

# 19-2886(L)

19-2893(CON)

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## United States Court of Appeals for the Second Circuit

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XY PLANNING NETWORK, LLC, FORD FINANCIAL SOLUTIONS, LLC, STATE OF  
NEW YORK, STATE OF CALIFORNIA, STATE OF CONNECTICUT, STATE OF  
DELAWARE, STATE OF MAINE, DISTRICT OF COLUMBIA, STATE OF NEW MEXICO  
and STATE OF OREGON,

*Petitioners,*

v.

UNITED STATES SECURITIES AND EXCHANGE COMMISSION and WALTER  
CLAYTON, in his official capacity as Chairman of the United States Securities  
and Exchange Commission,

*Respondents.*

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### BRIEF FOR STATE PETITIONERS

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BARBARA D. UNDERWOOD  
*Solicitor General*

STEVEN C. WU  
*Deputy Solicitor General*

ESTER MURDUKHAYEVA  
*Assistant Solicitor General  
of Counsel*

LETITIA JAMES  
*Attorney General  
State of New York*  
28 Liberty Street  
New York, New York 10005  
(212) 416-6279

Dated: December 27, 2019

*(Complete counsel listing appears on  
signature pages.)*

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## PRELIMINARY STATEMENT

Millions of Americans invest their money to help them buy a house, send a child to college, or retire securely. Yet retail (that is, individual) investors often lack the financial literacy and experience to direct their own investment decisions and therefore rely on the advice of financial professionals, including broker-dealers and investment advisers. Although broker-dealers and investment advisers both offer personalized investment advice and market themselves as trusted financial professionals, the two groups have historically been subject to dramatically different standards of conduct. Investment advisers are subject to a fiduciary duty requiring them to provide advice “without regard to” their own interests, pursuant to the Investment Advisers Act of 1940 (Advisers Act). But investment advice from broker-dealers is not generally subject to a fiduciary duty; instead, their recommendations need only be “suitable” for a customer. This suitability standard has permitted broker-dealers to offer investment advice subject to conflicts of interest.

The harms caused by these disparate standards have become increasingly stark in recent years, as broker-dealers have shifted to focus

more on the provision of personalized investment advice as a substantial or even predominant part of their business, as opposed to the order-execution services that they traditionally provided. In the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Congress directed the Securities and Exchange Commission to address the growing convergence of advisory services offered by broker-dealers and investment advisers, and to pursue regulations that would eliminate the increasingly obsolete disparity in the Commission's treatment of investment advice given by these financial professionals.

In this case, New York and seven other States, as well as several private petitioners, challenge the regulation that resulted: a regulation that purports to address the Commission's regulatory gap between broker-dealers and investment advisers but in fact exacerbates it. *See* Regulation Best Interest: The Broker-Dealer Standard of Conduct, 84 Fed. Reg. 33,318 (July 12, 2019) (Final Rule). The Final Rule declines to impose a uniform fiduciary standard of conduct on personalized investment advice provided by broker-dealers and investment advisers, instead subjecting broker-dealers to a variation of the preexisting and ineffective

suitability standard. This Court should vacate the Final Rule for several reasons.

First, the Final Rule contravenes Congress's direction to impose the fiduciary standard currently applicable to investment advisers to broker-dealers who provide advisory services to retail investors as a substantial rather than incidental part of their business. In the Dodd-Frank Act, Congress recognized that broker-dealers were increasingly providing extensive investment advice and ordered the Commission to evaluate several approaches to address this new reality. The common thread underlying all these approaches was Congress's expectation that a broker-dealer's provision of substantial, non-incidental investment advice would be subject to the fiduciary standard applicable to investment advisers under the Advisers Act. The Final Rule's failure to impose such a standard is contrary to law and in excess of the Commission's statutory authority.

Second, the Final Rule is arbitrary and capricious because the Commission failed to justify its failure to apply a uniform fiduciary standard to investment advisers and broker-dealers offering personalized investment advice to retail investors. Among other defects, the Final Rule unreasonably disregards the Commission's findings (in a study conducted

pursuant to the Dodd-Frank Act) and leaves investors vulnerable to the well-documented harms of conflicted investment advice contrary to the rule's asserted purpose of enhancing investor protections.

## JURISDICTIONAL STATEMENT

The Final Rule was released on June 5, 2019, and was published in the Federal Register on July 12, 2019. *See* 84 Fed. Reg. 33,318. On September 9, 2019, the States of New York, California, Connecticut, Delaware, Maine, New Mexico, and Oregon, and the District of Columbia (State Petitioners) filed a complaint in the United States District Court for the Southern District of New York challenging the Final Rule pursuant to the Administrative Procedure Act (APA), Dkt. 1, No. 19-cv-8365 (S.D.N.Y. Sept. 9, 2019). State Petitioners also filed a protective petition in this Court, Dkt. 1, No. 19-2893 (2d Cir. Sept. 9, 2019), due to the Exchange Act's judicial review provision, *see* 15 U.S.C. § 78y(b)(1).<sup>1</sup>

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<sup>1</sup> Section 78y(b)(1) provides that the Court of Appeals has exclusive jurisdiction over challenges arising from Commission rules “promulgated pursuant to section 78f, 78i(h)(2), 78k, 78k–1, 78o(c)(5) or (6), 78o–3, 78q, 78q–1, or 78s of” the Exchange Act.

On September 24, 2019, the Commission notified the district court that it intended to move to dismiss the complaint on jurisdictional grounds. *See* Dkt. 25, No. 19-cv-8365 (S.D.N.Y. Sept. 24, 2019). Specifically, the Commission contended that this Court had exclusive jurisdiction over any challenge to the Final Rule because the regulation purported to rely in part on some of the statutes referenced in Section 78y(b)(1). State Petitioners disagreed that any of the statutes listed in Section 78y(b)(1) authorized the Final Rule. Three days later, and before the parties had an opportunity to brief the jurisdictional issue, the district court (Marrero, J.) issued a sua sponte order dismissing the complaint in favor of this petition for review. *See* Dkt. 27, No. 19-cv-8365 (S.D.N.Y. Sept. 27, 2019). The court subsequently entered a final judgment clarifying that the dismissal was without prejudice. *See* Dkt. 30, No. 19-cv-8365 (S.D.N.Y. Oct. 8, 2019).

State Petitioners have proceeded in this Court at the direction of the district court and have briefed the merits of their challenge to the Final Rule. But acquiescence in this Court's jurisdiction over the petition does not imply acquiescence in the Commission's underlying claim that the Final Rule is authorized by any of the statutes listed in Section

78y(b)(1). If the Court determines sua sponte that it lacks subject-matter jurisdiction over the petition, State Petitioners request that the Court transfer the proceeding to the district court pursuant to 28 U.S.C. § 1631.

### **QUESTIONS PRESENTED**

1. Whether the Final Rule is contrary to law and exceeds statutory authority.

2. Whether the Commission acted arbitrarily and capriciously in refusing to adopt a uniform fiduciary standard that would apply to investment advisers and broker-dealers offering personalized investment advice to retail investors.

### **STATEMENT OF THE CASE**

#### **A. The Market for Retail Investment Advice**

##### **1. Statutory and regulatory differences between broker-dealers and investment advisers**

In the United States, retail investors—individuals investing for personal, family, or household purposes—generally invest through two

types of professionals: investment advisers and broker-dealers. (SA<sup>2</sup> 24-27, 98.)

Investment advisers provide personalized investment advice—e.g., how to allocate assets between different types of financial products—and manage accounts on an ongoing basis. Investment advisers are regulated under the Advisers Act. *See* 15 U.S.C. § 80b-1 et seq. Under that Act, an investment adviser is “any person who, for compensation, engages in the business of advising others, either directly or through publications or writings, as to the value of securities or as to the advisability of investing in, purchasing, or selling securities.” *Id.* § 80b-2(a)(11).

Among the Advisers Act’s requirements is the mandate that financial professionals comply with a fiduciary duty in providing personalized investment advice. *SEC v. Capital Gains Research Bureau, Inc.*, 375 U.S. 180, 191 (1963). That duty “reflects a congressional recognition of the delicate fiduciary nature of an investment advisory relationship” founded on “trust and confidence.” *Id.* at 190-91 (quotation marks omitted). The fiduciary obligation includes the duties of loyalty and

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<sup>2</sup> Citations to “SA” refer to the Special Appendix. Citations to “PA” refer to the Joint Petitioners’ Appendix.

care, which require that the adviser provide advice without regard to her own financial or other interest. (PA 439-456; see also *infra* at 20, 46.)

Brokers and dealers historically served a different role that was transactional rather than advisory in nature: fulfilling orders to execute securities transactions. Brokers and dealers are regulated under the Securities Exchange Act of 1934. *See* 15 U.S.C. § 78a et seq. Under the Exchange Act, a broker is “any person engaged in the business of effecting transactions in securities for the account of others,” *id.* § 78c(a)(4)(A), while a dealer is “any person engaged in the business of buying and selling securities . . . for such person’s own account through a broker or otherwise,” *id.* § 78c(a)(5)(A). The term broker-dealer is commonly used because brokerage firms typically serve both functions. The Commission has delegated much of its regulatory authority over broker-dealers to the Financial Industry Regulatory Authority (FINRA), a private self-regulatory organization. *See id.* § 78o-3; FINRA, *About FINRA*, <https://www.finra.org/about>.

From the outset of this regulatory scheme, Congress understood that broker-dealers would sometimes provide personalized investment advice alongside their transactional business. Recognizing that the Advisers Act

would otherwise regulate such advice, Congress provided a narrow exception from the Advisers Act for “any broker or dealer [i] whose performance of such [personalized investment advice] services is *solely incidental* to the conduct of his business as a broker or dealer and [ii] who receives no special compensation therefor.” 15 U.S.C. § 80b-2(a)(11)(C) (emphasis added). Broker-dealers who offer investment advice that does not qualify for this exception are subject to the Advisers Act. *See Financial Planning Ass’n v. SEC*, 482 F.3d 481, 487-88, 490 (D.C. Cir. 2007); *see also* 15 U.S.C. § 80b-8(b) (recognizing that a financial professional may be subject to both the Exchange Act and the Advisers Act).

In practice, however, both the broker-dealer industry and the Commission have generally applied a lower “suitability” standard to almost all investment advice provided by broker-dealers.<sup>3</sup> Through rulemaking and guidance, FINRA has provided that the “suitability” standard requires a broker-dealer to “make only those recommendations

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<sup>3</sup> Broker-dealers may separately be subject to fiduciary duties under state common law. The existence and scope of state-law fiduciary obligations is highly jurisdiction- and case-specific. *See* Arthur B. Laby, *Fiduciary Obligations of Broker-Dealers and Investment Advisers*, 55 Vill. L. Rev. 701, 712-714 (2010).

that are consistent with the customer's best interests [and] prohibits a broker from placing his or her interests ahead of the customer's interests." FINRA Regulatory Notice 12-25; *see also* FINRA Regulatory Notice 11-02. Notwithstanding this language, the suitability standard offers fewer protections than the Advisers Act's fiduciary standard and therefore has permitted broker-dealers to make investment recommendations that serve their own financial interests. (PA 439-442.)

Broker-dealers comprise a substantial segment of the financial marketplace. Brokerage firms manage over 140 million accounts containing over \$4 trillion in assets, and nearly ninety percent of those assets are held in firms that serve retail investors.<sup>4</sup> (SA 90.) More than half of these firms are either dually registered as investment advisers or are affiliated with investment advisers. (SA 89-90.) While dually registered firms can offer both brokerage and advisory services and customers may have multiple accounts of each type at a given firm, each account is subject to only one category of regulation. *See* Certain Broker-Dealers

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<sup>4</sup> Most assets managed by investment advisers are held in institutional, rather than retail, accounts. Retail accounts contain approximately \$10.95 trillion in assets, or thirteen percent of the total assets under management by investment advisers. (SA 93.)

Deemed Not To Be Investment Advisers, 70 Fed. Reg. 20,424, 20,440 n.165 (Apr. 19, 2005), *vacated on other grounds by Financial Planning Ass'n*, 482 F.3d at 487.

## **2. Broker-dealers' provision of personalized investment advice as a substantial and non-incident part of their business**

The problem that this Final Rule acknowledges but fails to address is a major shift in the business model of broker-dealers away from the execution of securities transactions and toward the provision of personalized investment advice in a manner that, from the perspective of investors, is essentially indistinguishable from the business model of investment advisers.

When the federal securities laws were first enacted, broker-dealers provided highly specialized order execution services. *See* Joel Seligman, *The Transformation of Wall Street* 487 (3d ed. 2011). “The broker’s advisory function, by contrast, was of less importance.” Arthur B. Laby, *Selling Advice and Creating Expectations: Why Brokers Should Be Fiduciaries*, 87 Wash. L. Rev. 707, 729 (2012).

Investment advisers followed a different business model based on “two fundamental principles”: that advisers would act solely in the

interests of investors, and “not engag[e] in any other activity, such as security selling or brokerage, which might directly or indirectly bias their investment judgment”; and that advisers would be compensated only by “definite, professional fees fully disclosed in advance.” *Investment Trusts and Investment Companies: Hearings on S. 3580 Before the Subcomm. of the S. Comm. on Banking and Currency, 76th Cong., 3d Sess., pt. 2, at 724 (1940)*. Investment advisers’ compensation was a key distinction from broker-dealers: while broker-dealers earned commissions or similar fees associated with specific trades, investment advisers typically charged a fixed fee or a percentage of the total value of assets under management in a given account. *See Laby, Selling Advice, supra, at 726*.

Over time, broker-dealers began shifting their business practices to more closely resemble investment advisers. Following the Commission’s elimination of fixed-rate commissions in 1975, brokerage firms began to offer two-tiered pricing: a “discount” tier for “execution only” services and a “full service” tier that included investment advice. *Id.* at 727. By the 1990s and early 2000s, the advent of electronic trading made order execution an automated and inexpensive process. *Id.* at 730. As the value of execution services correspondingly diminished, broker-dealers began

to market themselves as “trusted” financial professionals offering personalized investment advice while using titles such as “financial planner,” “financial advisor,” “financial consultant,” and “investment specialist.” *Id.* at 754-58; Angela A. Hung et al., *Investor and Industry Perspectives on Investment Advisers and Broker-Dealers* (“2008 RAND Report”) 70-71, 91-92 (RAND: Inst. for Civil Justice 2008). At the same time, many brokers transitioned to offering fee-based, rather than transaction-based, investment accounts. Laby, *Selling Advice, supra*, at 727-29.

Despite broker-dealers’ increasing provision of personalized investment services for special compensation in a manner resembling investment advisers, the industry continued to rely on the Advisers Act’s broker-dealer exception as a blanket exemption from the Act’s requirements, including its fiduciary duty obligation. *See* Christine Lazaro, *The Future of Financial Advice: Eliminating the False Distinction Between Brokers and Investment Advisers*, 87 St. John’s L. Rev. 381, 398-400 (2013). In 2005, the Commission attempted to formalize the broker-dealer industry’s view of the exemption by promulgating a rule that expressly allowed broker-dealers to collect fees

for investment advice without subjecting them to the Advisers Act's requirements. *See generally* 70 Fed. Reg. at 20,424-20,453.

In 2007, the D.C. Circuit vacated this rule, holding that the Commission had exceeded its authority by exempting broker-dealers offering investment advice from the Advisers Act in a way that went beyond the Act's narrowly drawn broker-dealer exception for "solely incidental" advice without "special compensation." *See Financial Planning Ass'n*, 482 F.3d at 487. Although broker-dealers subsequently converted fee-based accounts into either traditional brokerage or advisory accounts, they have continued to offer advisory services in connection with brokerage accounts while disavowing a fiduciary duty or any other obligation under the Advisers Act. *See Joseph C. Peiffer & Christine Lazaro, Major Investor Losses Due to Conflicted Advice: Brokerage Industry Advertising Creates the Illusion of a Fiduciary Duty* at 8-16, Pub. Inv. Arbitration Bar Ass'n Report (Mar. 25, 2015).

**3. The pervasive confusion among retail investors regarding the market for investment advice**

Approximately three-quarters of American adults reside in a household that invests, but the financial sophistication of retail investors is generally limited. (SA 26 n.239, 98-99.) *See also* Library of Cong., Fed. Research Div., *Financial Literacy Among Retail Investors in the United States* 1 (Dec. 30, 2011). The different standards of conduct that have in practice applied to financial professionals offering largely identical investment advice have caused significant confusion among retail investors. For example, a 2008 RAND study found that investors did not understand that a fiduciary duty (followed by investment advisers) imposes a higher standard of conduct than the suitability standard (followed by broker-dealers). 2008 RAND Report, *supra*, at 111. And more than half of the investors surveyed believed that broker-dealers were required to disclose conflicts of interest, even though the suitability standard does not require such disclosures. *Id.* at 89; *see also* TD Ameritrade, *What You Need to Know About Financial Advice* 1 (2006).

The broker-dealer industry's use of ambiguous terminology and the overlap of services provided by financial professionals likely contribute to investor confusion. A 2010 survey found that more than three-quarters

of investors believed that financial professionals who represent themselves as “financial advisors” were subject to the same fiduciary standard as investment advisers, even though many of these professionals are broker-dealers who have not historically adhered to a fiduciary standard. Infogroup/ORC, *U.S. Investors & the Fiduciary Standard: A National Opinion Survey* 3, 5 (Sept. 15, 2010). A 2018 RAND study found that retail investors were unsure about the differences in compensation for broker-dealers and investment advisers (PA 598-599, 614) and had considerable difficulty identifying the type of financial professional they used (PA 595-596).

#### **4. The consequences of conflicted investment advice**

Empirical evidence confirms that the absence of a fiduciary duty, combined with the distinct incentives of a transaction-based compensation model, meaningfully increases the possibility that broker-dealers will offer biased investment advice that diminishes investor returns. *See, e.g.,* Jeremy Burke et al., *Impacts of Conflicts of Interest in the Financial Services Industry* 4-5 (RAND Working Paper Feb. 2015); Roman Inderst & Marco Ottaviani, *Misselling Through Agents*, 99 *Am. Econ. Rev.* 883, 884-85 (2009). A 2015 RAND study on mutual fund investments found,

for example, that financial professionals compensated on a transaction-by-transaction basis and not subject to a fiduciary duty (such as broker-dealers) are more likely to recommend higher-cost, actively managed funds than comparable products with lower fees. Burke et al., *Impacts of Conflicts of Interest, supra*, at 13-19. Another study observed a similar effect for sales of annuity contracts. See Vivek Bhattacharya et al., *Fiduciary Duty and the Market for Financial Advice* 2-4 (Nat'l Bureau of Econ. Research Working Paper No. 25861, May 2019).

A 2015 report by the White House Council of Economic Advisers estimated that conflicted investment advice by professionals not subject to a fiduciary duty leads retirement savers to lose approximately one percentage point on their returns annually. See White House Council of Econ. Advisers, *Effects of Conflicted Investment Advice on Retirement Savings* 2 (Feb. 2015). The study further concluded that conflicted advice results in an aggregate loss of \$17 billion per year in Individual Retirement Accounts (IRAs) and that retirees receiving conflicted advice would lose approximately twelve percent of the value of their savings if drawn down over thirty years. *Id.* at 2-3. The United States Department of Labor (DOL) likewise found that underperformance associated with conflicted

advice in the sale of mutual funds held in IRAs would result in a decrease of one-half to one percent in the value of such investments annually and could cost investors between \$95 billion and \$189 billion over ten years and between \$202 billion and \$404 billion over twenty years. U.S. Dep't of Labor, *Regulating Advice Markets: Definition of the Term 'Fiduciary'—Conflicts of Interest—Retirement Investment Advice, Regulatory Impact Analysis for Final Rule and Exemptions* 9 (Apr. 2016).

