes from December 2014 and December 2016 and excludes observations missing total net asset values. All continuous variables are winsorized at the 1% and 99% level within month. Conflicted classes are classes with a load and/or a 12b-1 fee greater than 25bps. Clean classes are classes without a load and a 12b-1 fee under 25bps. See Appendix B for variable definitions.

Panel A: EOY 2014	*Conflicted Share Classes*					*Clean Share Classes*				
Classes *(N = 10,094)*			4,923					5,171		
Funds *(N = 3,278)*			2,058					2,686		
	Mean	Stdev	P25	P50	P75	Mean	Stdev	P25	P50	P75
Size/TNA ($M)	249.0	847.0	2.900	19.70	124.7	460.8	1,343	4.800	38.70	256.7
Age (Months)	134.6	103.5	51.00	122.0	195.0	103.8	97.07	30.00	78.00	156.0
Monthly Flow (%)	0.499	12.06	-2.216	-0.570	1.175	0.991	15.18	-2.162	-0.327	1.294
Expense Ratio (%)	1.493	0.527	1.140	1.450	1.900	0.881	0.423	0.650	0.910	1.130
12b-1 fee (%)	0.507	0.377	0.250	0.499	1.000	0.043	0.092	0.000	0.000	0.000
Turnover Ratio (%)	78.60	100.3	27.00	50.00	88.00	72.42	95.89	24.00	46.00	80.00
Unadjusted Ret (%)	-0.114	1.841	-0.911	-0.187	0.796	-0.215	1.930	-1.059	-0.249	0.681
Retail Class Ratio (%)	78.49	41.09	100.0	100.0	100.0	23.90	42.65	0.000	0.000	0.0

Panel B: EOY 2016	*Conflicted Share Classes*					*Clean Share Classes*				
Classes *(N = 10,473)*			4,699					*5,774*		
Funds *(N = 3,326)*			2,035					2,838		
	Mean	Stdev	P25	P50	P75	Mean	Stdev	P25	P50	P75
Size/TNA ($M)	222.7	769.2	2.900	20.90	120.2	445.6	1,379	3.100	32.50	226.5
Age (Months)	146.3	107.8	58.00	135.0	210.0	108.3	101.9	31.00	80.00	156.0
Monthly Flow (%)	0.014	12.31	-2.844	-1.260	0.514	1.646	16.00	-2.293	-0.866	1.359
Expense Ratio (%)	1.435	0.538	1.080	1.380	1.840	0.821	0.429	0.550	0.850	1.070
12b-1 fee (%)	0.490	0.372	0.250	0.400	1.000	0.039	0.087	0.000	0.000	0.000
Turnover Ratio (%)	78.22	104.0	27.00	50.00	86.00	69.95	93.08	24.00	44.00	81.00
Unadjusted Ret (%)	1.412	1.610	0.588	1.410	2.229	1.307	1.701	0.633	1.446	2.082
Retail Class Ratio (%)	77.36	41.86	100.0	100.0	100.0	21.41	41.02	0.000	0.000	0.000

Table 2
Class Level Monthly Flows and the Fiduciary Rule

This table shows results from the difference-in-difference regression of monthly flow percentage on a conflicted class indicator and its interaction with a dummy variable indicating the Fiduciary Rule issuance and vacation. The sample includes funds with multiple share classes with differing conflicted status and runs from January 2012 – March 2016 for the pre-period and April 2016 – February 2018 for the fiduciary period. Fixed effects include fund-month and fund family. All continuous variables are winsorized at the 1% and 99% level within month. Controls includes the prior month's natural log of TNA, prior month's expense ratio, prior month's turnover, the natural log of current age measured in months, and prior monthly flow. Coefficients are in percentage terms where a value of 0.50 equals 0.50%. *t*-statistics in parentheses are calculated from heteroskedasticity-robust standard errors clustered by fund. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively. See Appendix B for variable definitions.