**B. Statutory and Regulatory Efforts to Address Broker-Dealers' Provision of Personalized Investment Advice as a Substantial Part of Their Business**

**1. The Dodd-Frank Act**

As explained in more detail below, Congress addressed the dissimilar standards of conduct that the Commission has applied to investment advisers and broker-dealers offering personalized investment advice in Section 913 of the Dodd-Frank Act. *See* Pub. L. No. 111-203, 124 Stat. 1376, 1824-30 (July 21, 2010). Congress's action followed several years of attention by the Treasury Department.

In March 2008, Treasury called on Congress to “harmonize the regulation and oversight of broker-dealers and investment advisers offering similar services to retail investors,” citing “the rapid and continued

convergence of the services provided” by the two groups “and the resulting regulatory confusion.” See U.S. Dep’t of Treasury, *Blueprint for a Modernized Financial Regulatory Structure* 125-26 (Mar. 2008). In October 2009, Treasury again urged Congress to expressly require broker-dealers providing investment advice to adhere “to the fiduciary standard to align the legal framework with investment advisers.” See U.S. Dep’t of Treasury, *Financial Regulatory Reform, A New Foundation: Rebuilding Financial Supervision and Regulation* 71-72 (2009).

Congress acknowledged the serious problem caused by broker-dealers offering substantial and non-incidental personalized investment advice to retail investors without complying with the fiduciary duty that the Advisers Act imposes on professionals giving such advice. See, e.g., 156 Cong. Rec. S4065 (daily ed. May 20, 2010) (statement of Sen. Kaufman); *id.* at S4068-69 (statement of Sen. Akaka). Congress considered three distinct approaches to address this problem, each of which recognized that the Advisers Act governed the provision of investment advice and each of which endorsed the fiduciary standard imposed by that statute. The legislative history described below

demonstrates that Congress enacted Section 913 with the Advisers Act as the undisputed statutory baseline.

First, the House passed a bill that would require the Commission to impose a uniform fiduciary standard requiring brokers, dealers, and investment advisers “to act in the best interest of the customer without regard to the financial or other interest” of the professional “when providing personalized investment advice about securities to retail customers.” *See* Wall Street Reform & Consumer Protection Act of 2009, H.R. 4173, 111th Cong. § 7103(a)(1) (as passed by House of Representatives, Dec. 2, 2009). As the House explained, the “without regard to” standard is equivalent to the fiduciary standard imposed pursuant to sections 206(1) and (2) of the Advisers Act. *Id.*; *see also* 15 U.S.C. § 80b-6(1)-(2). The intent of this bill was to “apply the current state of law [for investment advisers] to brokers and dealers” with respect to the scope of the fiduciary obligation. H.R. Rep. No. 111-687, pt. 1, at 75 (2010). The House bill therefore preserved the Advisers Act’s fiduciary obligation without imposing the Act’s other requirements on broker-dealers.

Second, a proposed Senate bill would have gone even further than the House bill by eliminating the Advisers Act’s “solely incidental” exception for broker-dealers, thereby subjecting all broker-dealers offering personalized investment advice to the full panoply of regulations that apply to investment advisers under the Advisers Act—including but not limited to the fiduciary duty requirement. *See Restoring American Financial Stability Act, S. 3217, 111th Cong. § 913(a)* (discussion draft, as introduced to S. Banking Comm., Nov. 10, 2009).

Third, the Senate passed a bill that would not by itself impose additional standards on broker-dealers but would instead require the Commission to consider subjecting broker-dealers’ investment advice to preexisting standards, including wholesale regulation under the Advisers Act. Specifically, the bill would require the Commission to conduct a one-year study to identify gaps in the standards of protection for retail investors and to commence a rulemaking “to address such regulatory gaps and overlap that can be addressed by rule” using the Commission’s preexisting authority. *See Restoring American Financial Stability Act of 2010, S. 3217, 111th Cong. § 913(f)* (S. Amend. No. 3739, Apr. 29, 2010).

The enacted version of the Dodd-Frank Act confirmed Congress’s conclusion that broker-dealers providing substantial and non-incidental investment advice needed to be appropriately regulated—either entirely under the Advisers Act or subject to at least the Advisers Act’s fiduciary obligation. Congress understood that broker-dealers should be subject to the Advisers Act if they gave investment advice outside that Act’s narrow exception—as broker-dealers in fact appeared to be doing in practice. The principal innovation of the Dodd-Frank Act in this regard, contained in Section 913, was a grant of regulatory authority to the Commission to require broker-dealers to comply with *only* the Advisers Act’s fiduciary duty requirement, without imposing the Act’s many other requirements, as the first Senate bill eliminating the Act’s broker-dealer exception would have done.

First, Section 913 required the Commission to conduct a six-month study to evaluate “the effectiveness of existing legal or regulatory standards of care for brokers, dealers, investment advisers [and associated persons] for providing personalized investment advice and recommendations about securities to retail customers” and to determine “whether there are legal or regulatory gaps, shortcomings, or overlaps . . .

relating to the standards of care . . . that should be addressed by rule or statute.” Dodd-Frank Act, § 913(b), 124 Stat. at 1824-25. Congress further directed the Commission to “consider the findings[,] conclusions, and recommendations of the study”—including recommendations about the appropriate mechanism by which to impose a fiduciary obligation—in subsequent rulemaking. *Id.* § 913(f), 124 Stat. at 1827-28.

Second, Section 913 adopted the House bill’s proposed standard of conduct in a new subsection delegating substantive rulemaking authority to the Commission. *Id.* § 913(g), 124 Stat. at 1828-29. Specifically, Section 913(g) amended the Exchange Act and the Advisers Act to authorize the Commission to impose a rule requiring “that the standard of conduct for all brokers, dealers, and investment advisers, when providing personalized investment advice about securities to retail customers . . . , shall be to act in the best interest of the customer without regard to the financial or other interest of the broker, dealer, or investment adviser providing the advice.” *Id.* § 913(g)(2), 124 Stat. at 1828. Section 913(g) retained the House’s instruction that the applicable standard “be no less stringent than” the fiduciary standard applicable to investment advisers under Sections 206(1) and (2) of the Advisers Act. *Id.* § 913(g)(2), 124

Stat. at 1829; *see also id.* § 913(g)(1), 124 Stat. at 1828 (specifying that conduct for broker-dealers and investment advisers “shall be the same”).

Finally, Section 913 authorized the Commission to preserve key aspects of the broker-dealer model, including the ability to receive commission-based compensation, the lack of a continuing obligation to monitor investments, and the ability to sell a proprietary or limited range of products. *See id.* § 913(g)(1), 124 Stat. at 1828. Section 913(g) likewise limited the fiduciary obligation to broker-dealers’ provision of personalized investment advice to retail customers, rather than all investors, as under the Advisers Act. *See id.*

Section 913 thus gave the Commission a regulatory option, not previously available under the Advisers Act, under which the Commission could preserve key distinctions between broker-dealers and investment advisers while ensuring that retail investors were protected by a uniform fiduciary standard when receiving substantial and non-incidental personalized investment advice from either type of professional. The one regulatory feature that Congress did *not* permit the Commission to forgo was the application of the Advisers Act’s fiduciary duty on broker-dealers offering such advice to retail investors.

## **2. The Section 913 study and the 2013 Investor Advisory Committee recommendation**

In January 2011, the Commission released its Section 913 study. (PA 320-527.) The study confirmed that retail investors were harmed by the differing standards of conduct followed by investment advisers and broker-dealers offering personalized investment advice. (See PA 426-434.) The study determined that retail investors reasonably rely on financial professionals to assist them with important decisions and therefore have a reasonable expectation that the investment advice they receive—whether from a broker-dealer or an investment adviser—is “in accordance with a fiduciary standard.” (PA 434.)

Consistent with Congress’s mandate, the study considered the costs and benefits of various regulatory approaches, all of which would apply the Advisers Act’s existing fiduciary standard uniformly on all professionals offering personalized investment advice to retail investors. Those approaches included: (i) imposing all of the Advisers Act’s substantive requirements—including but not limited to the fiduciary duty—on broker-dealers providing personalized investment advice as a substantial part of their business; (ii) eliminating the broker-dealer exception from the Advisers Act, which would go even further than the

first option by extending the Act's full panoply of regulations to *all* investment advice provided by broker-dealers, including "solely incidental" advice; and (iii) using the authority provided by Section 913(g) to apply to broker-dealers only "the existing fiduciary standard applicable to investment advisers" under the Advisers Act while preserving the distinct regulatory treatment of broker-dealers in other ways. (*See* PA 472-499.) The study ultimately recommended that the Commission act pursuant to Section 913(g), because a tailored requirement that broker-dealers comply with a fiduciary duty in offering investment advice would "heighten[] investor protection" and "investor awareness" while relieving broker-dealers of other obligations under the Advisers Act. (PA 325-328; *see also* PA 441-445.)

In November 2013, the Commission's Investor Advisory Committee (IAC) likewise recommended that the Commission impose a uniform fiduciary standard on broker-dealers and investment advisers, either by narrowing the "solely incidental" exception or by adopting the standard of conduct set forth in Section 913(g). (PA 529-530.)

The Commission did not immediately take regulatory action in response to either the 913 Study or the 2013 IAC recommendation.

### 3. The Department of Labor's Fiduciary Rule

In April 2016, DOL sought to address conflicted investment advice provided to retirement plan participants using the agency's rulemaking authority under the Employee Retirement Income Security Act (ERISA), which generally regulates such plans. *See* Definition of the Term 'Fiduciary'; Conflict of Interest Rule—Retirement Investment Advice, 81 Fed. Reg. 20,946 (Apr. 8, 2016). Under ERISA, “a person is a fiduciary with respect to a[n employee pension benefit] plan to the extent . . . he renders investment advice for a fee or other compensation.” 29 U.S.C. § 1002(21)(A). DOL historically applied a narrow definition of “renders investment advice” that, in practice, exempted broker-dealers from being ERISA fiduciaries. *See* John J. Topoleski & Gary Shorter, *Department of Labor's 2016 Fiduciary Rule: Background and Issues* 7 (Cong. Research Serv. July 2017). The 2016 rule provided that any investment advice given for a fee in connection with a retirement plan was subject to a fiduciary duty. *See also* 81 Fed. Reg. 21,002, 21,002-003 (Apr. 8, 2016), *corrected at* 81 Fed. Reg. 44773 (July 11, 2016), *and amended by* 82 Fed. Reg. 16902 (Apr. 7, 2017) (exemption allowing financial professionals to

engage in transactions otherwise prohibited for ERISA fiduciaries contingent on contractual agreement to be bound by fiduciary obligation).

Following the change in administrations, DOL delayed the effective date of the 2016 rule. Topoleski & Shorter, *supra*, at 8-9. In March 2018, the Fifth Circuit invalidated the rule before it went into effect. *Chamber of Commerce v. United States Dep't of Labor*, 885 F.3d 360, 363, 365-66 (5th Cir. 2018). Among other things, the court held that the 2016 rule was a “direct imposition on the delegation to the SEC” in the Dodd-Frank Act to “promulgate enhanced, uniform standards of conduct for broker-dealers and investment advisers” who render investment advice to retail investors. *Id.* at 385-86.

### **C. The Final Rule**

In June 2017, the Commission announced that it was considering rulemaking to address the standards of conduct for professionals offering personalized investment advice. (PA 310-312.) In April 2018, the Commission released a proposed rule that would require broker-dealers making a recommendation of a securities transaction or investment strategy “to act in the best interest of the retail customer at the time a recommendation is made without placing the financial or other interest

of the broker-dealer . . . ahead of the interest of the retail customer.”<sup>5</sup> (PA 102.) The proposed rule would not subject broker-dealers to the Advisers Act’s fiduciary standard (either directly or pursuant to Section 913(g)) and would allow broker-dealers to offer personalized investment advice subject to conflicts of interest.

The Commission received over 300 comments in response to the June 2017 announcement, and more than 6,000 comments in response to the proposed rule.<sup>6</sup> The majority of commenters—including State Petitioners, the IAC, consumer advocacy groups, members of Congress, and thousands of individuals—objected to the Commission’s refusal to impose a uniform fiduciary duty on broker-dealers.

In June 2019, the Commission released the Final Rule (SA 1-175), together with a separate rule requiring broker-dealers and investment

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<sup>5</sup> Although the Commission asserted that this standard “incorporates and goes beyond” FINRA’s suitability standard (PA 3), the phrasing of the new standard is substantially similar to FINRA’s standard. (*Compare* PA 102 *with* FINRA Regulatory Notice 12-25.)

<sup>6</sup> Comments in response to the Chairman’s June 2017 statement are available at <https://www.sec.gov/comments/ia-bd-conduct-standards/iabdconductstandards.htm>. Comments in response to the proposed rule are available at <https://www.sec.gov/comments/s7-07-18/s70718.htm>.

advisers to provide a Relationship Summary disclosure to prospective and existing retail customers (PA 110-286). The Commission also issued interpretative statements—which are meant to be read in tandem with the Final Rule (SA 4 n.22, 22)—regarding the scope of the broker-dealer exception under the Advisers Act (PA 301-309) and the fiduciary standard applicable to investment advisers (PA 287-300).

The Final Rule largely adopted the standard of conduct as proposed. *See* 17 C.F.R. § 240.15l-1(a)(1). The Commission acknowledged that broker-dealers “provid[e] personalized investment advice in the form of recommendations of securities transactions or investment strategies involving securities” (SA 2) and recognized that retail customers reasonably rely on broker-dealers’ “investment expertise and knowledge” in making investment decisions based on such recommendations (SA 22). Nevertheless, the Final Rule “declined to subject broker-dealers to a wholesale and complete application” of the Advisers Act (SA 5; *see* SA 146-147) and refused to impose on broker-dealers the Act’s fiduciary standard (SA 14; *see* SA 148-149).

Because, as explained above, the Advisers Act applies to investment advice offered by broker-dealers outside the narrowly drawn broker-

dealer exception, the Final Rule justified its approach in part by adopting (in the simultaneously released interpretive guidance) a sweeping interpretation of the “solely incidental” broker-dealer exception that would effectively extend to all investment advice offered by broker-dealers. Specifically, the Commission defined “solely incidental” advice as all advice “provided in connection with” and “reasonably related to the broker-dealer’s primary business of effecting securities transactions.” (PA 305.) The Commission further declared that “[t]he quantum or importance of investment advice that a broker-dealer provides to a client is not determinative,” and that “[a]dvice need not be trivial, inconsequential, or infrequent to be consistent with the solely incidental prong.” (PA 305.)

The upshot of the Final Rule is that broker-dealers will be subject to a standard of conduct less protective than the fiduciary standard even when they provide “consequential” investment advice to retail investors as a substantial part of their business. (PA 305.) The practical consequence of this more lenient standard is that broker-dealers are not “per se prohibit[ed] . . . from making recommendations where conflicts of interest are present” and may “recommend products that entail higher

costs or risks for the retail customer, or that result in greater compensation to the broker-dealer, or that are more expensive, than other products, provided that the broker-dealer complies with the specific component obligations” of the Final Rule. (SA 17.)

The component obligations are as follows. First, the Disclosure Obligation requires a broker-dealer “prior to or at the time of the recommendation, [to] provide[] the retail customer, in writing, full and fair disclosure of . . . [a]ll material facts relating to the scope and terms of the relationship with the retail customer” and “[a]ll material facts relating to conflicts of interest that are associated with the recommendation.” 17 C.F.R. § 240.15l-1(a)(2). The Commission declined to impose specific requirements for the timing, form, method, or content of the disclosure, citing a desire to maintain “flexibility” for broker-dealers. (SA 31, 53.)

Second, the Care Obligation requires a broker-dealer making a recommendation to “exercise[] reasonable diligence, care, and skill to . . . [u]nderstand the potential risks, rewards, and costs associated with the recommendation,” and to “have a reasonable basis to believe” that the recommendation is in the best interest of “at least some retail customers”

as well as the particular retail customer receiving the recommendation.  
17 C.F.R. § 240.15l-1(a)(2)(ii).

Third, the Conflict of Interest Obligation requires a broker-dealer to “establish[], maintain[], and enforce[] written policies and procedures reasonably designed to”: (i) “[i]dentify, and at a minimum disclose, . . . or eliminate, all conflicts of interest associated with recommendations,” (ii) “[i]dentify and mitigate any conflicts . . . that create an incentive” for an individual professional to place her interest or the interest of the brokerage firm ahead of the interest of the retail customer, (iii) “[i]dentify and disclose any material limitations” placed on securities or investment strategies and “[p]revent such limitations and associated conflicts” from causing recommendations that place the interests of the firm or individual professional ahead of the retail customer, and (iv) “[i]dentify and eliminate any sales contests, sales quotas, bonuses, and non-cash compensation” tied to the sale of specific securities or types of securities “within a limited period of time.” 17 C.F.R. § 240.15l-1(a)(2)(iii). Although the Commission conceded that disclosure alone does not “sufficiently reduce[] the potential effect” of conflicted advice, the Final Rule “allow[s] firm-level conflicts to be generally addressed through disclosure” (SA 73)

and does not require any particular mitigation methods with respect to individual incentives. (SA 75.)

Fourth, the Compliance Obligation requires broker-dealers to “establish[], maintain[], and enforce[] written policies and procedures reasonably designed to achieve compliance with” the Final Rule. 17 C.F.R. § 240.15l-1(a)(2)(iv). The Final Rule “does not enumerate specific requirements” that must be included in such policies. (SA 80.)

The Relationship Summary requires broker-dealers and investment advisers to make specific “standard of conduct” disclosures to potential and existing customers. The disclosures require both broker-dealers and investment advisers to inform retail investors that “we have to act in your best interest and not put our interest ahead of yours.” (PA 275-276.) The required “standard of conduct” disclosure for both groups of financial professionals is identical notwithstanding the Commission’s decision in the Final Rule to impose a distinct standard of conduct on broker-dealers.

The Final Rule and the Relationship Summary are set to take effect on June 30, 2020. (SA 83; PA 220.)

## STANDING

The Final Rule permits broker-dealers to offer personalized investment advice subject to conflicts of interest. (SA 17.) Empirical research has repeatedly demonstrated that conflicted investment advice harms retail investors by reducing the return on their investments.<sup>7</sup> See *supra* at 16-18; Addendum (Add.) 1-5. And these harms have the “predictable effect” of causing injury to State Petitioners’ proprietary interests. *Department of Commerce v. New York*, 139 S. Ct. 2551, 2566 (2019). Those injuries confer Article III standing on State Petitioners.<sup>8</sup>

First, State Petitioners impose and collect taxes on investment income, including realized gains associated with securities transactions. A reduction in investment returns thus necessarily inflicts “a direct injury in the form of a loss of specific tax revenues.” *Wyoming v. Oklahoma*, 502 U.S. 437, 447-48 (1992).

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<sup>7</sup> That conflicted advice results in diminished returns is undisputed. (SA 111-114.) The Final Rule itself estimates that conflicted advice in the mutual fund market alone results in an annual loss to investors ranging between \$4.1 and \$9.7 billion. (SA 141-142.)

<sup>8</sup> The standing of any one of the State Petitioners is “sufficient to satisfy Article III’s case-or-controversy requirement.” *Rumsfeld v. Forum for Acad. & Inst. Rights, Inc.*, 547 U.S. 47, 52 n.2 (2006).

As set forth in the declaration of State Petitioners' expert, conflicted advice associated with annuity contracts and mutual funds alone results in lost tax revenue in the following amounts annually: \$30.1 million in New York, \$49 million in California, \$4.49 million in Connecticut, \$1.41 million in Delaware, \$2.3 million in Maine, \$2.81 million in New Mexico, \$6.28 million in Oregon, and \$792,000 in the District of Columbia. Add. 5-7. Moreover, these calculations are underinclusive because broker-dealers offer other types of investment products that could be subject to losses resulting from conflicted investment advice. Add. 7. For example, the District of Columbia estimates that reduced distributions from retirement accounts (which can contain many types of financial products) would result in annual tax revenue losses ranging from \$150,000 to \$800,000.<sup>9</sup> Add. 97-99. State Petitioners likewise collect substantial tax revenues on investment income from non-retirement accounts, and a substantial portion of this revenue stream may similarly be affected by a

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<sup>9</sup> While revenue personnel in California, Maine, New York, and Oregon did not have sufficient data to estimate a projected tax revenue loss based on reduced retirement savings, they attested that such reductions could have a meaningful effect on state tax revenues. Add. 92, 95, 102, 107-108.

reduction in investment returns due to conflicted advice. Add 93, 95, 99, 103, 106-107. Reduced investment earnings will likewise diminish purchasing power, which can reduce, among other things, sales tax revenues in States that collect such taxes. Add. 7.

Second, State Petitioners will be injured by diminished investment returns in retirement accounts, because such losses will increase the States' financial burden in providing care for the elderly. *See, e.g. California v. Azar*, 911 F.3d 558, 572-74 (9th Cir. 2018) (finding standing based on increased state expenditures resulting from lost private insurance coverage); *Texas v. United States*, 809 F.3d 134, 155 (5th Cir. 2015) (finding standing based on public funding costs associated with issuing drivers' licenses). Personal retirement savings provide for a variety of elder care needs and expenses, including health care, housing, and food. Reduced retirement savings due to conflicted investment advice increase the likelihood that the elderly will have to rely on state public assistance programs.

States already expend substantial financial resources on elder care. In 2018, New York allocated more than \$127 million for programs subsidizing in-home, community, nutrition, and transportation services

for the elderly, among other projects.<sup>10</sup> California's 2019-2020 budget likewise allocated \$357.6 million for in-home supportive services, \$114.7 million for a senior nutrition program, and \$63 million for Medi-Cal's Aged, Blind, and Disabled program, among other projects.<sup>11</sup> And the District of Columbia approved an operating budget of more than \$54 million for the Department of Aging and Community Living in fiscal year 2020—a twelve percent increase from the prior year.<sup>12</sup>

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<sup>10</sup> See N.Y. State Assemb., Comm. on Aging, *2018 Annual Report*, at 2-3. This figure does not include expenditures for medical care.

<sup>11</sup> See State of California, *California State Budget: 2019-2020*, at 54-56.

<sup>12</sup> See District of Columbia, Dep't of Aging & Cmty. Living, *Fiscal Year 2020 Budget*, at 1. Other State Petitioners likewise report substantial public expenditures on elder care. See, e.g., Conn. Office of the State Comptroller, *Open Expenditures* (expenditures for fiscal year 2018), available at <https://opencheckbook.ct.gov/#!/year/2018/explore/0-/program/Programs+for+Senior+Citizens/0/service>; S.B. 237, 149th Gen. Assemb. (Del. 2018) (appropriations for fiscal year 2019), available at <https://legis.delaware.gov/BillDetail?LegislationId=27026>; State of Maine, Dep't of Health & Human Servs., *Office of Aging and Disability Services*, at 3 (expenditures for fiscal year 2018), available at <http://legislature.maine.gov/doc/2748>; State of New Mexico, *Report of the Legislative Finance Committee*, at 40 (May 2019) (appropriations for fiscal year 2020), [https://www.nmlegis.gov/Entity/LFC/Documents/Session\\_Publications/Post\\_Session\\_Fiscal\\_Reviews/May%202019.pdf](https://www.nmlegis.gov/Entity/LFC/Documents/Session_Publications/Post_Session_Fiscal_Reviews/May%202019.pdf); H.B. 5026, 80th Leg. Assemb. (Or. 2019) (appropriations for 2019-2020), available at <https://olis.leg.state.or.us/liz/2019R1/Downloads/MeasureDocument/HB5026/Enrolled>.

Even a modest decrease in retirement savings, combined with the nation's increasing elderly population, is likely to cause more people to rely on state public assistance programs like those described above. A 2017 study found that an increase of only \$1,000 in retirement savings per retiree per year would reduce public spending on elder care by \$33 billion nationally between 2018 and 2032. William Shiflett & Catherine Harvey, *The U.S. Could Save \$33 Billion by Helping People Save for Their Own Retirement* (AARP Pub. Policy Inst. Feb. 2018); see also Philip A. Trostel, *The Fiscal Implications of Inadequate Retirement Savings in Maine* (Univ. of Maine Margaret Chase Smith Policy Ctr. Feb. 2017). For State Petitioners, such an increase in savings would result in reduced expenditures of approximately \$1.5 billion in New York, \$1.4 billion in California, \$90 million in Connecticut, \$18 million in Delaware, \$23 million in Maine, \$7 million in New Mexico, and \$99 million in Oregon.<sup>13</sup> See Shiflett & Harvey, *supra*, at 1-2. Conversely, reduced savings will lead to substantially increased public expenditures to make up for

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<sup>13</sup> The study did not examine the District of Columbia.

individuals' shortfalls.<sup>14</sup> See, e.g., Econsult Solutions, *The Impact of Insufficient Retirement Savings on the Commonwealth of Pennsylvania* 3 (Jan. 2018); Karen A. Zurlo et al., *Retiring Poor in New Jersey: The Projected Expenditures on Government Programs for Older Adults* 10 (Mar. 2016).

### STANDARD OF REVIEW

This Court may set aside an agency action that is “arbitrary, capricious, an abuse of discretion, or not otherwise in accordance with the law” or “in excess of statutory jurisdiction, authority, or limitations, or short of statutory right.” 5 U.S.C. § 706(2). An agency action is arbitrary and capricious “if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter

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<sup>14</sup> State Petitioners' expert projected that income losses associated with only annuities and mutual funds would result in increased state expenditures over ten years in the following amounts: \$77.6 million in New York, \$106.7 million in California, \$10 million in Connecticut, \$3 million in Delaware, \$4.5 million in Maine, \$7.1 million in New Mexico, \$12.1 million in Oregon, and \$3.5 million in the District of Columbia. Add. 7-9. These estimates are likewise underinclusive because they do not include reductions in income associated with other financial products that may be affected by conflicted investment advice. Add. 8-9.

to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983).

## SUMMARY OF ARGUMENT

I. The Final Rule is contrary to a statutory principle established in the Advisers Act and confirmed in the Dodd-Frank Act: financial professionals who offer personalized investment advice to retail investors as a substantial part of their business must adhere to a fiduciary standard under which they provide investment advice without regard to their own interests. The Commission here expressly found that broker-dealers offer such advice. Having made that determination, the Commission was required to regulate broker-dealers’ advisory services in one of two ways: (1) by applying the full panoply of regulations under the Advisers Act, including its fiduciary standard, to broker-dealers’ non-incident investment advice; or (2) by invoking its authority under Section 913(g) to impose only the fiduciary standard, but not the Advisers Act’s other requirements, on broker-dealers’ provision of investment advice to retail investors. Under either option, however, the Commission was required to

impose a standard of conduct on broker-dealers' provision of substantial investment advice that was "the same as" and "no less stringent" than the standard applicable to investment advisers. The Final Rule's disregard of this mandate renders it both contrary to law and in excess of statutory authority.

II. Even if the Final Rule were not contrary to law and in excess of authority, the regulation should be vacated because it is arbitrary and capricious. It was unreasonable for the Commission to reject the fiduciary standard in favor of an ill-defined standard that permits broker-dealers to provide conflicted investment advice and promotes investor confusion. Among other flaws, the Final Rule relies on speculative economic analysis that overstates the purported benefits of the rule while discounting empirical evidence and the findings of the 913 Study.

## ARGUMENT

### POINT I

#### THE FINAL RULE IS CONTRARY TO LAW AND EXCEEDS THE COMMISSION'S STATUTORY AUTHORITY

##### A. **Congress Intended that Broker-Dealers Providing Personalized Investment Advice Be Subject to a Fiduciary Duty.**

In determining whether agency action is contrary to law or exceeds statutory authority, “the question . . . is always whether the agency has gone beyond what Congress has permitted it to do.” *City of Arlington v. FCC*, 569 U.S. 290, 297-98 (2013). Where the applicable statutes are clear, “that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.” *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842-43 (1984). And even where a statute admits of some ambiguity, an agency is still prohibited from relying on an unreasonable interpretation of that statute. *Id.* at 844.

The Final Rule is contrary to law and exceeds the Commission's statutory authority because it disregards Congress's direction in Section 913(g) and the Advisers Act to impose a fiduciary duty on broker-dealers who provide personalized investment advice as a substantial rather than

incidental part of their business. The Commission's finding of broker-dealers' considerable advisory function (*see* SA 2, 89-90) triggers regulatory consequences that the Final Rule unlawfully disregards. Instead of subjecting such broker-dealers to regulation under the Advisers Act or to the Act's fiduciary standard pursuant to Section 913(g), the Final Rule imposes a standard that complies with neither scheme. This Court should vacate the Final Rule.

- 1. Congress has mandated that all financial professionals offering personalized investment advice be subject to a fiduciary duty absent certain narrowly drawn exceptions.**

When enacting the Advisers Act in 1940, Congress was demonstrably concerned about the potential exploitation of the special relationship of trust and confidence between a financial professional and a customer who relies on that professional's knowledge, expertise, and guidance to make investment decisions. *See Capital Gains*, 375 U.S. at 191-92; H.R. Rep. No. 76-2639, at 28 (1940). The Advisers Act accordingly imposed numerous requirements, including a fiduciary duty, on "any person who, for compensation, engages in the business of advising others . . . as to the value of securities or as to the advisability of investing in, purchasing, or

selling securities.” 15 U.S.C. § 80b-2(a)(11) (emphasis added); *Transamerica Mortg. Adv., Inc. v. Lewis*, 444 U.S. 11, 17 (1979).

There is no dispute that the entirety of the Advisers Act, including its fiduciary obligation, applies to broker-dealers offering investment advice, unless they satisfy the Act’s narrowly drawn exception for “solely incidental” advice made without receiving any additional “special compensation.” 15 U.S.C. § 80b-2(a)(11)(C); *see also* S. Rep. No. 76-1175, at 22 (1940). As explained *supra* at 12-13, significant changes in broker-dealers’ business practices no longer allow advisory services to be deemed “incidental” to brokerage firms. To the contrary, investment advice is an increasingly dominant part of broker-dealers’ business models—as demonstrated by, among other things, the fact that broker-dealers routinely market themselves as providing primarily advisory services to investors. (*See, e.g.*, PA 1468-1470, 1552-53.) Notwithstanding these developments, the promise of the Advisers Act has remained unfulfilled as broker-dealers, with the acquiescence of the Commission, have declined to comply with a fiduciary duty even as they have increasingly relied on personalized investment advice as a substantial part of their business.

Congress responded to this regulatory gap in the Dodd-Frank Act, which reinforced Congress's intent that investment advice given to retail investors be subject to the Advisers Act's fiduciary duty, regardless of the title of the financial professional giving such advice. The Dodd-Frank Act was motivated by Congress's concern that unsophisticated investors were being exploited by trusted financial professionals, including broker-dealers. As the legislative history of the Dodd-Frank Act confirms (see *supra* at 18-24) Congress was keenly aware that the increasingly dominant advisory services offered by broker-dealers should trigger the requirements of the Advisers Act, including the fiduciary obligation in Sections 206(1) and (2) of that Act. And Congress made clear that the Advisers Act's fiduciary obligation required professionals offering personalized investment advice "to act in the best interest of the customer without regard to [their own] financial or other interest."<sup>15</sup> See H.R. Rep. No. 111-687, pt. 1, at 75 (2010). The various proposals

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<sup>15</sup> The 913 Study likewise found that the "without regard to" standard "include[s] at a minimum, the duties of loyalty and care" under Sections 206(1) and (2) of the Advisers Act. (PA 442-444.) The Commission is therefore mistaken to refer to the "without regard to" standard as a "new" standard. (SA 148.)

considered by Congress during the drafting of Section 913 differed only on the question of whether to accommodate the concerns of the broker-dealer industry by limiting any regulation to the Advisers Act's fiduciary standard, rather than the Act's full panoply of regulations. See *supra* at 18-24.

Section 913 thus offered the Commission a specific and well-defined alternative to wholesale regulation under the Advisers Act, which would otherwise apply to the types of advisory services offered by broker-dealers. The enacted version of Section 913 embraced the core fiduciary duty contained in the Advisers Act, while maintaining other regulatory distinctions between broker-dealers and investment advisers. First, Section 913(g)(1) authorized the Commission to impose a standard of conduct for broker-dealers offering personalized business advice that “shall be the same as the standard of conduct applicable to an investment adviser under section 211” of the Advisers Act. Dodd-Frank Act, § 913(g)(1), 124 Stat. at 1828. Second, Section 913(g)(2) amended Section 211 of the Advisers Act to provide a uniform standard of conduct for all brokers, dealers, and investment advisers offering personalized investment advice to retail investors “that shall be no less stringent than the standard

applicable to investment advisers under section 206(1) and (2)—that is, no less stringent than the Advisers Act’s “without regard to” standard. *Id.* § 913(g)(2), 124 Stat. at 1828-29. At the same time, Section 913(g)(1) specified that broker-dealers could continue to be regulated differently from investment advisers in other respects—for example, they could continue to receive commission-based compensation, would not be subject to continuing obligations, and would be permitted to sell proprietary products. *Id.* § 913(g)(1), 124 Stat. at 1828.

The Final Rule’s standard of conduct is therefore contrary to law because it is concededly neither the “same as” nor “no less stringent than” the “without regard to” fiduciary standard provided in the Advisers Act and Section 913(g). (SA 146-149.) The Commission cannot avoid the legal implications of the Final Rule’s shortcomings by pointing to its simultaneously released interpretive guidance on the scope of the Advisers Act’s fiduciary duty. (PA 287-300.) To the extent the interpretive guidance suggests that the Advisers Act standard is less protective than the “without regard to” standard (PA 290, SA 14, 146), such an interpretation is squarely at odds with the Dodd-Frank Act and is therefore unlawful. *Humane Soc’y of U.S. v. Zinke*, 865 F.3d 585, 603

(D.C. Cir. 2017). And even if the Commission could permissibly impose on investment advisers a standard that is less protective than the “without regard to” standard, the Final Rule admittedly fails to subject broker-dealers even to that diminished obligation (SA 146), contrary to Congress’s expectation that the broker-dealer standard “shall be the same” as the investment adviser standard, *see* Dodd-Frank Act, § 913(g)(1), 124 Stat. at 1828.

More fundamentally, the Final Rule is wrong to interpret Section 913(g)’s use of the word “may” as giving the Commission the authority, but not any mandate, to apply a fiduciary standard to broker-dealers offering investment advice as a substantial part of their business. (SA 13.) The discretion given to the Commission by Section 913(g) was not about whether to impose a fiduciary duty on broker-dealers at all; rather, it was about whether the Commission could decline to apply the Advisers Act’s *other* requirements on broker-dealers who were increasingly focused on providing investment advice rather than order execution. The baseline rule against which Congress enacted the Dodd-Frank Act was the Advisers Act’s unambiguous language extending the entirety of the Act’s requirements to “*any person*”—regardless of title—“who, for compensation,

engages in the business of advising others” on investments, absent an applicable exception. 15 U.S.C. § 80b-2(a)(11) (emphasis added); *Norfolk S. Ry. Co. v. Kirby*, 543 U.S. 14, 31 (2004) (“[T]he word ‘any’ has an expansive meaning.”) Without Section 913(g), the Commission would lack any authority to exempt modern-day broker-dealers—who in practice are often indistinguishable from investment advisers with respect to their provision of advisory services—from the Advisers Act’s requirements. Although Section 913(g) confers such authority on the Commission and identifies certain distinct broker-dealer practices that it specifically exempts from the Act, the one requirement that Congress did not allow the Commission to disregard was the mandate that the Advisers Act’s fiduciary standard apply to broker-dealers’ provision of substantial and non-incidental investment advice to retail investors.

The legislative history of Section 913 supports this interpretation. As Representative Paul Kanjorski explained, the structure of Section 913 was intended to “allow the regulators to study and come up with rules and regulations that allow a fiduciary relationship between broker-dealers, investment advisers, and their clients.” 156 Cong. Rec. H5236 (daily ed. June 30, 2010). Representative Barney Frank likewise explained

that Congress expected the Commission to use its authority “to impose greater fiduciary responsibilities” on broker-dealers. *Id.* at H5216. In other words, Congress left it to the Commission to decide whether broker-dealers should be subject only to the Advisers Act’s fiduciary obligation or to all of its requirements. But Congress did not authorize the Commission to take the approach adopted by the Final Rule—the express disavowal of the fiduciary standard and adoption of a more lenient standard of conduct.

**2. The Advisers Act’s “solely incidental” exception does not apply to broker-dealers offering personalized investment advice to retail investors as a substantial part of their business.**

There is no merit to the Commission’s suggestion that the Final Rule’s adoption of a more lenient standard for broker-dealers than a fiduciary duty is justified in light of the Commission’s broad interpretation of the Advisers Act’s “solely incidental” broker-dealer exception. (PA 301-309; *see* SA 4, 36, 89.) In a concurrent interpretative guidance that is incorporated by reference into the Final Rule, the Commission concluded that “solely incidental” investment advice extends to any advice that is “provided in connection with” and “reasonably related to

the broker-dealer’s primary business of effecting securities transactions.” (PA 305.) This interpretation would exempt from the Advisers Act nearly all investment advice provided by modern-day broker-dealers.

The Commission’s reading of “solely incidental” stretches far beyond any reasonable interpretation of the statute.<sup>16</sup> See *Utility Air Regulatory Grp. v. EPA*, 573 U.S. 302, 321 (2014). As this Court has held, “[t]he common meaning of ‘incidental’ . . . implies that [one event] must occur in subordinate conjunction” with another event and is “the coincidental and secondary result” of that other event. *Barton Mines Corp. v. Commissioner*, 446 F.2d 981, 991-92 (2d Cir. 1971); see also *Powell’s Books, Inc. v. Kroger*, 622 F.3d 1202, 1214 (9th Cir. 2010) (something “incidental” must be “subordinate or nonessential”). Congress’s use of the word “incidental” thus unambiguously conveyed its intent to apply the Advisers Act’s broker-dealer exception to the circumstances in

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<sup>16</sup> The Commission’s interpretation of “solely incidental” is not entitled to *Chevron* deference because it is was not promulgated by a rule or regulation that has the force of law. *United States v. Mead Corp.*, 533 U.S. 218, 226-27 (2001). The interpretation is not entitled to *Skidmore* deference because, as explained below, it is unreasonable and inconsistent with Congress’s intent, and therefore unpersuasive. *Wyeth v. Levine*, 555 U.S. 555, 577 (2009).

which broker-dealers operated at the time of the Act—professionals who predominantly executed securities transactions, and at best provided investment advice as a peripheral matter (so minimally that they did not receive any “special compensation”). See *supra* at 11-12.

The Advisers Act’s use of the modifier “solely” prior to “incidental” further underscores Congress’s intent to limit the scope of the exception to advice that plays a truly tangential role in the broker-dealer’s primary business of executing securities transactions. See *Milner v. Department of Navy*, 562 U.S. 562, 570 n.4 (2011) (noting that “solely” means “exclusively or only” (quotation marks omitted)). Accordingly, the “solely incidental” exception applies only where a broker-dealer offers investment advice by “chance or minor consequence” attendant to her primary brokerage duties, see Merriam-Webster Online Dictionary, s.v. *incidental*, or when such advice is an “accompanying but not a major part of” a securities transaction, see *New Oxford American Dictionary* 878 (3d ed. 2010); see also Arthur B. Laby, *Reforming the Regulation of Broker-Dealers and Investment Advisers*, 65 *Bus. Law.* 395, 419-20 & n. 196 (2010) (collecting contemporaneous dictionary definitions of “incidental”).