	Dependent Variable = *Monthly Flow (%)*			
	(1)	(2)	(3)	(4)
Conflicted	-0.652***	0.286***	-0.647***	0.295***
	(-9.17)	(4.00)	(-9.11)	(4.10)
Conflicted × Fiduciary	-0.759***	-0.630***	-0.758***	-0.633***
	(-8.10)	(-7.32)	(-8.08)	(-7.32)
Controls	No	Yes	No	Yes
Fund-Month FE	Yes	Yes	Yes	Yes
Fund Family FE	No	No	Yes	Yes
Observations	259,671	259,671	259,185	259,185
Adjusted R^2	0.226	0.239	0.226	0.239

Table 3
Fund Level Monthly Flows and the Fiduciary Rule

This table shows results from the difference-in-difference regression of monthly flow percentage on a conflicted fund indicator and its interaction with a dummy variable indicating the Fiduciary Rule issuance and vacation. Conflicted funds are funds where 75% of their assets are in conflicted share classes while clean funds are funds where 75% of their assets are clean share classes. Those funds with 12b-1 fees under 25 basis points are excluded from the sample. The sample runs from January 2012 – March 2016 for the pre-period and April 2016 – February 2018 for the fiduciary period. Fixed effects include objective-month and fund family. All continuous variables are winsorized at the 1% and 99% level within month. Controls includes the prior month's natural log of TNA, prior month's expense ratio, prior month's turnover, the natural log of current age measured in months, and prior monthly flow. Coefficients are in percentage terms where a value of 0.50 equals 0.50%. *t*-statistics in parentheses are calculated from heteroskedasticity-robust standard errors clustered by fund. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively. See Appendix B for variable definitions.

	Dependent Variable = *Monthly Flow (%)*			
	(1)	(2)	(3)	(4)
Conflicted	-0.420***	-0.197**	-0.466***	-0.327**
	(-4.41)	(-2.08)	(-3.60)	(-2.53)
Conflicted × Fiduciary	-0.360**	-0.433***	-0.461***	-0.498***
	(-2.89)	(-3.72)	(-3.65)	(-4.06)
Controls	No	Yes	No	Yes
Objective-Month FE	Yes	Yes	Yes	Yes
Fund Family FE	No	No	Yes	Yes
Observations	135,581	135,581	135,425	135,425
Adjusted R^2	0.034	0.046	0.053	0.066

Table 4
Convexity and the Fiduciary Rule

This table compares the flow-performance sensitivities between conflicted and clean funds, before and after the Fiduciary Rule. A panel regression with a piecewise linear specification is performed, separately for conflicted and clean funds, in which monthly flows are regressed on funds' fractional performance ranks over the low, middle, and high-performance ranges and the interaction with an indicator variable denoting the Fiduciary Rule. Performance Rank is measured based on prior 12-month unadjusted returns. All specifications include objective-month fixed effects. Controls includes the prior month's natural log of TNA, prior month's expense ratio, prior month's turnover, the natural log of current age measured in months, and prior monthly flow. Coefficients are interpreted as the difference between the two portfolios and are in percentage terms where a value of 0.50 equals 0.50%. *t*-statistics in parentheses are calculated from heteroskedasticity-robust standard errors clustered by month. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.