The Commission's broad interpretation of "solely incidental" sweeps well beyond these limited circumstances. As the Commission recognized, and as Congress understood in enacting the Dodd-Frank Act, modern broker-dealers rely substantially on the offering of personalized investment advice. Yet, so long as a broker-dealer retains some vestige of its order-execution services, the Commission's "solely incidental" interpretation would exempt any investment advice from the protections of the Advisers Act and Section 913. In effect, the Commission would allow broker-dealers to evade regulation when it is their provision of brokerage services, rather than their investment advice, that is truly "incidental" to their main business.

The Commission's reliance on the Tenth Circuit's decision in *Thomas v. Metropolitan Life Insurance Company* to defend its interpretation of "solely incidental" is misplaced. (See PA 304-305.) In *Thomas*, the Tenth Circuit interpreted the "solely incidental" exception to apply when a broker-dealer gives advice "only in connection with the primary business of selling securities," but the court also held that the exception did *not* apply when investment advice "is not connected to the sale of securities" or when the advice offered "supersede[s] the sale of the

product as the ‘primary’ goal of the transaction or the ‘primary’ business of the broker-dealer.” 631 F.3d 1153, 1163-64, 1167 (10th Cir. 2011); *see also* U.S. Sec. & Exch. Comm’n, *Seventh Annual Report* 29 (1942) (exception applies only to “brokers and security dealers whose investment advice is given solely as an incident of their *regular business* for which no special fee is charged” (emphasis added)).

Here, as the Commission has acknowledged, investment advice is an increasingly important service offered by modern broker-dealers because order execution is no longer a time-consuming, specialized, or remunerative venture. (SA 95 & n.931 (recognizing that industry trends have resulted in substantially lower commission rates).) Confirming this fact, brokerage firms market themselves in a primarily advisory capacity because today’s retail customers pay for investment advice, not for order execution. (*See, e.g.*, PA 1468-1470, 1552-53.) Indeed, firms now offer “execution-only” services as an “accommodation” to their investing clients, rather than as a revenue generator. (*See, e.g.*, PA 2218.) The Commission’s attempt to stretch the meaning of “solely incidental” to provide an essentially wholesale exemption for broker-dealers from the Advisers Act thus does not withstand scrutiny.

**B. The Statutory Provisions Relied on by the Commission Do Not Supersede Congress’s Intent to Impose a Fiduciary Standard on Broker-Dealers Offering Personalized Investment Advice.**

There is no dispute that the Advisers Act and Section 913(g) contemplate the imposition of a fiduciary duty on broker-dealers who provide personalized investment advice to retail investors. Nevertheless, the Commission contends that it can rely on other statutory provisions—namely Section 913(f) of the Dodd-Frank Act and various provisions of the Exchange Act—to support the Final Rule’s non-fiduciary standard of conduct. (SA 13, 174 (citing Section 913(f), and 15 U.S.C. §§ 78c, 78j, 78o, 78o(c)(6), 78o(l), 78q, 78w, 78mm).) The Commission is wrong. None of the statutes on which the Commission relies authorizes the agency to disregard Congress’s intent to impose a fiduciary obligation on broker-dealers offering personalized investment advice to retail investors as a substantial part of their business.

The Commission primarily relies on Section 913(f) of the Dodd-Frank Act, which provides as follows:

The Commission may commence a rulemaking, as necessary or appropriate in the public interest and for the protection of retail customers (and such other customers as the Commission may by rule provide), to address the legal or regulatory standards of care for

brokers, dealers, investment advisers, [and associated persons] . . . for providing personalized investment advice about securities to such retail customers. The Commission shall consider the findings[,] conclusions, and recommendations of the study required under subsection (b).

Dodd-Frank Act, § 913(f), 124 Stat. at 1827-28. But read in context “and with a view to [its] place in the overall statutory scheme,” *Roberts v. Sea-Land Servs., Inc.*, 566 U.S. 93, 101 (2012) (quotation marks omitted), Section 913(f) cannot be divorced from the remainder of the statute. Rather, Section 913(f) confers general rulemaking authority on the Commission consistent with the conclusions of the study required by Section 913(b)—assuming that the study found that differing standards of conduct were causing investor harm (which it did). It is Section 913(g), and the provisions of the Advisers Act that it incorporated and reinforced, that provide the substantive standards for the Commission to follow in promulgating a rule.

Congress has used a similar structure in other federal statutes. For example, the temporary emergency standards provision of the Occupational Safety and Health Act provides that, upon publication of an emergency temporary standard, the agency “shall commence a proceeding,” and separately provides that the agency “shall promulgate

a standard under this paragraph.” 29 U.S.C. § 655(c)(3); *see also* 30 U.S.C. § 811(b) (parallel provision under the Federal Mine Safety and Health Amendments Act of 1977). Similarly, a provision of the Federal Communications Act directs the agency to “commence a rulemaking proceeding to implement this section,” 47 U.S.C. § 340(c)(1)(A)(ii), while a different provision authorizes the agency to “adopt rules pursuant to such rulemaking,” *id.* § 340(c)(1)(B). Thus, Congress routinely authorizes an agency to commence a rulemaking proceeding while separately providing substantive standards for any rules promulgated as a result.

The various Exchange Act provisions on which the Commission relies are likewise insufficient to support the standard of conduct adopted in the Final Rule. The purpose of the Exchange Act is to regulate the purchase and sale of securities. But investment advice is expressly governed by the Advisers Act. Indeed, Section 913(g) expressly amended the Exchange Act to create new authority to regulate broker-dealers providing investment advice—recognizing that such authority did not previously exist under the Exchange Act. Dodd-Frank Act, § 913(g)(1), 124 Stat. at 1828 (adding 15 U.S.C. § 78o(k)).

Accordingly, the general antifraud provision of the Exchange Act—15 U.S.C. § 78j—cannot support the Final Rule’s standard of conduct because it is the antifraud provisions of the Advisers Act, namely Sections 206(1) and (2), that govern investment advice.<sup>17</sup> Sections 78o(c)(6) or 78(o)(l) likewise do not support the standard of conduct adopted by the Final Rule.<sup>18</sup> Subsection (c)(6) authorizes the Commission to establish rules and regulations “with respect to the time and method of, and the form and format of documents used in connection with” completing securities transactions and closing accounts. 15 U.S.C. § 78o(c)(6). This provision has nothing to do with standards of conduct pertaining to the offering of personalized investment advice. Subsection (l) authorizes the Commission to “facilitate the provision of simple and clear disclosures to investors,” and to promulgate rules “prohibiting or

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<sup>17</sup> Moreover, the Exchange Act’s antifraud provision requires scienter, *see See Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 196-97 (1976), an element the Final Rule expressly rejects (SA 8).

<sup>18</sup> The Final Rule purports to rely on 15 U.S.C. § 78o generally and subsections 78o(c)(6) and 78o(l) specifically. (SA 174.) Given the Commission’s identification of specific subsections of section 78o (*see also* SA 13), it is reasonable to conclude that the Commission does not rely on other subsections of the same provision.

restricting certain sales practices, conflicts of interest, and compensation schemes.”<sup>19</sup> *Id.* § 78o(l). While this provision may authorize certain ancillary portions of the Final Rule, it does not authorize the Commission to adopt a standard of conduct for broker-dealers offering personalized investment advice, much less a standard that disregards Congress’s direction to impose the fiduciary duty currently applicable to investment advisers.<sup>20</sup>

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<sup>19</sup> Section 78o contains two different subsection (l)s. State Petitioners assume that the Final Rule intended to rely on the provision quoted above.

<sup>20</sup> The remaining statutes cited by the Commission either fail to delegate standalone rulemaking authority or delegate rulemaking authority on issues that are not even conceivably linked to the standard of conduct at issue here. *See* 15 U.S.C. §§ 78c (definitional provisions of the Exchange Act), 78q (authority to promulgate general recordkeeping and reporting requirements), 78w (general rulemaking authority “to implement the provisions of this chapter”), and 78mm (general authority to exempt persons, securities, or transactions from the “provisions of this chapter . . . to the extent that such exemption is necessary or appropriate in the public interest, and is consistent with the protection of investors.”)

## POINT II

### THE COMMISSION'S DISAVOWAL OF A UNIFORM FIDUCIARY RULE IN FAVOR OF A VAGUE AND INEFFECTIVE STANDARD FOR BROKER-DEALERS IS ARBITRARY AND CAPRICIOUS

#### A. The Final Rule Fails to Serve Its Stated Goal of Protecting Investors.

Even if the Commission had acted within its statutory authority in promulgating the standard of conduct adopted in the Final Rule, the regulation should nevertheless be vacated as arbitrary and capricious. The Final Rule's stated purpose is "to enhance investor protection by reducing the potential harm to retail customers from conflicts of interest that may affect broker-dealer recommendations." (SA 73; *see* SA 4, 72, 145.) But the ineffectual standard of conduct adopted in the Final Rule leaves investors vulnerable to the same harms that Congress, the 913 Study, and the Commission itself sought to remedy. The Commission's conclusion that the Final Rule's standard of conduct serves its stated purpose thus runs "counter to the evidence before the agency." *State Farm*, 463 U.S. at 43.

The Commission did not dispute the 913 Study's exhaustive factual findings regarding consumer harm stemming from the existing broker-dealer regulatory gap. (*See* PA 426-434.) Yet rather than closing the gap,

the Final Rule instead preserved the same confusing disparity between investment advisers and broker-dealers that has harmed retail investors. (SA 108-117.) Indeed, aspects of the Final Rule exacerbate the confusion suffered by retail investors—for example, by using *identical language* for the disclosures that investment advisers and broker-dealers must give, notwithstanding the distinct standards of conduct that apply to them under the Final Rule. See *supra* at 34.

The Final Rule’s claim that its standard would “build upon and go beyond the recommendations in the 913 Study” (SA 13) is also flatly inconsistent with the record. The 913 Study recommended that the Commission impose the fiduciary standard set forth in the Advisers Act and expressly referred to in Section 913(g), which would require a broker-dealer to “act in the best interest of the customer without regard to the[ir] financial and other interest.” (PA 441-443.) But the Final Rule expressly disavowed this fiduciary duty, instead adopting a more lenient standard that resembles FINRA’s less protective suitability rule. By its plain terms, the Final Rule allows a broker-dealer to consider her own financial interests in making a recommendation. (SA 17.)

Moreover, the standard adopted in the Final Rule is circular, vague, and ineffective. The Final Rule provides that a broker-dealer “shall act in the best interest of the retail customer at the time the recommendation is made, without placing the financial or other interest of the [broker-dealer] . . . making the recommendation ahead of the interest of the retail customer.” 17 C.F.R. § 240.15l-1(a)(1). But the regulation offers no definition of what “best interest” means, aside from compliance with the Disclosure, Care, Conflict of Interest, and Compliance Obligations. (SA 16.) This purported answer begs the question, however, because the Care Obligation itself uses the term “best interest” but does not define it. *See* 17 C.F.R. § 240.15l-1(a)(2)(ii). Moreover, the Care Obligation “does not require documentation of the basis for believing a particular recommendation was in a particular retail customer’s best interest” (SA 62), and the Disclosure Obligation does not require that an investor be informed of the basis for a specific recommendation (SA 42).<sup>21</sup>

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<sup>21</sup> In 2013, the IAC urged the Commission to require those providing investment advice “to document the basis for their belief that their recommendation is in the customer’s best interests.” (PA 535.) The Final Rule fails to address this recommendation, much less to explain its basis for rejecting it.

Therefore, an investor has no way of knowing what “best interest” means and no standard or record to evaluate or challenge a broker-dealer’s recommendation.

The Conflict of Interest Obligation also fails to effectively deal with conflicts of interest. With respect to firm-level conflicts, the Conflict of Interest Obligation requires only disclosure. 17 C.F.R. § 240.15l-1(a)(2)(iii)(A).<sup>22</sup> And with respect to individual-level conflicts, the Final Rule makes clear that broker-dealers may dispose of any conflicts through disclosure combined with internal policies and procedures. (SA 75, 77.) But as the Final Rule acknowledged, disclosure is generally inadequate to address investor harm, especially for investors with limited financial sophistication. (SA 116, 151.) Indeed, numerous studies show that “disclosures of conflicts can have the perverse effect of increasing bias and moral licensing in the provision of advice.” (SA 116 & n.1148) (collecting studies). And the Final Rule offers no explanation of how a broker-dealer’s internal policies and procedures can protect an

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<sup>22</sup> The Conflict of Interest Obligation is thus largely a restated Disclosure Obligation, which requires disclosure of “material facts relating to conflicts of interest.” 17 C.F.R. § 240.15l-1(a)(2)(i)(B).

investor when investors have no means to enforce or ensure compliance with such policies and procedures. Indeed, the Final Rule explicitly declined to create a private right of action for investors. (SA 10.)

Accordingly, the Final Rule repeatedly fails to satisfy its stated goal of protecting retail investors.

**B. The Commission’s Speculative Economic Analysis Fails to Support the Final Rule.**

The Commission’s economic analysis likewise failed to justify its decision to adopt the Final Rule’s standard instead of a fiduciary standard. An agency must both “consider responsible alternatives to its chosen policy” and “give a reasoned explanation for its rejection of such alternatives.” *City of Brookings Mun. Tel. Co. v. FCC*, 822 F.2d 1153, 1169 & n.46 (D.C. Cir. 1987) (quotation marks omitted). “Absent any ‘satisfactory explanation’ in the rulemaking record,” the adoption of a “plainly inferior” standard is arbitrary and capricious. *Public Citizen, Inc. v. Mineta*, 340 F.3d 39, 56 (2d Cir. 2003) (quoting *State Farm*, 463 U.S. at 43).

The Commission conceded that “it is not possible to quantify, with meaningful precision, either the existing harm or the specific benefits we

expect to flow from” the Final Rule. (SA 140.) As a result, the Commission imposed a standard of conduct on the \$4 trillion broker-dealer industry without first quantifying the costs associated with the agency’s failure to impose a fiduciary duty or the purported benefits of the rule for retail investors. “[R]easonable regulation ordinarily requires paying attention to the advantages and the disadvantages of agency decisions” and making some effort to adequately consider both sides. *Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015) (emphasis omitted). As a group of former SEC senior economists (including twelve former chief economists) explained in a comment letter sharply criticizing the proposed rule’s economic analysis, a new regulation “cannot be adequately evaluated without . . . some indication of how the rule’s economic costs and benefits would be distributed across the affected individuals and firms.” (PA 3201.)

With respect to costs, the Commission admitted “the existence of broker-dealer behavior under the [existing] baseline that is harmful to investors,” but asserted that quantifying those harms “would render any estimates insufficiently precise to inform our policy choices.” (SA 119.) But “[a]n agency may not avoid an obligation to analyze . . . consequences

that foreseeably arise from [its action] merely by saying that the consequences are unclear.” *Kern v. United States Bureau of Land Mgmt.*, 284 F.3d 1062, 1072 (9th Cir. 2002).

The Commission’s failure to quantify aggregate investor harms was especially unreasonable given the availability of prior government studies on the issue, including by the White House Council of Economic Advisers and DOL. See *supra* at 17-18. While the Commission took issue with “a particular study” relied on by the Council and DOL (SA 119), the agency failed to explain why that single study rendered the prior governmental economic analyses unreliable in their entirety. Nor did the Commission explain why other academic studies and reports available in the record were insufficient to support an aggregate cost analysis. (See SA 107-114 (referencing academic studies and reports studying effects of conflicted advice in the United States, United Kingdom, Canada, and India).) And the agency failed to explain why it did not commission a new study or perform its own aggregate analysis prior to promulgating the Final Rule.

Instead, the Commission performed a limited analysis of the impact of conflicted advice on mutual fund investments alone. Even that limited

accounting concluded that investors lose between \$4.1 and \$9.7 billion annually due to the absence of a fiduciary rule. (SA 141-142.) Shockingly, the Final Rule then concluded that its standard of conduct would mitigate or eliminate that loss entirely (SA 142)—a finding at odds with the Commission’s acknowledgment that the agency could not quantify the benefits associated with the new regulation (SA 120).

The Commission’s evaluation of the benefits associated with the Final Rule was likewise inadequate. For example, the rule is substantively similar to FINRA’s suitability rule—a standard that has failed to sufficiently protect investors to date. *Compare* 17 C.F.R. § 240.15l-1(a)(1) and (a)(2)(ii), *with* FINRA Regulatory Notice 12-25. The Commission asserted that the Final Rule is more protective than the existing FINRA standard because the Final Rule requires a recommendation to be “in the best interest” of a customer rather than “consistent with the best interest” of a customer. (SA 57, 127.) But the Commission did not explain, much less quantify, the substantive distinction between these phrases.

Likewise, the Commission acknowledged that broker-dealers are already subject to disclosure obligations regarding “an array of market

practices with respect to the disclosure of capacity, fees, services, and conflicts of interest.” (SA 121.) The Commission’s speculation that the Final Rule’s Disclosure Obligation would provide new benefits is thus unsupported by evidence and unreliable in any event. Among other things, the Final Rule does not require standardization of the timing, form, or manner of disclosure in the interest of preserving “flexibility” for broker-dealers. (SA 124.) It was therefore unreasonable for the Commission to presume that the Final Rule would “increase the consistency of disclosure practices across broker-dealers.” (SA 123.)

Moreover, and as the Commission acknowledged, the existence and scope of any benefits associated with the Disclosure Obligation depend on variable factors such as the nature of existing disclosure obligations, the manner in which a disclosure is conveyed, the facts that a broker-dealer “deems necessary to disclose,” the extent to which retail customers understand and use disclosures, and the extent to which a disclosure improves investor efficiency. (SA137; *see also* SA 124.) The Final Rule makes no effort to evaluate the likelihood that any of these events occur in a manner likely to promote the effectiveness of the disclosures.

The Commission's evaluation of the benefits associated with the Conflict of Interest Obligation similarly relied largely on the purported benefits of disclosures. (SA 130-132.) The Commission also asserted that retail investors would benefit from the Final Rule because the regulation will offer broker-dealers "the option of addressing conflicts of interest associated with recommendations by eliminating such conflicts entirely, rather than just disclosing them." (SA 133.) This "benefit" cannot seriously be attributed to the Final Rule, as broker-dealers have always had the "option" to mitigate or eliminate conflicts of interest. More fundamentally, as with the Disclosure Obligation, the existence and scope of benefits associated with the Conflict of Interest Obligation depend chiefly on voluntary decisions made by broker-dealers about how to craft and enforce their disclosure and compliance policies. (SA 134.)

Finally, the Commission's economic analysis of Section 913(g) as a regulatory alternative was also unreasonable. The Final Rule erroneously speculated that the adoption of a fiduciary standard would lead broker-dealers to exit the market rather than continue to provide brokerage services, leading to a reduction in investor choice especially for lower-market investors. (SA 147-149.) The Final Rule's speculation was based

on a handful of industry surveys about changes that broker-dealers expected to make in response to DOL's 2016 rule, which never went into effect. (SA 104-105.) As commenters noted (*see, e.g.*, PA 1512-1513) and the Commission acknowledged, these industry surveys were limited in scope and not necessarily "indicative of broader trends in the market for advice" (SA 105).

In any event, the Commission erred in drawing conclusions about investor choice from these surveys because Section 913(g) is meaningfully different from DOL's 2016 rule in several respects. Namely, DOL's 2016 rule and its related exemption imposed contractual obligations that do not exist under Section 913(g). *See supra* at 27-28. Section 913(g) also expressly preserved various aspects of the broker-dealer business model, including the ability to collect commissions. *See* Dodd-Frank Act, § 913(g)(1), 124 Stat. at 1828. The Final Rule's economic analysis failed to mention the differences between DOL's 2016 rule and Section 913(g) or to discuss the possibility that Section 913(g)'s accommodation of broker-dealers' distinct regulatory status would limit flight from the market.

The Commission also failed to analyze whether a reduction in investor choice could nevertheless be justified by a corresponding

reduction in investor harm due to ongoing conflicted advice. As the Commission acknowledged, a reduction in broker-dealer services would most likely affect lower-market investors who may be unable to satisfy minimum account balance or other requirements imposed by certain investment advisers. (SA 106.) But the Commission failed to consider whether these investors are especially vulnerable to the harms of conflicted investment advice offered by broker-dealers given the disparities in financial sophistication and literacy between financial professionals and lower-market customers. Likewise, the Commission failed to seriously consider the possibility that investment advisers might see an advantage to providing lower fee-based services to customers formerly served by broker-dealers. In failing to consider these issues, the Commission has not met its “duty to consider responsible alternatives to its chosen policy.” *City of Brookings*, 822 F.2d at 1169 (quotation marks omitted).

**C. The Disclosure Obligation and Relationship Summary Will Exacerbate Investor Confusion.**

There is no dispute that retail investors are confused by the legal distinctions between broker-dealers and investment advisers, and that this confusion shows no sign of abating. Indeed, a 2018 RAND study determined that “respondents seemed less informed about the marketplace for professional financial advice in 2018 than they were in 2007.” (PA 598.) The Commission’s Chairman likewise admitted in August 2018 that “the key differences between broker-dealers and investment advisers are not well understood by many of our Main Street investors.” (PA 314.) Empirical evidence routinely shows that poorly drafted, duplicative, and unclear disclosures are likely to exacerbate rather than alleviate consumer confusion. (PA 2293-2295 (collecting studies).) The Disclosure Obligation imposed under the Final Rule suffers from all these infirmities and is therefore likely to harm rather than help consumers.

First, the Disclosure Obligation is almost entirely unstandardized under the guise of preserving “flexibility” for broker-dealers. (SA 31, 53, 124.) This “flexibility” will leave broker-dealers with limitless room to describe an already confusing regulatory scheme in incomprehensible ways, including through overlapping written and oral disclosures, the

latter of which do not have to be documented in substance. (SA 51.) And investors will receive different disclosures from different financial professionals, leaving them unable to meaningfully compare the available options.

Second, the standard-of-conduct disclosure required in the Relationship Summary incorrectly informs investors that broker-dealers and investment advisers are subject to an identical standard of conduct. (PA 150-151 nn.507-509, 275-276.) This disclosure requirement is confusing at best (and flatly misleading at worst) because investment advisers remain subject to a higher standard of conduct than broker-dealers because of the Final Rule. (See SA 5.) The Relationship Summary is the only required standard-of-conduct disclosure in the Final Rule. (SA 44.)

Finally, notwithstanding requests from multiple commenters (*see e.g.*, PA 1336-1337, 1454-1458, 1922-1923, 2482-2483, 2789-2790, 2901), the Final Rule declined to impose limitations on misleading marketing practices that have been documented to harm investors, including broker-dealers' use of suggestive titles and advertisements suggesting a relationship of trust and confidence. *See* 2008 RAND Report, *supra*, at

70-71, 91-92. While the Final Rule created a presumption against standalone broker-dealers using the term “adviser” or “advisor” in marketing materials (SA 35-36), the Commission declined to prohibit the practice in its entirety and placed no limitations on dually registered firms or individuals, despite evidence that dual registration contributes to consumer confusion (PA 596). Nor did the Final Rule limit the use of other common misleading terms, such as “financial manager,” “financial consultant,” and “investment specialist,” or circumscribe other marketing practices that suggest a relationship of trust and confidence between broker-dealers and their customers. The Commission’s failure to address marketing practices—which demonstrably influence consumers—is irrational given the general limitations of disclosure and the specific flaws in the Disclosure Obligation.

## CONCLUSION

The Court should vacate and set aside the Rule.

Dated: New York, New York  
December 27, 2019

Respectfully submitted,

LETITIA JAMES  
*Attorney General*  
*State of New York*  
BARBARA D. UNDERWOOD  
*Solicitor General*  
STEVEN C. WU  
*Deputy Solicitor General*

MATTHEW COLANGELO  
*Chief Counsel*  
*Federal Initiatives*  
KEVIN WALLACE  
*Acting Chief*  
*Investor Protection Bureau*  
JEFFREY A. NOVACK  
RITA BURGHARDT McDONOUGH  
JONATHAN ZWEIG  
*Assistant Attorneys General*  
*of Counsel*

By: /s/ Ester Murdukhayeva  
ESTER MURDUKHAYEVA  
Assistant Solicitor General

28 Liberty Street  
New York, NY 10005  
(212) 416-6279

*Attorneys for Petitioner State of*  
*New York*

XAVIER BECERRA  
*Attorney General*  
*State of California*

MATTHEW RODRIGUEZ  
*Chief Assistant Attorney General*

MARTIN GOYETTE  
*Senior Assistant Attorney General*

AMY WINN  
*Supervising Deputy Attorney*  
*General*

KATHLEEN JENNINGS  
*Attorney General*  
*State of Delaware*

MARION QUIRK  
*Assistant Director*  
*Investor Protection*

JOSEPH E. GIBBS-TABLER  
*Deputy Attorney General*

By: /s/ Nathaniel R. Spencer-Mork  
NATHANIEL R. SPENCER-MORK  
Deputy Attorney General

By: /s/ Jillian Lazar  
JILLIAN LAZAR  
Director, Investor Protection

450 Golden Gate Avenue  
Suite 11000  
San Francisco, CA 94102  
(415) 510-94102

Delaware Department of Justice  
820 N. French Street  
Wilmington, DE 19801  
(302) 577-5088

*Attorneys for Petitioner*  
*State of California*

*Attorneys for Petitioner*  
*State of Delaware*

WILLIAM TONG  
*Attorney General*  
*State of Connecticut*

AARON M. FREY  
*Attorney General*  
*State of Maine*

By: /s/ Joseph J. Chambers  
JOSEPH J. CHAMBERS  
Assistant Attorney General

By: /s/ Gregg D. Bernstein  
GREGG D. BERNSTEIN  
Assistant Attorney General

Finance Department Head  
55 Elm Street, P.O. Box 120  
Hartford, CT 06141  
(860) 808-5270

6 State House Station  
Augusta, ME 04333  
(207) 626-8814

*Attorneys for Petitioner*  
*State of Connecticut*

*Attorneys for Petitioner*  
*State of Maine*

HECTOR BALDERAS  
*Attorney General*  
*State of New Mexico*

NICHOLAS M. SYDOW  
*Civil Appellate Chief*

By: /s/ Tania Maestas  
TANIA MAESTAS  
Chief Deputy Attorney General

408 Galisteo Street  
Santa Fe, NM 87501  
(505) 490-4060

*Attorneys for Petitioner*  
*State of New Mexico*

KARL A. RACINE  
*Attorney General*  
*District of Columbia*

LOREN L. ALIKHAN  
*Solicitor General*  
JACQUELINE R. BECHARA  
*Assistant Attorney General*

By: /s/ Graham E. Phillips  
GRAHAM E. PHILLIPS  
Assistant Attorney General

Office of the Attorney General  
441 4th Street NW  
Suite 630 South  
(202) 724-6647  
*Attorneys for Petitioner*  
*District of Columbia*

ELLEN F. ROSENBLUM  
*Attorney General*  
*State of Oregon*

By: /s/ Brian A. de Haan  
BRIAN A. DE HAAN  
Assistant Attorney General  
Civil Enforcement Division

Oregon Department of Justice  
100 SW Market Street  
Portland, OR 97201  
(971) 673-3806

*Attorneys for Petitioner*  
*State of Oregon*

## CERTIFICATE OF COMPLIANCE

Pursuant to Rule 32(a) of the Federal Rules of Appellate Procedure, William P. Ford, an employee in the Office of the Attorney General of the State of New York, hereby certifies that according to the word count feature of the word processing program used to prepare this brief, the brief contains 13,975 words and complies with the typeface requirements and length limits of Rule 32(a)(5)-(7) and Local Rule 32.1.

*/s/ William P. Ford*

# Addendum

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# DECLARATION OF MANISHA PADI

I, Dr. Manisha Padi, declare as follows:

1. I am an Assistant Professor of Law at Berkeley Law School. Prior to my appointment at Berkeley, I was a Lecturer in Law and National Science Foundation Postdoctoral Fellow at the University of Chicago Law School. I received a Ph.D. in economics from the Massachusetts Institute of Technology and a J.D. from Yale Law School. My work studies the empirical impact of financial regulation, consumer protection law, and retirement policy on economic outcomes for ordinary households. Ongoing research projects include a study of consumer protection laws in Ohio, which I show improved mortgage performance while cutting down on risky mortgage lending, and a study of retirement policy in Chile, where I show that retirement income mandated through public programs like Social Security limit the ability of private markets to supply fixed income investment products. My CV is attached as Exhibit 1.
2. This declaration consists of three parts. In Part I, I introduce and discuss the existing economic evidence showing that retail investors are harmed by conflicted financial advice. In Part II, I provide empirical analysis documenting the loss in state tax revenues due to conflicted financial advice. In Part III, I provide empirical analysis documenting an increase in state spending on benefits programs due to conflicted advice.

## **I. Retail Investors Are Harmed by Conflicted Financial Advice**

### **A. The Economic Literature Clearly Establishes that Conflicts of Interest in the Provision of Investment Advice Are Associated With Lower Returns for Retail Investors**

3. Broadly, retail investors seek financial advice from two classes of financial professionals – registered investment advisers (“RIAs”) and broker dealers (“BDs”).
4. RIAs generally charge a fixed or percentage-based fee for advice and are subject to a fiduciary duty towards investors. BDs are compensated on a transactional basis and are not fiduciaries under federal law. They have no legal duty of loyalty or care to investors. Instead, they may recommend any “suitable” investment product, even if that product has higher associated fees and lower returns. BDs are therefore not precluded from recommending higher cost products, even if that recommendation is at the expense of the investors’ expected return.
5. Scholarly research demonstrates that conflicts of interest lead to worse outcomes for investors. Research has repeatedly shown that BDs subject to conflicts of interest because of the absence of a fiduciary duty recommend higher-cost products that produce a lower return to investors.

6. The first approach to studying this disparity is comparing the returns of products sold through brokers, relative to those sold directly. Bergstresser et al. (2009) show that equity, bonds, and money market funds sold by brokers provide an annualized return of 14 to 90 basis points below those by similar directly sold funds.<sup>1</sup> Reuter (2015) calculates that broker-sold products obtain a return of 27 to 49 basis points lower than directly sold products.<sup>2</sup> Chalmers and Reuter (2014) show that investors who worked with brokers providing active advising in university sponsored retirement plans invested in funds with 50 basis points in higher fees and with 125 to 298 basis point in lower returns relative to self-directed advisers.<sup>3</sup>
7. Another line of research compares products recommended by financial professionals gaining a larger share of excess fees, and who therefore face a strong conflict of interest, to professionals who gain a lower share of fees. Christoffersen et al. (2013) show that professionals steer customers towards mutual funds that provide higher payments to the professional, imposing a cost of 50 basis points per year on investors.<sup>4</sup> Del Guercio and Reuter (2014) show that actively managed broker sold mutual funds earn 112 to 132 basis points below passively managed funds that do not provide conflicting payments to brokers.<sup>5</sup> Friesen and Sapp (2007) show that investors in load funds, which are typically bought through brokers, experience a 98 basis point higher loss than non-load funds, which are typically sold directly.<sup>6</sup>
8. Direct evidence regarding the magnitude of conflicts of interest was also gathered through audit studies, surveys, focus groups, and public commentary. For example, in an audit study, Mullainathan et al. (2012) sent trained actors to several hundred financial professionals, randomizing the existing portfolio of these potential clients.<sup>7</sup> The study showed that the advice the actors received were indicative of significant conflicts of interest. On average, financial professionals recommended strategies that increased clients' expense ratios through active management and increased "churning" of assets that increase commissions without improving investor returns.
9. These conflicts are particularly pernicious for retail individual investors because such investors do not appreciate the legal distinctions between RIAs and BDs and the inherent potential for conflicted BD advice which is unmitigated by a fiduciary obligation. Retail investors vary substantially in financial literacy, and those effects are

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<sup>1</sup> Bergstresser, Daniel, John MR Chalmers, and Peter Tufano. "Assessing the costs and benefits of brokers in the mutual fund industry." *The Review of Financial Studies* 22.10 (2008): 4129-4156.

<sup>2</sup> Reuter, Jonathan. "Revisiting the Performance of Broker-Sold Mutual Funds." Available at SSRN 2685375 (2015).

<sup>3</sup> Chalmers, John, and Jonathan Reuter. "What is the impact of financial advisors on retirement portfolio choices and outcomes?." Available at SSRN 2078536 (2012).

<sup>4</sup> Christoffersen, Susan EK, Richard Evans, and David K. Musto. "What do consumers' fund flows maximize? Evidence from their brokers' incentives." *The Journal of Finance* 68.1 (2013): 201-235.

<sup>5</sup> Guercio, Diane Del, and Jonathan Reuter. "Mutual fund performance and the incentive to generate alpha." *The Journal of Finance* 69.4 (2014): 1673-1704.

<sup>6</sup> Friesen, Geoffrey C., and Travis RA Sapp. "Mutual fund flows and investor returns: An empirical examination of fund investor timing ability." *Journal of Banking & Finance* 31.9 (2007): 2796-2816.

<sup>7</sup> Mullainathan, Sendhil, Markus Noeth, and Antoinette Schoar. *The market for financial advice: An audit study*. No. w17929. National Bureau of Economic Research, 2012.

exacerbated for women, the elderly, African Americans, Hispanics, and those without higher education.<sup>8</sup> GAO (2011) collected evidence and comments from financial industry stakeholders showing that conflicts of interest associated with investment advice were not apparent to such investors.<sup>9</sup>

10. Investor confusion is unsurprising, as survey evidence show that RIAs and BDs overlap significantly in the services they provide and how they market themselves to investors.<sup>10</sup> BD and RIA firms surveyed and studied by economists at RAND were often found to be dually registered or to have affiliations and significant relationships with firms with the opposite classification.<sup>11</sup> BDs provided financial advisory services, while RIAs provided brokerage services.<sup>12</sup> Disclosures made to customers regarding conflicts of interest were difficult to understand.<sup>13</sup> Retail investors surveyed by RAND could not distinguish between job titles or actions that would be taken by BDs, relative to RIAs, even after learning about fiduciary duty and the differences between the two types of advisors.<sup>14</sup>
11. The SEC and the Department of Labor have previously concluded that investors were losing significant returns due to the legal differences between the standards of conduct applicable to RIAs and BDs. (SEC 2011; DOL RIA 2016).<sup>15</sup> The SEC and Department of Labor also concluded that investors were unaware of these differences and therefore unable to mitigate or avoid such losses.
12. In the Regulation Best Interest Final Rule (“Final Rule”), the SEC stated that the loss of returns due to conflicts of interest was at least 20 basis points per month in the context of mutual funds.<sup>16</sup> These losses could be larger depending on the statistical methods used to calculate losses from conflicted advice, as well as the market’s evolution in the absence of regulatory intervention. Taken together, the SEC estimates in the mutual fund market alone, investors may be losing between \$4.1 and \$9.7 billion per year due to conflicted financial advice.

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<sup>8</sup> Financial Literacy Among Retail Investors in the United States: A report prepared by the Federal Research Division, Library of Congress, under an Interagency Agreement with the Securities and Exchange Commission, December 2011. Available at [https://www.loc.gov/rr/frd/pdf-files/Investor\\_Literacy\\_Report.pdf](https://www.loc.gov/rr/frd/pdf-files/Investor_Literacy_Report.pdf).

<sup>9</sup> “Regulatory Coverage Generally Exists for Financial Planners, but Consumer Protection Issues Remain,” GAO-11-235, January 2011. Available at <https://www.gao.gov/new.items/d11235.pdf>.

<sup>10</sup> Hung, Angela A., et al. Investor and industry perspectives on investment advisers and broker-dealers. Vol. 767. Rand Corporation, 2008.

<sup>11</sup> RAND report, page 42.

<sup>12</sup> RAND report, page 60.

<sup>13</sup> RAND report, page 72.

<sup>14</sup> RAND report, page 110-112.

<sup>15</sup> “Study on Investment Advisers and Broker-Dealers,” Section 913 Report, US Securities and Exchange Commission (January 2011); “Regulating Advice Markets,” Regulatory Impact Analysis for Final Rule and Exemptions, Department of Labor (April 2016).

<sup>16</sup> 87 Fed. Reg. 33,318, 33,458-33,459 (2019).

**B. Recent Research Shows Causal Evidence that Imposing Fiduciary Duties on Broker Dealers Significantly Improves Returns for Retail Investors**

13. To remedy the significant losses faced by investors receiving conflicted advice, scholars and policymakers have considered expanding the federal fiduciary duty, to which RIAs are already subject, to all financial professionals providing personalized investment advice to retail investors.
14. I, along with Northwestern University Economics Professors Vivek Bhattacharya and Gaston Illanes, tested this possibility empirically using a natural experiment generated by differences in state common law. Our academic study, titled “Fiduciary Duty and the Market for Financial Advice,” was circulated by the National Bureau of Economic Research working paper series as Working Paper Number 25861 in May 2019.<sup>17</sup>
15. Our research design compares investments between: (1) states that impose some form of a fiduciary duty on BDs under certain circumstances based on state common law of agency; and (2) neighboring states that do not.
16. Because these state-level differences do not impact the RIAs’ federal fiduciary duties, RIA sales act as a control group against which the difference in BD sales can be compared. This approach is referred to as a “difference-in-difference” research design.
17. We analyzed proprietary data from a financial services provider that covers variable and fixed annuities sold to retail investors through both BD and RIA distribution channels between 2013 and 2015. To avoid including the effects of other state characteristics in our estimation, we limited our analysis to counties on the border of states with different levels of fiduciary liability. We first calculate the implied net present value of returns from each product, based on their contract characteristics. Then, we compare the sales of variable and fixed annuities between states with and without common law fiduciary duties for BDs. By comparing the difference in sales by BDs with the difference in sales by RIAs, we calculate the difference-in-difference estimate of the causal effect of fiduciary duty.
18. Our study found that in states where BDs were more likely to be found to have a fiduciary duty towards their customers when providing personalized investment advice, customers purchased more fixed indexed annuities, relative to variable annuities, and purchased variable annuities with lower fees and higher returns.<sup>18</sup> Overall, we estimated that customers of BDs in states with some form of common law fiduciary duties achieved a net return on investment of 51 basis points higher than comparable customers in non-fiduciary duty states. Customers of BDs who do not face a fiduciary

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<sup>17</sup> See Exhibit 3.