	Dependent Variable = *Monthly Flow (%)*					
	(1)	(2)	(3)	(4)	(5)	(6)
	Conflicted	Clean	Difference	Conflicted	Clean	Difference
High	20.97***	6.638***	14.33***	16.33***	6.531***	9.797***
	(10.61)	(4.20)	(5.68)	(10.31)	(4.28)	(4.47)
High × Fiduciary	-11.47***	2.112	-13.58***	-9.72***	2.869	-12.59***
	(-3.92)	(0.85)	(-3.55)	(-3.95)	(1.17)	(-3.64)
Mid	1.554***	1.669***	-0.115	1.656***	2.370***	-0.714*
	(5.36)	(5.99)	(-0.28)	(6.74)	(8.49)	(-1.90)
Mid × Fiduciary	0.511	-0.081	0.593	0.373	-0.126	0.499
	(1.24)	(-0.19)	(1.00)	(1.04)	(-0.30)	(0.90)
Low	11.62***	-2.129	13.75***	10.30***	-0.399	10.70***
	(7.22)	(-0.87)	(4.67)	(7.58)	(-0.17)	(3.96)
Low × Fiduciary	-2.005	5.749*	-7.753*	-2.277	4.197	-6.474*
	(-0.83)	(1.76)	(-1.90)	(-1.15)	(1.32)	(-1.72)
Controls	No	No		Yes	Yes	
Objective-Month FE	Yes	Yes		Yes	Yes	
Observations	50,332	85,113		50,332	85,113	
Adjusted R^2	0.061	0.049		0.106	0.062	

Table 5
The Fiduciary Rule and Portfolio Return Regressions

This table reports the results from portfolio regressions based on Carhartt (1997) four-factor model. The sample is January 2012 to February 2018. Portfolio returns are calculated monthly by equal (columns 1-3) or value weighting (columns 4-6). Weights correspond to the monthly total net assets of each fund in the fund-of-funds portfolio. The dependent variable is excess return and the difference in excess return between the conflicted and clean portfolio. *MKTRF* is the return on the market minus the risk-free rate. *SMB, HML,* and *UMD* are the small minus big, high minus low book-to-market, and momentum factors. *Fiduciary* is a dummy variable indicating the period after the Fiduciary Rule was issued, April 2016-February 2018. Intercept and Fiduciary coefficients are in percentage terms where a value of 0.50 equals 0.50%. *t*-statistics in parentheses are calculated from robust standard errors. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively. See Appendix B for variable definitions.

	Dependent Variable = *Excess Return (%)*					
	Equal-Weighted			Value-Weighted		
	(1)	(2)	(3)	(4)	(5)	(6)
	Conflicted	Clean	Diff (1)-(2)	Conflicted	Clean	Diff (4)-(5)
Intercept	-0.142**	-0.101	-0.041**	-0.072	-0.047	-0.025
	(-2.03)	(-1.53)	(-2.59)	(-1.21)	(-0.81)	(-1.17)
Fiduciary	-0.004	-0.020	0.016	0.014	0.048	-0.033
	(-0.04)	(-0.22)	(0.56)	(0.17)	(0.59)	(-0.50)
MKTRF	0.890***	0.905***	-.0152**	0.916***	0.942***	-0.026**
	(43.04)	(43.87)	(-2.97)	(53.30)	(54.11)	(-3.14)
MKTRF × Fiduciary	-0.021	-.0334	.0127	-0.002	0.004	-0.006
	(-0.59)	(-0.99)	(1.54)	(-0.06)	(0.13)	(-0.29)
SMB	0.164***	0.150***	0.014**	0.080***	0.077***	0.004
	(6.54)	(6.32)	(2.02)	(4.11)	(3.90)	(0.35)
SMB × Fiduciary	-0.048	-0.058*	0.010	-0.045	-0.073**	0.027
	(-1.44)	(-1.83)	(0.94)	(-1.42)	(-2.18)	(1.06)
HML	-0.061	-0.038	-0.023**	-0.075*	-0.106**	0.032**
	(-1.46)	(-0.94)	(-2.60)	(-1.84)	(-3.07)	(2.33)
HML × Fiduciary	0.009	-0.010	0.019*	0.007	0.018	-0.011
	(0.20)	(-0.23)	(1.78)	(0.16)	(0.47)	(-0.62)
UMD	-0.033*	-0.027	-0.006	-0.027	-0.009	-0.018**
	(-1.68)	(-1.25)	(-1.29)	(-1.39)	(-0.48)	(-2.46)
UMD × Fiduciary	-0.016	-0.018	0.003	-0.010	-0.037	0.026
	(-0.47)	(-0.62)	(0.25)	(-0.27)	(-1.08)	(0.86)
Observations	74	74	74	74	74	74
Adjusted R^2	0.983	0.984	0.241	0.986	0.987	0.221