<sup>18</sup> Fixed indexed annuities are simpler products, with fewer opportunities to hide fees from investors. The shift in contract types and characteristics show that broker dealers play an advisory role that is responsive to fiduciary duty.

duty under state common law lose over \$7000 on average during their lifetime from a single annuity contract.<sup>19</sup>

19. Our data shows that fiduciary duty does not necessarily decrease the availability of financial advice overall. BDs in states more likely to impose a common law fiduciary duty serve the same number of customers and sell the same number of annuity contracts as BDs in states with lesser duties. Moreover, we used the distribution of returns to test whether fiduciary duty imposes a fixed cost, or whether it improves the quality of financial advice. Results show that the distribution of BD advice expands in fiduciary duty states, meaning that the best advice provided by BDs in fiduciary states is better than the best advice provided by BDs in non-fiduciary states. Fiduciary duty causes the quality of advice to improve.
20. Our study concluded that the failure to impose a fiduciary duty on broker dealers causes large losses to investors in annuity markets. We also concluded that our study likely underestimates the positive impact a federal fiduciary duty law would produce. This is because: (a) the state common law fiduciary duties apply only in particular circumstances to varying degrees; and (b) a uniform federal statutory duty would likely be a superior disciplining tool than variable and potentially inconsistent state common law.
21. This failure to impose a uniform federal fiduciary duty on BDs impacts the State Petitioners.<sup>20</sup>
22. First, our study directly demonstrates the harm from conflicted advice in the annuity market. Nationwide annuity sales in 2018 were \$100 billion.<sup>21</sup> BDs sold 23% of these, corresponding to more than 190,000 contracts nationwide. In New York, BDs sold 12,460 annuity contracts totaling \$1.5 billion in 2018.<sup>22</sup> Assuming a 51 basis point impact on their investments from conflicted advice, a conservative figure consistent with our own study and the prior literature, produces a loss to New York investors of approximately \$89.3 million from conflicted advice on annuity contracts in 2018 alone. Applying the same conservative assumption to the remaining State Petitioners, our study implies that investors in the annuities market lost \$144.8 million in California, \$17.3 million in Connecticut, \$4.4 million in Delaware, \$7.2 million in Maine, \$9.3

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<sup>19</sup> This assumes a discount rate of 3% and a withdrawal rate of 15% per year from a contract with initial face value of \$120,000, the average in our sample. I assume the average annuity purchaser is 62 years of age at initial investment, and 72 years of age when withdrawals begin. Optimal returns on variable annuities, calculated as the best returns that could be obtained from the choice of subaccount investment options available through the annuity, 9% on average in non-fiduciary states, compared to 9.5% in fiduciary states.

<sup>20</sup> The State Petitioners are the States of New York, California, Connecticut, Delaware, Maine, New Mexico, and Oregon, and the District of Columbia.

<sup>21</sup> "Facts + Statistics: Annuities," Insurance Information Institute. Last accessed at <https://www.iii.org/fact-statistic/facts-statistics-annuities> (December 21, 2019).

<sup>22</sup> Werner, Carrie, "The Older Population: 2010," 2010 Census Briefs (November 2011). Last accessed at <https://www.census.gov/prod/cen2010/briefs/c2010br-09.pdf>.

million in New Mexico, \$18.2 million in Oregon, and \$2.4 million in Washington, D.C.<sup>23</sup>

23. Second, the available evidence also supports large losses in the mutual fund market. Following the analysis in the SEC's Final Rule, which was in turn based on Reuter (2015), the loss in returns to investors in mutual fund markets is approximately 47 basis points.<sup>24</sup> The findings of the Council of Economic Advisers report (2015) show that retail investors' mutual fund holdings are 9.6 times larger than their annuity holdings. This implies that lost mutual fund returns to investors in New York State alone total \$428 million. Losses to investors in other State Petitioners in mutual fund markets total \$695 million in California, \$82.9 million in Connecticut, \$21.1 million in Delaware, \$34.5 million in Maine, \$44.5 million in New Mexico, \$87.3 million in Oregon, and \$11.3 million in Washington, D.C.
24. Third, my calculations are limited to losses in annuity contracts and mutual fund sales. BDs offer many other types of financial products, including stocks, corporate bonds and municipal or government bonds. Investment advice in the sale of these products may also be subject to the conflicts of interest discussed above and can lead to additional losses that have not been quantified here.
25. Accordingly, the failure to impose a federal fiduciary duty on BDs causes, at a minimum, an annual approximate loss to investors of approximately \$517.5 million in New York, \$839.4 million in California, \$100.1 million in Connecticut, \$25.6 million in Delaware, \$41.7 million in Maine, \$53.8 million in New Mexico, \$105.5 million in Oregon, and \$13.6 million in Washington, D.C.

## **II. The Reduction in Investment Returns Caused by Conflicted Investment Advice Can Be Expected to Decrease Tax Revenues Collected by States**

27. The loss of retail investment returns due to conflicted financial advice causes harm to states by lowering their tax revenues. Investors with fewer savings due to conflicted advice will have lower income throughout their lifetime. Drops in yearly income will arise from lower returns on annuity products and mutual funds, as well as other products.
28. To quantify the impact of conflicted advice on state tax revenues, I calculate the average state income tax rate using data on yearly tax revenue on adjusted gross income.<sup>25</sup> Of all income that is subject to taxation in New York, which usually includes withdrawals

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<sup>23</sup> These calculations assume that a federal fiduciary standard would raise implicit returns on variable annuities sold in each state by 51 basis points. This would occur due to the higher stringency of a regulatory fiduciary duty than a state common law fiduciary duty, which exists to some degree in some of the State Petitioners according to the Finke and Langdon (2012). The difficulty of enforcing state common law means the impact of fiduciary duty as measured in our study substantially understates the potential impact of a mandatory fiduciary duty imposed at the federal level. See Bhattacharya, Illanes, and Padi at pgs. 5-6, 33-34.

<sup>24</sup> 87 Fed. Reg. at 33,458-33,459.

<sup>25</sup> Tax revenues by state available from the Census Quarterly Summary of State and Local Tax Revenue. <https://www.census.gov/programs-surveys/qtax.html>

from annuities and savings accounts that are invested in mutual funds, 5.8% is paid to the State of New York in income tax. Assuming 15% of savings are withdrawn yearly from annuity and mutual fund investments starting at the age of 72, the total loss in New York income tax revenue based on losses from annuity contracts and mutual funds is \$30.1 million per year.

29. Similar calculations show that the remaining State Petitioners' income tax revenues would also be lower due to conflicted financial advice. The total loss in yearly revenue based on losses from annuity contracts and mutual funds is \$49 million in California, \$4.49 million in Connecticut, \$1.31 million in Delaware, \$2.3 million in Maine, \$2.81 million in New Mexico, \$6.28 million in Oregon, and \$792,000 in Washington, D.C.
30. In total, conflicted financial advice causes at least \$97.8 million in yearly lost income tax revenue to the State Petitioners. This excludes lost income tax revenue from conflicted advice on financial products other than annuities and mutual funds. It also excludes lost sales tax revenue (for those states that collect sales tax) arising from retail investors who would have had higher spending power with higher returns on their investments.<sup>26</sup> Each of these other categories of losses are difficult to quantify based on existing data but would further increase the negative impact of conflicted advice on state tax revenues.

### **III. Insufficient Retirement Savings Caused by Conflicts in Investment Advice Can Be Expected to Increase Public Benefits Expenditures by the States**

31. Lost retirement assets due to conflicted advice impacts state expenditures by increasing public benefits spending. States spend on a variety of public programs, including housing subsidies, health care subsidies, Medicaid spending, and long-term care subsidies. The burden on these public programs increases when retirees' private savings decrease, leading to insufficient income in retirement.
32. Conflicted financial advice leads to decreases in annuity returns of 51 basis points, and decreases in mutual fund returns of 47 basis points. Assuming a withdrawal rate of 15% each year after the age of 72, this leads to an average income loss of \$68,600 throughout retirement attributable to annuity and mutual fund losses.
33. Lost retirement income from conflicted advice makes it more likely that retirees will be unable to amass sufficient savings for retirement. As Americans save for retirement in defined contribution plans, retail investing has had higher stakes in the financial health of retirees. Burke et al. (2015) estimated that at the end of 2009, Americans held 8.3 trillion dollars in self-directed retirement plans, and a further 4.7 trillion dollars in

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<sup>26</sup> The Pennsylvania report on insufficient savings notes that reduced consumer expenditures contributes to lost sales tax revenue (page 23). See "The Impact of Insufficient Retirement Savings on the Commonwealth of Pennsylvania," Report to the Pennsylvania Treasury Department (January 2018). Note that state sales tax revenue may be as large as state income tax revenue. <https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/projects/state-and-local-backgrounders/sales-taxes>

Individual Retirement Accounts (IRAs).<sup>27</sup> Losses of even a few basis points in returns on such a large pool of wealth, starting during a retiree's lifetime cause significant decreases in retirement savings by age 65.

34. Insufficient retirement savings lead to an increase in public spending. The Pennsylvania report on insufficient savings in retirement and its impact on public spending is one of several projects that calculates state spending on retirees without sufficient retirement income.<sup>28</sup> These expenditures include state Medicaid spending, long term care spending, housing vouchers, transportation programs, and other public programs that support older Americans, and increase as retirement income decreases. The Pennsylvania report estimates that for each dollar lost in retirement income, state spending on benefit programs increases by 13 cents.<sup>29</sup> Rescaling this effect to account for differences in public spending across states, I calculate that reduced retirement income due to losses in the annuity and mutual fund markets attributable to conflicted investment advice would lead to an increase in New York's public spending of at least \$2.88 million per year.<sup>30</sup>
35. The remaining State Petitioners would likewise increase public spending on benefits programs due to retirement losses caused by conflicted investment advice in the annuity and mutual fund markets. Such conflicted advice would lead to an increased annual spending of at least \$3.96 million in California, \$370,000 in Connecticut, \$112,000 in Delaware, \$166,000 in Maine, \$265,000 in New Mexico, \$448,000 in Oregon, and \$129,000 in Washington, D.C.
36. These estimates are limited to the causal impact of conflicted financial advice on income from mutual fund and annuity investments during retirement. Excluded are other sources of retirement income and wealth that are impacted by conflicted advice and would increase public spending, including investments in stocks, bonds, and real estate. Each of these sources of lost retirement income and wealth are difficult to quantify, but would increase the impact on state public spending.
37. Over the next ten years, these costs are expected to multiply as retirement age populations increase and state healthcare spending expands. Trostel (2017) conservatively estimates that state spending on retirees, which currently totals about \$1.7 billion across the country, will grow by approximately \$1.7 billion every two years.<sup>31</sup> Based on the assumption that New York's expenditures will increase

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<sup>27</sup> Burke, Jeremy, et al. "Impacts of conflicts of interest in the financial services industry." RAND Working Paper 1076 (2015).

<sup>28</sup> See also Trostel, Philip, "The Fiscal Implications of Inadequate Retirement Savings in Maine." University of Maine Whitepaper (2017).

<sup>29</sup> The effect of insufficient retirement savings on public spending can be calculated from the relationship reported in Figure 2.1 of the Pennsylvania report. The average change in spending for a lost dollar of private income can be calculated by taking the difference in spending across income categories and dividing by the size of the income category (Pennsylvania report page 19).

<sup>30</sup> Scaling is done based on public welfare spending by state: <https://www.taxpolicycenter.org/statistics/state-and-local-general-expenditures-capita>

<sup>31</sup> This conservative estimate assumes that there is no change in retirement savings adequacy over time. See scenario 1 on page 10 of Trosten (2017).

proportionally with the national average in state spending, the net present cost to New York alone over this time period will be \$77.6 million in expenditures due to conflicted financial advice in the annuity and mutual fund markets. Similar calculations show that spending will increase over the next 10 years by \$106.7 million in California, \$10 million in Connecticut, \$3 million in Delaware, \$4.5 million in Maine, \$7.1 million in New Mexico, \$12.1 million in Oregon, and \$3.5 million in Washington, D.C. These estimates do not include projected drops in retirement preparedness and the impact of conflicted advice outside mutual funds and annuities, each of which would significantly expand state spending over the next ten years.

I state under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and belief.

Executed on December 25, 2019 in Berkeley, California.



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MANISHA PADI

# **EXHIBIT 1**

	New York		California		Connecticut		Delaware		Maine		New Mexico		Oregon		Washington, D.C.	
	\$		\$		\$		\$		\$		\$		\$		\$	
Contract amount	\$ 120,000.00		\$ 120,000.00		\$ 120,000.00		\$ 120,000.00		\$ 120,000.00		\$ 120,000.00		\$ 120,000.00		\$ 120,000.00	
Contract age (years)	62		62		62		62		62		62		62		62	
Withdrawal age (years)	72		72		72		72		72		72		72		72	
Withdrawal percent	15%		15%		15%		15%		15%		15%		15%		15%	
Discount rate	0.97		0.97		0.97		0.97		0.97		0.97		0.97		0.97	
Average tax rate	0.0582		0.0584		0.0448		0.0512		0.0406		0.0232		0.0659		0.0582	
Conflicted annuity return	9.0%		9.0%		9.0%		9.0%		9.0%		9.0%		9.0%		9.0%	
Unconflicted annuity return	9.5%		9.5%		9.5%		9.5%		9.5%		9.5%		9.5%		9.5%	
Conflicted mutual fund return	0%		0%		0%		0%		0%		0%		0%		0%	
Unconflicted mutual fund return	0%		0%		0%		0%		0%		0%		0%		0%	
Conflicted annuity NPV	\$ 152,999.86		\$ 152,999.86		\$ 152,999.86		\$ 152,999.86		\$ 152,999.86		\$ 152,999.86		\$ 152,999.86		\$ 152,999.86	
Unconflicted annuity NPV	\$ 160,164.86		\$ 160,164.86		\$ 160,164.86		\$ 160,164.86		\$ 160,164.86		\$ 160,164.86		\$ 160,164.86		\$ 160,164.86	
Conflicted mutual fund NPV	\$ 758,499.33		\$ 758,499.33		\$ 758,499.33		\$ 758,499.33		\$ 758,499.33		\$ 758,499.33		\$ 758,499.33		\$ 758,499.33	
Unconflicted mutual fund NPV	\$ 792,861.62		\$ 792,861.62		\$ 792,861.62		\$ 792,861.62		\$ 792,861.62		\$ 792,861.62		\$ 792,861.62		\$ 792,861.62	
Total income difference	\$ 1,757.29		\$ 1,757.29		\$ 1,757.29		\$ 1,757.29		\$ 1,757.29		\$ 1,757.29		\$ 1,757.29		\$ 1,757.29	
Number of annuity contracts	12,460.83		20,212.46		2,411.11		615.33		1,004.69		1,295.87		2,539.50		327.52	
Number of mutual fund contracts	119,623.95		194,039.66		23,146.64		5,907.17		9,645.06		12,440.38		24,379.19		3,144.15	
Loss from annuity contracts	\$ 89,281,864.67		\$ 144,822,361.79		\$ 17,275,598.47		\$ 4,408,839.92		\$ 7,198,634.96		\$ 9,284,936.33		\$ 18,195,514.99		\$ 2,346,649.96	
Loss from mutual fund sales	\$ 428,182,550.21		\$ 694,546,517.64		\$ 82,851,202.05		\$ 21,144,140.86		\$ 34,523,583.10		\$ 44,529,174.32		\$ 87,262,984.93		\$ 11,254,184.33	
Total annual loss to retirees	\$ 517,464,414.89		\$ 839,368,879.43		\$ 100,126,800.52		\$ 25,552,980.78		\$ 41,722,218.05		\$ 53,814,110.65		\$ 105,458,499.92		\$ 13,600,834.29	

# **EXHIBIT 2**

## MANISHA PADI

*E-mail:* mpadi@berkeley.edu · *Webpage:* manishapadi.com · *Phone:* 518-526-6700

*Address:* 687 Simon Hall, Berkeley Law School, Berkeley, CA 94720

### ACADEMIC APPOINTMENTS

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#### **University of California, Berkeley, School of Law**

Assistant Professor of Law 2019 – present

#### **University of Chicago School of Law**

Bigelow Fellow and Lecturer in Law 2017 – 2019

NSF Social, Behavioral, & Economic Sciences Postdoctoral Fellow 2017 – 2019

### EDUCATION

---

#### **Massachusetts Institute of Technology**

Ph.D. in Economics, 2017

*Thesis:* Essays on Consumer Financial Markets

#### **Yale Law School**

J.D., 2017

*Activities:* Mortgage Foreclosure Litigation Clinic; Landlord/Tenant Clinic; Editor, Yale Journal on Regulation; Law and Economics Working Group

#### **Massachusetts Institute of Technology**

B.S. in Economics, B.S. in Mathematics, 2010

*Thesis:* Education Level as a Dynamic Choice

*Activities:* Vice President, Undergraduate Economics Association; Research Assistant & Tutor, Economics Department

### FELLOWSHIPS, GRANTS, AND AWARDS

---

Center for Equitable Growth Postdoctoral Grant 2018 – 2019

NSF SBE Postdoctoral Fellowship 2017 – 2019

BC Center for Retirement Research Dissertation Fellowship 2016 – 2017

MIT Economics Shultz Dissertation Grant 2015

Tobin Project Democracy & Markets Graduate Fellow 2014 – 2015

NSF Graduate Research Fellowship 2010 – 2015

Robert C. Byrd Scholar 2006 – 2010

MIT Burchard Scholar for Excellence in Humanities and Social Sciences 2009

WORKING PAPERS AND PUBLICATIONS

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[Consumer Protection Laws and the Mortgage Market: Evidence from Ohio](#)

[The Exercise of Contract Rights](#)

[Fiduciary Duty and the Market for Financial Advice](#) (with Vivek Bhattacharya and Gaston Illanes)

[Competition, Asymmetric Information, and the Annuity Puzzle: Evidence from a Government-Run Exchange in Chile](#) (with Gaston Illanes)

[Polarized Politics, Stable Markets: The Case of State Attorneys General & Mortgage Lender](#)  
(with Brian Feinstein and Chen Meng)

Manisha Padi & Abigail R. Moncrieff, *Measuring the Welfare Effects of a Nudge: A Different Approach to Evaluating the Individual Mandate*, in *Nudging Health: Health Law and Behavioral Economics* 275-286 (I. Glenn Cohen, Holly Fernandez Lynch, and Christopher T. Robertson eds., 2016).

Abigail R. Moncrieff & Manisha Padi, *Beyond Payment and Delivery Reform: The Individual Mandate's Cost-Control Potential*, 40 AM. J.L AND MED. 185-298 (2014).

EXPERIENCE

---

**Department of Economics, MIT**, Cambridge, MA

Teaching Assistant for Introductory Microeconomics 2016-2017

**Department of Justice, Antitrust Division**, Washington, D.C.

Summer Legal Intern Program Summer 2014

**Weil Gotshal and Manges**, New York, NY

Summer Associate Summer 2014

**New York City Law Department**, New York, NY

Summer Honors Intern Summer 2011

INVITED PRESENTATIONS

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2020: New York University Law and Economics Seminar (scheduled); Harvard Law and Economics Seminar (scheduled); UC Irvine Law School (scheduled); Duke Law and Economics Seminar (scheduled)

2019: American Economics Association Meeting; Stanford University; University of Wisconsin, Madison; National Bureau of Economic Research Industrial Organization/Insurance Meeting; Berkeley Consumer Law Conference; University of Chicago Law School; Risk Theory Conference; Wharton Financial Regulation Conference; University of Toronto Law and Economics Colloquium; University of Illinois College of Law; Berkeley Law and Economics Colloquium; Conference on Empirical Legal Studies

2018: American Economics Association Meeting; American Law and Economics Association Meeting; Empirical Contracts Conference; Southern Illinois University at Carbondale Economics; University of Texas Law and Economics Seminar; Florida State University; Queen's University (Kingston, CA); George Washington; Cornell Law School; University of California, Berkeley Law; University of Southern California; University of San Diego; Washington University of St. Louis; University of Michigan; Conference on Empirical Legal Studies; University of California, Los Angeles; University of Texas, Austin; Northwestern University; University of Virginia; Federal Trade Commission Microeconomics

2017: Retirement Research Consortium Conference

#### PROFESSIONAL SERVICE

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Referee for *American Law and Economics Review*; *Journal of Law and Economics*; *International Review of Law and Economics*; *Journal of Public Economics*; *Journal of Risk and Insurance*; *Journal of Law, Economics, and Organization*; *Journal of Empirical Legal Studies*

# **EXHIBIT 3**

NBER WORKING PAPER SERIES

FIDUCIARY DUTY AND THE MARKET FOR FINANCIAL ADVICE

Vivek Bhattacharya  
Gaston Illanes  
Manisha Padi

Working Paper 25861  
<http://www.nber.org/papers/w25861>

NATIONAL BUREAU OF ECONOMIC RESEARCH  
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Fiduciary Duty and the Market for Financial Advice  
Vivek Bhattacharya, Gaston Illanes, and Manisha Padi  
NBER Working Paper No. 25861  
May 2019  
JEL No. G23,G28,K15,L51,L84

**ABSTRACT**

Recent regulatory debate in the financial advice industry has focused on expanding fiduciary duties to broker-dealers. Proponents of this reform argue that it would improve the advice given to clients and limit losses from agency problems, while detractors counter that such regulation would increase compliance costs without directly improving consumer outcomes. This paper evaluates these claims empirically, using a transactions-level dataset for annuity sales from a major financial services provider and exploiting state-level variation in common law fiduciary duty. We find that imposing fiduciary duty on broker-dealers shifts the set of products they sell to consumers, away from variable annuities and towards fixed indexed annuities. Within variable annuities, fiduciary duty induces a shift towards lower-fee, higher-return annuities with a wider array of investment options. We develop a model that leverages the distributional changes in products sold to test the mechanism by which fiduciary duty operates. We find evidence that fiduciary duty does not solely increase the cost of doing business but that it has the intended effect of directly impacting financial advice.

Vivek Bhattacharya  
Department of Economics  
Northwestern University  
Kellogg Global Hub, Room 3379  
2211 Campus Drive  
Evanston, IL 60208  
vivek.bhattacharya@northwestern.edu

Manisha Padi  
University of Chicago  
1111 East 60th Street  
Chicago, Illinois 60637  
manishap@uchicago.edu

Gaston Illanes  
Department of Economics  
Northwestern University  
Kellogg Global Hub, Room 3421  
2211 Campus Drive  
Evanston, IL 60208  
and NBER  
gaston.illanes@northwestern.edu

## I. Introduction

Many individuals in the United States buy complex financial products to save for retirement, and they use financial advisers to help them find, evaluate, and choose between these products. As in any industry where experts provide advice to less-informed customers, a natural concern is whether incentives are aligned. This concern is exacerbated in the financial advice industry, as many advisers are compensated on commission, receiving higher payouts from steering clients towards high fee products. Regulators—such as the Securities and Exchange Commission, state regulatory authorities and courts, and the Department of Labor—have recognized this potential conflict of interest and imposed various “standards of care” to alleviate it. The most stringent standard of care is that of fiduciary duty, which roughly requires advisers to act in the best interest of their consumers.<sup>1</sup> Currently, financial advisers licensed as *registered investment advisers* (RIAs) have a fiduciary duty towards their clients at the national level, while those licensed as *broker-dealers* (BDs) do not. In recent years, regulators have discussed expanding fiduciary duty to include all financial advisers, including broker-dealers and registered investment advisers.<sup>2</sup> Supporters of the expansion argue that imposing fiduciary duty on all advisers will alleviate conflicts of interest and ensure that retirees choose products that are better suited to their needs. Opponents argue that fiduciary duty does not have a noticeable impact on product choice—because competition already disciplines financial advisers, because the conflict-of-interest was overblown to begin with, or because fiduciary duty does not actually constrain advisers at all—but will instead increase the cost of doing business, leading to fewer advisers in the market and fewer retirees purchasing beneficial products.

This paper evaluates these competing claims empirically. First, we estimate the causal effect of fiduciary duty and test for the presence of a constraint on advice using a new dataset of transaction-level data for annuity sales from an anonymous financial services provider (“FSP”). FSP is a large company—within the top-five companies by market share in the market for annuities—that is representative of other large companies in this industry in terms of types of products offered, size of

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<sup>1</sup>Section II.A discusses in greater detail what comprises fiduciary duty in various settings.

<sup>2</sup>In 2016, the Department of Labor promulgated rules expanding fiduciary duty to broker-dealers handling retirement savings. After several delays during the Trump administration, the Fifth Circuit struck down the rule as overreaching the DoL’s administrative powers (see *Chamber of Commerce of the USA v. United States Department of Labor*, No. 17-10238 (5th Cir. 2018)). Several state treasurers have since signed an appeal to the SEC, asking for federal action expanding fiduciary duty to broker-dealers. See <https://www.marketwatch.com/story/is-the-fiduciary-rule-dead-or-alive-what-its-fate-means-to-you-2018-03-16>.

the adviser network, and financial health. This dataset contains information about every contract sold by FSP from 2008–2015, detailed data about the product and adviser and some limited data on the client. Crucially, for each transaction we observe the type of adviser (RIA vs. BD) and granular geographic information about the locations of the transacting parties.

Although broker-dealers do not have fiduciary duty at the national level, state courts in several states have ruled that they are fiduciaries to their customers. In this paper, we will argue that fiduciary duty has a causal impact on outcomes by leveraging comparisons between broker-dealers and registered investment advisers across state borders where fiduciary status for broker-dealers differs. To do so, we will focus on two related estimators that will deliver the causal impact of fiduciary duty under different assumptions: a differences-in-differences estimator (across counties on different sides of a state border and across adviser types), and the difference within advisor type across the border. The differences-in-differences estimator will be robust to demand changes at the borders, provided they are constant across adviser types, but will not be robust to spillover effects of regulation onto RIAs. Interpreting the within-adviser type difference causally requires the assumption of no systematic demand differences at the border, but under this assumption it delivers an estimate of the causal effect of the regulation onto broker-dealers and of the spillover effect onto RIAs. As a result, this estimator is robust to the presence of spillover effects onto RIAs. Strikingly, we find that across a wide variety of outcome variables, the difference across the border for registered investment advisers is zero, which has two important implications. First, for this to hold in the presence of a demand break across the border, one would need a spillover effect onto RIAs that perfectly counteracts the demand break, which we believe to be implausible. This, together with a battery of other checks, lends credence to the identifying assumptions embedded in the border difference. Second, since the difference for RIAs is often insignificant, implies that the estimates of fiduciary duty on broker-dealers from the two strategies largely agree in magnitude.

Using these strategies, we find that extending fiduciary duty to broker-dealers leads to a compositional shift in the set of products purchased by their clients. More specifically, broker-dealers sell fewer variable annuities relative to fixed indexed annuities under fiduciary duty.<sup>3</sup> The effect of fiduciary duty on variable annuity sales is substantial: about three-fourths of all annuities sold by a typical broker-dealer are variable annuities, and imposing fiduciary duty on broker-dealers

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<sup>3</sup>The structure of annuity products is discussed in greater detail in Section II.B.

reduces this proportion by around 9 percentage points. This is not the case for registered investment advisers, whose sale composition does not change. Unfortunately, it is difficult to make welfare statements about this shift, as fixed indexed annuities do not dominate variable annuities (or vice-versa). However, variable annuities have been under significant scrutiny by regulators, given their poor reputation as high fee, low yield products.<sup>4</sup>

We also study the effect of fiduciary duty on the product characteristics of transacted variable annuities. By focusing on a single product type and on characteristics that have a straightforward welfare interpretation, such as fees, we are able to make clearer statements about advice quality. Annuity products have complex and multidimensional fee structures, and we find that extending fiduciary duty to broker-dealers causes their clients to purchase products with lower fees on many of these dimensions. Moreover, under fiduciary duty broker-dealers steer customers towards products with a larger and more diverse set of investment options that, under several alternative assumptions on the portfolio allocation, lead to improved mean returns. We then aggregate all these dimensions by formulating and solving a dynamic programming problem to compute the net present value of all variable annuities in the dataset, assuming optimal execution by a risk-neutral individual. We find that broker-dealers with fiduciary duty sell their clients higher-return variable annuities. Along all of the aforementioned specifications, we find no evidence that of spillover effects of regulation onto registered investment advisers.

These results tell us that fiduciary duty has an impact on consumers, but they cannot tell us the mechanism underlying this effect. To disentangle the mechanism, we develop a model of entry into the provision of financial advice with heterogenous adviser qualities and differentially regulated firms that encompasses the arguments of both detractors and proponents of extending fiduciary duty to all broker-dealers. Detractors argue that this reform will only increase the cost of doing business, regardless of advice quality. If this argument, which we call the *fixed cost channel*, is true, then fiduciary duty will lead to exit of broker-dealers, and potentially to entry of registered investment advisers. However, proponents argue that it will constrain advisers from providing low quality advice. We name this argument the *advice channel*. If this channel holds, some advisers will improve their advice, while others will find it unprofitable to remain in the market, and will exit.

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<sup>4</sup>See, for example, <https://www.thinkadvisor.com/2014/07/28/variable-annuities-a-top-source-of-customer-compla/?slreturn=20181123212558> or <https://www.finra.org/sites/default/files/InvestorDocument/p125846.pdf>.

Moreover, their exit may induce the entry of previously unprofitable advisers offering high quality advice. The distinguishing feature between these two mechanisms is that there cannot be entry of broker-dealers offering high quality advice if fiduciary duty operates solely through the fixed cost channel.

Distinguishing between these two channels has important implications for policy, as the advice channel implies that fiduciary duty constrains advisers' ability to provide low-quality advice, while the fixed cost channel implies that fixed cost increases happen to lead to an equilibrium with on average fewer low quality advisers. Moreover, we argue that if fiduciary duty were to operate solely through the latter channel, then the mean impact is less likely to be externally valid or to be robust to different levels of stringency in the fiduciary standard.

To study the impact of fiduciary duty on market structure, we leverage an additional dataset provided by FSP with information about all advisers who can sell annuities in the United States, including those who have not transacted with the company. We find that imposing fiduciary duty on broker-dealers reduces the number of broker-dealer firms operating in the market by about 16%. Moreover, we document a compositional shift to not just investment advisory firms—whose number are not significantly affected by the regulation—but also to broker-dealer firms with larger footprints.

We then use the predictions of the model to test whether any of the shift in equilibrium purchases is plausibly driven by a change in advice. As our model predicts, product quality may increase directly through the advice channel or indirectly through the fixed cost channel if exiting firms offer more distorted advice. By leveraging the distribution of advice—proxied in the data by the net present value of the annuity—rather than simply its mean, we find evidence that is consistent with the advice channel, and we are able to determine that regulations that increase the fixed cost of operating as a financial adviser would have the unintended consequence of driving the firms that provide the highest-quality advice out of business. Fiduciary duty works, at least in part, as intended—by directly impacting financial advisers' advice to their clients.

There are several important limitations to our analysis. To begin, our estimates are specific to variation in fiduciary duty induced by common law. State legislation or national rulemaking by the DOL or SEC may induce a number of other effects. If the sole difference between common law and these other efforts is the stringency of enforcement, the presence of the advice channel provides

suggestive evidence that rules may continue to impact product selection in the same way. However, state legislation or national rulemaking may also lead to product reformulation, an issue that we are not able to address. Another limitation is that we are not able to make statements on social welfare. There are two main reasons for this. First, one may believe that differentiation in this industry is not large enough to counteract the inefficiency from free entry (Mankiw and Whinston, 1986), and as a result exit of firms can be welfare enhancing. Since we do not have structural estimates of profits or fixed costs, we cannot speak to this effect. Moreover, as Agarwal, Chomsisengphet, Mahoney, and Stroebel (2014) discuss, distorted advice can lead to excessive private demand for products, relative to the social demand function. In such a setting, exit of firms can also increase welfare if it leads to additional exertion of market power and higher prices. Despite these limitations, we believe that by providing evidence that fiduciary duty has an effect on consumer choice, that this effect leads consumers to purchase products with higher returns and a wider array of investment options, and that these findings must have come, at least partially, from a change in advice, this paper provides an important contribution into this policy debate.

*Related Literature.* Despite the importance for public policy of studying the impact of fiduciary duty, there has been limited empirical work on this topic—possibly in part because of a lack of useful data. We are aware of a small number of papers that study questions similar to ours. Finke and Langdon (2012) classify states based on whether they place common-law fiduciary duty on broker-dealers and find that fiduciary duty does not impact the number of broker-dealers per household. They also run surveys with financial advisers to ask whether fiduciary duty standards constrain the advice they give to clients. Their estimates on both dimensions are noisy, and they suffer from the important drawback that comparisons are conducted *across entire states*. Our border strategy at least partially addresses the issues that states with fiduciary duty may be different in other dimensions. Kozora (2013) considers a temporary change in the fiduciary standard of a subset of brokers in the municipal bond market and finds that more strict standards led to more recommendations of investment-grade bonds. Finally, Egan (2017) considers the impact of fiduciary duty in the reverse convertible bond market, documenting significant dispersion in the market value of these bonds and high likelihoods of purchase of dominated products. Through the lens of a search model, he estimates that extending fiduciary duty to all financial advisers would increase

consumers' risk-adjusted returns by 2%. We are also aware of concurrent work-in-progress by Labro and Omartian (2017) of fiduciary duty on compliance activities.<sup>5</sup>

This paper is related to a broader literature on the market for financial advice. While theoretical work on financial advice has a long tradition,<sup>6</sup> there is a growing body of recent empirical work on this market. Recent work has studied the prevalence and geographic concentration of misconduct in this industry (Egan, Matvos, and Seru, 2019); we should be clear that nothing in our dataset is evidence of misconduct, but our paper does highlight geographic concentration of certain types of advice and choice behavior induced by regulation. In this paper we are agnostic about the potential recourse for offering suboptimal advice, but Kozora (2017) provides some evidence on this dimension by studying how properties of the product influence arbitration. There is some debate in the academic literature on the extent of conflict-of-interest problems in financial settings. A number of papers have documented intermediaries responding to commissions and other incentives rather than offering clients appropriate advice,<sup>7</sup> although none of these papers study how proposed regulation might influence these outcomes. On the other hand, Linnainmaa, Melzer, and Previtiero (2016) show that advisers' personal portfolios look like their clients', suggesting that suboptimal advice may be due to misconceptions about products rather than commissions.<sup>8</sup> Our results suggest that equilibrium product choice likely depends on something other than advisor beliefs: financial regulation does have a substantial impact.

This work adds three main contributions to this literature. First, it provides estimates of the causal effects of extending fiduciary duty to broker-dealers on the equilibrium set of products sold by both broker-dealers and registered investment advisers, and on various metrics of product quality. Second, it shows that while these average causal effects are interesting for the analysis of this specific fiduciary duty policy, they are not informative of the channel through which fiduciary duty operates. Moreover, the implications for external validity of the aforementioned causal effects are starkly

<sup>5</sup>To our knowledge, Labro and Omartian (2017) use a different cut of our dataset but focus on changes induced by the FINRA Know-Your-Customer Rule.

<sup>6</sup>See Inderst and Ottaviani (2012a). Inderst and Ottaviani (2012b) provides a good summary of the literature.

<sup>7</sup>See, for instance, Anagol, Cole, and Sankar (2017) in the context of life insurance in India, Mullainathan, Noeth, and Schoar (2012) for financial advisers in the United States (although without any discussion of fiduciary standards), Dickstein (2015) in the context of medicine, Guiso, Pozzi, Tsoy, Gambacorta, and Mistrulli (2017) for mortgages in Italy, Hong (2017) and Barwick, Pathak, and Wong (2017) for real estate, and Camara and Dupuis (2014) and DellaVigna and Hermle (2017) for movie reviews.

<sup>8</sup>Using a related dataset, Foerster, Linnainmaa, Melzer, and Previtiero (2017) show that advisers tend to give similar advice to all their clients, which is also consistent with misguided beliefs.

different across channels. Third, it shows sufficient conditions for fiduciary duty to operate as a constraint on advice, and documents empirical evidence for this channel. This final result lends credence to the position that extending fiduciary duty to broker-dealers at the federal level would be beneficial to consumers by continuing to impact advice along the dimensions observed in this paper.

The rest of the paper proceeds as follows. Section II discusses institutional details: the market for financial advisers, fiduciary standards, and properties of annuities. Section III describes the data. Section IV discusses the effect of fiduciary duty on product choice. Section V presents the model of fiduciary duty that will guide the remainder of the analysis. Section VI discusses the effect of fiduciary duty on market structure. Section VII uses the model to disentangle whether fiduciary duty operates through the entry channel or the advice channel, and Section VIII concludes.

## II. Institutional Details

In this section, we introduce the relevant details of the institutional setting. Section II.A discusses the role and types of financial advisers in the US and how fiduciary standards governing their behavior have evolved. Section II.B then discusses details of variable, fixed, and fixed indexed annuities, which are the specific products we study in this paper.

### II.A. Financial Advisers and Fiduciary Duty

The United States has two types of financial advisers, which evolved separately for historical reasons but now largely serve similar functions. The first type, registered investment advisers (RIAs), are regulated at the federal level by the SEC under the Investment Advisers Act of 1940. The second, broker-dealers (BDs), were initially conceived as mere brokers, but have grown into the role of providing financial advice as well. They are subject to the Securities Exchange Act of 1934 and regulated by state law and by FINRA, a private industry regulator. Registered investment advisers must be affiliated with a brokerage firm in order to sell certain products, including annuities, and thus many such advisers are *dually registered* as broker-dealers and investment advisers. They are subject to fiduciary duty at the federal level on their advisory accounts. In our sample, all transacting advisers will be either broker-dealers or dual registrants—as they are selling annuities—but we will refer to them as BDs and RIAs nevertheless.

All financial advisers tend to perform many of the same functions when working with individuals. Their primary role is to recommend and facilitate the purchase of investment vehicles, which are originally issued by upstream financial services providers. Given their history of brokering transactions, BDs tend to be paid by commission, receiving a fraction of the fee associated with a product. Compensation schemes for RIAs, on the other hand, tend to be a combination of commissions and “fees”, which are a percentage of assets under management. Following the literature, we refer to RIAs who accept both commissions and fees as “fee-based”, and to RIAs who only accept fees as “fee-only.” Advisers who are compensated, even in part, on the basis of commissions have a conflict of interest: they have an incentive to recommend higher fee products that benefit themselves over lower fee products that benefit their customers.

The patchwork of federal, state, and private regulation overseeing adviser behavior attempts to combat this conflict of interest by imposing legal duties on advisers. All BDs nationwide have a federal duty to deal fairly with their customer and must recommend products that are “suitable” for the consumer, as per FINRA regulation. This requirement does not specify that BDs must prioritize the customer’s best interest over their own, as long as the product they recommend satisfies FINRA’s suitability rules.<sup>9</sup> BDs are also required to provide customers with each product’s prospectus, which includes all technical details about the investment vehicle but is not easily understood by a layperson. Any dispute that arises over a BD’s regulatory compliance is arbitrated through FINRA’s private dispute resolution process. Other claims may be brought under state or federal law. Nationwide regulation of RIAs is more stringent. RIAs have fiduciary duty imposed on them by the SEC, which requires that the RIA place the interest of the customer over the RIA’s own interest. Fee-only advisers have no incentive to violate this duty, but fee-based advisers that take commissions also face a requirement of transparency towards the consumer, such as disclosure of compensation arrangements. RIAs must obtain the best price for each contract, and RIAs that recommend higher commission products must justify that recommendation by using proprietary SEC-approved software that validates recommendations and by drafting disclosures to clients, among other costly compliance measures. If a customer has a dispute with an RIA, the customer may sue in state or federal court, or enter into FINRA arbitration or external private arbitration.<sup>10</sup>

<sup>9</sup>See <http://www.finra.org/industry/suitability>.