Table 6
Class Level Monthly Flows and the Rule Vacated

This table shows results from the difference-in-difference regression of monthly flow percentage on a conflicted class indicator and its interaction with a dummy variable indicating the Fiduciary Rule issuance and vacation. The sample includes funds with multiple share classes with differing conflicted status and runs from January 2012 – March 2016 for the pre-period, April 2016 – February 2018 for the fiduciary period, and March 2018 – December 2019 for the vacated period. Fixed effects include fund-month and fund family. All continuous variables are winsorized at the 1% and 99% level within month. Controls includes the prior month's natural log of TNA, prior month's expense ratio, prior month's turnover, the natural log of current age measured in months, and prior monthly flow. Coefficients are in percentage terms where a value of 0.50 equals 0.50%. *t*-statistics in parentheses are calculated from heteroskedasticity-robust standard errors clustered by fund. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively. See Appendix B for variable definitions.

	Dependent Variable = *Monthly Flow (%)*			
	(1)	(2)	(3)	(4)
Conflicted	-0.652***	0.424***	-0.647***	0.432***
	(-9.17)	(6.21)	(-9.11)	(6.30)
Conflicted × Fiduciary	-0.759***	-0.636***	-0.757***	-0.638***
	(-8.10)	(-7.41)	(-8.08)	(-7.41)
Conflicted × Vacated	-0.299***	-0.232**	-0.305***	-0.241**
	(-3.36)	(-2.81)	(-3.43)	(-2.91)
Controls	No	Yes	No	Yes
Fund-Month FE	Yes	Yes	Yes	Yes
Fund Family FE	No	No	Yes	Yes
Observations	349,101	349,101	348,615	348,615
Adjusted R^2	0.222	0.236	0.222	0.235

Table 7
Fund Level Monthly Flows and the Rule Vacated

This table shows results from the difference-in-difference regression of monthly flow percentage on a conflicted fund indicator and its interaction with a dummy variable indicating the Fiduciary Rule issuance and vacation. Conflicted funds are funds where 75% of their assets are in conflicted share classes while clean funds are funds where 75% of their assets are in clean share classes. Those funds with 12b-1 fees under 25 basis points are excluded from the sample. The sample runs from January 2012 – March 2016 for the pre-period, April 2016 – February 2018 for the fiduciary period, and March 2018 – December 2019 for the vacated period. Fixed effects include fund-month and fund family. All continuous variables are winsorized at the 1% and 99% level within month. Controls includes the prior month's natural log of TNA, prior month's expense ratio, prior month's turnover, the natural log of current age measured in months, and prior monthly flow. Coefficients are in percentage terms where a value of 0.50 equals 0.50%. *t*-statistics in parentheses are calculated from heteroskedasticity-robust standard errors clustered by fund. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively. See Appendix B for variable definitions.

	Dependent Variable = *Monthly Flow (%)*			
	(1)	(2)	(3)	(4)
Conflicted	-0.420***	-0.196**	-0.523***	-0.364**
	(-4.41)	(-2.09)	(-4.28)	(-3.01)
Conflicted × Fiduciary	-0.360**	-0.432***	-0.440***	-0.470***
	(-2.89)	(-3.69)	(-3.52)	(-3.87)
Conflicted × Vacated	-0.054	-0.199	-0.224	-0.308**
	(-0.41)	(-1.60)	(-1.64)	(-2.27)
Controls	No	Yes	No	Yes
Objective-Month FE	Yes	Yes	Yes	Yes
Fund Family FE	No	No	Yes	Yes
Observations	178,514	178,514	178,351	178,351
Adjusted R^2	0.033	0.045	0.050	0.062