<sup>10</sup>Arbitrability varies across claims and states, although, to our knowledge, not across adviser types. Some, but not all, states will allow tort claims to be brought that are very similar in nature to arbitrable claims even when there

Consumer groups and the SEC have long been troubled by the arbitrary difference in regulatory standards across BDs and RIAs. Studies by the SEC (SEC, 2011, 2013a,b) have suggested that that consumers often do not realize that BDs have an incentive to sell high commission products. They also are unable to tell whether their financial adviser is technically classified as a BD or a RIA, and many assume that all advisers are fiduciaries. Motivated by these concerns, the SEC recommended that standards be harmonized across BDs and RIAs, requiring all advisers dealing with retail investors to offer the best possible contract in the investor's interest. The DOL promulgated a rule in 2016 largely following the SEC recommendation.<sup>11</sup> The rule would place a fiduciary duty on BDs that handle retirement savings for retail investors and require all advisers to sell customers the best available contract for that customer. In addition, the DOL rule requires contracts between advisers and consumers that specify the fiduciary duty and allow consumers to bring class action lawsuits to enforce it. The financial adviser industry pushed back on this rule, claiming it would significantly increase compliance costs for BDs and raise the spectre of expensive class action litigation, potentially putting some BDs out of business.<sup>12</sup> However, a number of decisions by the Trump administration along with legal rulings make it unlikely, at the time of this draft, that the rule will go into effect.<sup>13</sup>

This project takes advantage of variations in state common law that have already imposed fiduciary obligations on financial advisers in certain states, in order to estimate the impact of imposing fiduciary duties on BDs. Some states have imposed a common law duty of care that rises to the level of a fiduciary duty, or imposes a higher standard than required of BDs at the federal level. Finke and Langdon (2012) classify states into ones with no common law fiduciary duty on advisers and ones with some level of fiduciary duty; Figure I plots this classification.<sup>14</sup> These duties

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are mandatory arbitration clauses in the contract between client and adviser.

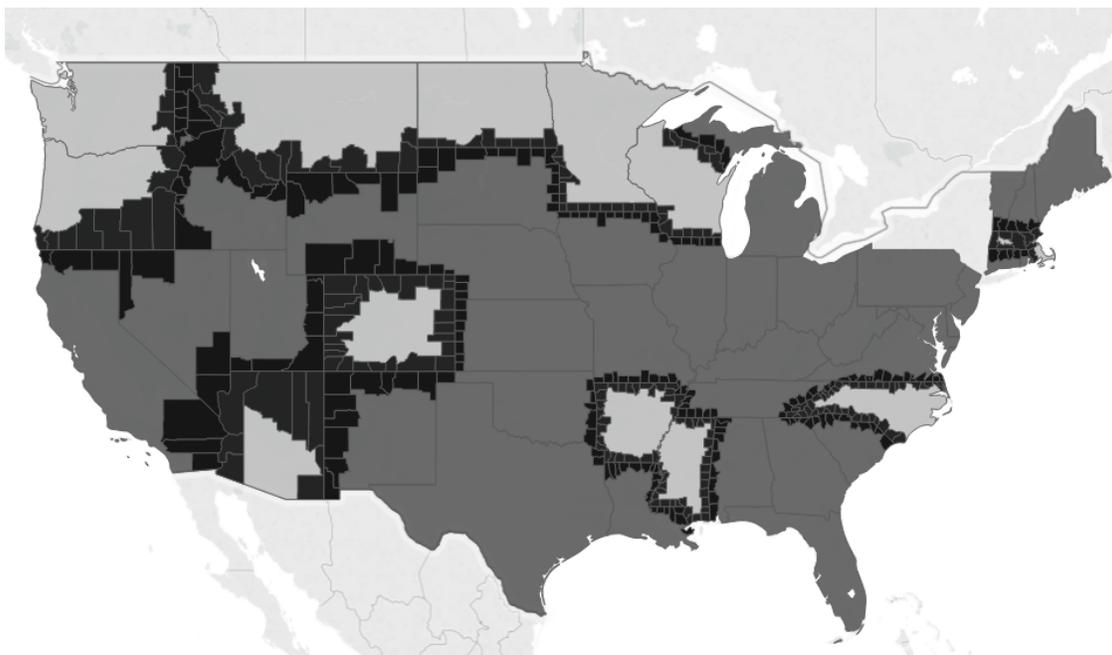
<sup>11</sup>See <https://www.dol.gov/agencies/ebsa/laws-and-regulations/rules-and-regulations/completed-rulemaking/1210-AB32-2>.

<sup>12</sup>See <http://www.investmentnews.com/article/20170810/FREE/170819991/dol-fiduciary-rule-compliance-costs-exceed-4-7-billion-sifma-study>.

<sup>13</sup>As of March 2018, the Fifth Circuit Court of Appeals vacated the DOL Rule, stating the DOL had overstepped its regulatory authority. While the case may be appealed to the Supreme Court, it currently seems unlikely the DOL Rule will be resurrected. The SEC is additionally proposing its own version of the regulation, as are states through *legislation*, rather than common law.

<sup>14</sup>In our analysis, we follow Finke and Langdon (2012) and say the following states have fiduciary-like duty: Alabama, California, Connecticut, Georgia, Idaho, Illinois, Iowa, Kansas, Louisiana, Michigan, Missouri, Nebraska, Nevada, New Hampshire, New Mexico, Oklahoma, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Wyoming. The control states, with no heightened duty, are: Arizona, Arkansas, Colorado, Massachusetts, Minnesota, Mississippi, Montana, North Carolina, North Dakota, Oregon, Washington, Wisconsin.

Figure I: Common law fiduciary duty on broker-dealers by state



Map of states with some degree of fiduciary duty (dark grey) and none (light grey), per the classification in Finke and Langdon (2012). Counties in black are ones at borders between states with different fiduciary standards and constitute our main sample. New York, which does not impose common law fiduciary duty on its broker-dealers, and its surrounding counties are omitted from the main sample due to New York having different suites of products.

allow clients to sue their financial advisers for low quality advice.<sup>15</sup> Since all RIAs already comply with federal fiduciary duty standards, they provide a control against which to compare treated BDs (facing a fiduciary duty) relative to control BDs (facing only FINRA suitability rules). It is important to note that states may not always be able to enforce these duties and that common law may be less salient than legislation, suggesting that any estimate obtained by comparing state law regimes will likely be an underestimate of the impact of a federal rule.<sup>16</sup> Nevertheless, BDs operating under the shadow of potential state law liability may make modifications to their behavior and compliance programs to minimize potential costs, resulting in changes to their recommendations, consumer purchasing behavior, market structure and sales by competitors, and other equilibrium

<sup>15</sup>Advisers who lie to their clients in a way that causes them material loss can always be sued for fraud or misrepresentation, under standard principles of tort law. Additional duties of care, including fiduciary duty, allow clients to recover losses sustained even when advisers have told clients the truth. This can occur when advisers suggest risky investments, “churn” across assets to increase their commissions, and otherwise do not tailor their advice to the needs of their client. For further discussion, see the Joint SEC/NASD Report (<https://www.sec.gov/news/studies/secnasdvp.htm>).

<sup>16</sup>Most state law fiduciary duty claims are brought by private individual litigants, while statutory fiduciary duty claims could allow for more state enforcement actions and class actions

effects.

## II.B. Fixed and Variable Annuities

To study the effect of fiduciary duty on the set of chosen investment products, we focus on annuities, which are one of the most common retirement vehicles with over \$3 trillion in reserves. In addition to the size and importance of the annuity market, the DOL directly mentioned concerns about annuities as the impetus for their 2016 fiduciary duty rule.<sup>17</sup> The simplest annuity contract is a fixed immediate annuity (or “income annuity”), in which investors turn over a lump sum amount in exchange for a promise to receive a fixed periodic payment until death. These products constitute a very small fraction of the US annuity market. Instead, most annuity contracts sold in the US are deferred annuities. These products involve an accumulation phase, during which money is contributed to an account and invested, and a payout phase, during which payments are made from the account to the annuitant. Fixed indexed and variable annuities are the most popular deferred annuity products. They share the structure of an accumulation and a payout phase, but differ in how the account grows during the accumulation phase, in the ways money can be withdrawn during both phases, in fee structure, and in the “riders,” or options, that can be added on to the contract.

Investors in fixed indexed annuities distribute their funds during the accumulation phase between a “fixed account,” which offers a guaranteed interest rate for a predetermined period of time,<sup>18</sup> and a set of “indexed accounts,” where returns are tied to the performance of an underlying index, usually the S&P 500.<sup>19</sup> In most cases, fees are not directly charged as part of the vehicle, but the margin comes from the gap between the realized return of the underlying index and the accrued return. The main exception to this statement are “surrender charges,” which tax withdrawals taken

<sup>17</sup> “The quantified losses also omit losses that adviser conflicts produce in connection with IRA investments other than mutual funds. Many other products, including various annuity products, among others, involve similar or larger adviser conflicts, and these conflicts are often equally or more opaque. Many of these same products exhibit similar or greater degrees of complexity, magnifying both investors’ need for good advice and their vulnerability to biased advice,” from <https://www.federalregister.gov/documents/2016/04/08/2016-07924/definition-of-the-term-fiduciary-conflict-of-interest-rule-retirement-investment-advice>.

<sup>18</sup> Products differ dramatically in the length of the guaranteed interest rate period, from 1 year to 8. Regardless of length, after this period ends the fixed account has a guaranteed interest rate that varies yearly.

<sup>19</sup> There are three prototypical mappings from the returns of the index to the returns of the account: “point-to-point,” “monthly-average,” and “performance triggered.” Under “point-to-point” crediting, the return of the account is the return of the underlying index between two predetermined points in time, with a cap and a floor. Under “monthly-average” crediting, each year the account is credited the average monthly return of the index. Finally, under “performance triggered” crediting, the indexed account receives a predetermined rate of return (usually between 4% and 6%) if the index has positive returns, and 0 otherwise.

in the first years of the accumulation period if they exceed a free withdrawal amount (typically 10% of contract value). Fixed indexed annuities are typically converted into a fixed annuity once investors are sufficiently old, transitioning the contract into the payout phase. In the case of death during the accumulation period, beneficiaries receive the contract amount.

Variable annuities replace the relatively small set of indexed accounts in fixed indexed annuities with a pool of investment funds, with a wide range of asset allocations, risk profiles, and fees. The most basic variable annuity contract resembles a fixed indexed annuity, with contract values accruing interest according to the performance of the set of funds chosen, and investors receiving an annuity upon entering the payout phase. For this contract, investors pay an annual percentage fee, the expense ratios of the funds they invest in, and surrender charges if withdrawing money in the first years of the accumulation period. Often, variable annuity contracts are sold with *living benefit riders*. These riders provide a degree of guaranteed income, at some fee. However, their structure can also incentivize excessive risk-taking in fund selection.<sup>20</sup> To partially mitigate these incentives, riders usually impose restrictions on the investment portfolio an annuitant can choose.<sup>21</sup> Furthermore, the incentive to annuitize a variable annuity is usually low, since it involves surrendering rider benefits.

Optimal execution of variable annuity contracts requires choosing appropriately from the pool of investment options, and if the contract is coupled with a living benefits rider, it further requires making correct decisions about when to take withdrawals. As a result, these contracts are more complex and difficult to price than a fixed indexed annuity. However, if executed correctly and with favorable returns, these contracts have significant upside potential. Thus, no product strictly dominates the other, and certain types of consumers will be better served by purchasing a variable annuity while others will benefit more from a fixed indexed product.

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<sup>20</sup>As an example, the most common rider in our dataset is a “minimum withdrawal.” With this rider, a fictitious account called an “income base” grows yearly by an enhancement rate, but it can increase to the contract amount if the contract amount exceeds this income base. At some age (usually 55), the annuitant can take a yearly payout from the income base. Since the income base benefits from the upside returns of the contract but is partially shielded from the downside risk, there is an incentive to both delay withdrawal (so that the contract base may benefit from positive shocks) and to invest in risky funds.

<sup>21</sup>See Kojien and Yogo (2018) for a study of how these incentives feed into financial fragility of life insurance companies.

### III. Data

In Section III.A, we describe the data provided to us by the financial service provider about their transactions and the advisers that sell its products. Section III.B discusses data sources for the individual products in the dataset. Further details are in Appendix E.

#### III.A. Transactions, Advisers, and Clients

We have transaction-level data from a major financial services provider, which we will refer to as FSP throughout the paper. While our data use agreement prevents us from being able to disclose the identity of this company, it is representative of major companies in the financial services industry, and is within the top-five companies by market share in the market for annuities. FSP sells a mix of annuities and insurance products in all fifty states, has household name recognition, is publicly traded, and has fairly large market capitalization. Our main dataset consists of information about all transactions associated with financial products offered by FSP in the United States between 2008 and 2015. For each transaction, we observe the specific FSP product transacted, the date of the transaction, the advisor selling the product, and the dollar amount of the transaction. If a contract involves multiple transactions—such as recurring payments—then these multiple transactions can be grouped together. In these situations, the contract amount we report is the sum of the transaction amounts for all transactions linked to that contract. The only client-level information we have is the client’s zipcode and age. Although clients can also be linked across contracts, clients purchasing multiple contracts is a fairly rare event, and we ignore these correlations in this analysis.

We have considerably more information about advisers in the dataset: while they cannot be identified in a way that makes it possible to match them to external datasets, they can be linked across transactions in the dataset. Moreover, FSP has also provided us data from Discovery Data, an industry data vendor, for advisers in 2015 who could potentially sell annuities or life insurance.<sup>22</sup> This dataset allows us to observe personal variables about the adviser, such as basic demographics, as well as regulatory information such as licensing and whether the adviser is registered as a broker-dealer representative (BD), a registered independent adviser (RIA), or both (DR). With some

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<sup>22</sup>While not all advisers in the transaction data from FSP can be matched to Discovery, the overwhelming majority can. Moreover, the advisers who remain unmatched look very similar in terms of their transactions to those who are matched, which allays concerns about the imperfect match.

Table I: Summary statistics for border counties

	<i>N</i>	Mean	Std.Dev.	Percentiles				
				10%	25%	50%	75%	90%
<i>Advisor-Level Quantities</i>								
Is Broker-Dealer								
FSP Advisors	4,016	0.205						
Contracts per FSP Advisor								
BD	822	5.7	9.2	1	1	2	6	14
RIA	3,194	5.7	9	1	1	3	6	14
<i>Contract-Level Quantities</i>								
Is Variable Annuity								
BD	4,706	0.789						
RIA	18,097	0.889						
Contract Amounts (\$K, 2015)								
BD	4,706	119.8	140.9	24.2	42.8	80.1	148.8	251.5
RIA	18,097	152.9	179.3	34.2	54.5	100.9	188	304.1
Client Age								
BD	4,706	61.4	10.4	49	55	62	68	74
RIA	18,097	64.7	9.6	54	59	65	71	77

exceptions, advisers in this cut of Discovery Data are all broker-dealers or dually-registered advisers, and those who transact with FSP are *all* either BDs or DRs.<sup>23</sup> We will refer to these groups as BDs and RIAs throughout the paper. Discovery is especially beneficial for two other reasons. First, it also includes information about the firms—including the firm footprint (e.g., local or national), size (number of branch offices as well as representatives), whether the firm offers annuities and insurance products, and some information about account sizes in that firm. Second, Discovery has also entries for advisers in the market who have *not* transacted FSP products—or might not even carry FSP products—and thus provides a complete snapshot of the subset of the advising market that could potentially carry annuities. A drawback of the Discovery dataset is that since we only currently have a snapshot in 2015, we have to restrict our analysis to window of time around this period to ensure that each adviser’s licensing information is likely to be accurate; we thus restrict the analysis to 2013–2015.

Table I provides summary statistics for advisers and FSP contracts sold in the relevant border

<sup>23</sup>Recall that any adviser selling products on behalf of a wholesaler must be affiliated with a broker-dealer.

counties highlighted in Figure I that we will use in our preferred specifications.<sup>24</sup> About 21% of advisers are broker-dealers. BDs and RIAs each sell about 5.7 FSP contracts on average over the sample period; this number is close to the 75<sup>th</sup> percentile of 6, consistent with a mass of advisers selling significantly more contracts. Conditional on selling an FSP annuity, BDs sell VAs about 79% of the time, while the proportion is somewhat larger for RIAs. Contract amounts are also larger, by about \$30,000, for RIAs. Finally, the average client is around the age of retirement, with a slight difference of about 3 years between BDs and RIAs. This difference seems to persist across all quantiles of the distribution, although it may be of limited economic significance.

### III.B. Product-Level Information

Since the transaction dataset from FSP contains (nearly) the exact description of the products for most transactions, we can match it to external data sources containing information about the products.<sup>25</sup> Variable annuities are required to file quarterly prospectuses with the SEC, along with updates to the prospectuses almost monthly. These prospectuses include detailed information about fees—including the mortality and expense fee, administrative expenses, surrender charges, etc.—along with investment options available to annuitants and detailed information about the charges associated with these investment options (e.g., expense ratios). Beacon Research, a data services company that provides disclosure software and curates product information for advisers and other financial firms, provided us with historical data for annuities in our sample. We also hand collected information about restrictions on investments, rider rules, and asset allocations from prospectuses stored in EDGAR, the SEC’s online database. We finally match subaccounts to data from the Morningstar Investment Research Center to collect information about fund ratings and investment styles, and we match it to the CRSP Survivorship-Bias-Free US Mutual Fund database for historical returns.

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<sup>24</sup>We make two main sample selection decisions. First, we exclude New York from our dataset, and thus counties that border only New York as well. New York does not impose common law fiduciary duty on its broker-dealers, but it does have a substantially different set of regulations surrounding the products that can be sold in the state. Indeed, financial services providers like FSP usually set a different suite of products in New York. Second, we only include contracts where we can identify the branch at which the adviser worked at the time of selling the contract, by cross-checking the entry in the transaction dataset with Discovery Data. This decision does not drop an especially significant number of contracts, and results are mostly unchanged.

<sup>25</sup>The main item missing from our dataset is whether the annuity provides a joint survivorship benefit.

## IV. Does Fiduciary Duty Affect Choices?

We leverage comparisons across state borders for both broker-dealers and registered investment advisers to estimate the effect of fiduciary duty on the composition of products sold in the market. Section IV.A discusses our empirical strategy. We then document compositional shifts on a number of dimensions. Section IV.B documents a shift away from variable annuities induced by fiduciary duty. Then, Section IV.C presents within-variable annuity comparisons of fees, investment options, returns, and net present value calculations.

### IV.A. Empirical Strategy

Simple comparisons of product sales by broker-dealers between states that impose common law fiduciary standards and those that do not are tainted by the fact that fiduciary standards are not randomly assigned. If preferences for financial instruments have influenced the adoption of fiduciary standards, for example, then differences in product sales across states confounds the effect of fiduciary standards with differences in preferences. Instead, we think of fiduciary duty as an endogenous object that is the result of each state’s judicial process. We address this issue in two steps. First, we restrict the analysis to counties on either sides of a border between states that differ in fiduciary status, since we expect that—and subsequently provide corroborating evidence for the fact that—border counties are more similar to each other than the two states are. Second, we compare the difference across the border for broker-dealers to that for registered investment advisers, leading to a difference-in-differences strategy to determine whether fiduciary duty has an equilibrium impact. In particular, for a variety of characteristics  $Y_{ist}$ , we run the regression

$$\begin{aligned}
 Y_{ist} = & \alpha_0 + \alpha_1 \cdot \mathbb{1}[\text{State has FD for BDs}]_s \cdot \mathbb{1}[\text{Advisor is a BD}]_i \\
 & + \alpha_2 \cdot \mathbb{1}[\text{State has FD for BDs}]_s \cdot \mathbb{1}[\text{Advisor is an RIA}]_i \\
 & + \alpha_3 \cdot \mathbb{1}[\text{Advisor is a BD}]_i + \text{FE} + \text{Controls} + \epsilon_{ist}, \quad (1)
 \end{aligned}$$

where  $i$  represents an advisor,  $s$  a state, and  $t$  a transaction. In our preferred specification, we include contract-month fixed effects to address changes in interest rates over time, and add border fixed effects to use only within-border variation. We use the classification of fiduciary status from

Finke and Langdon (2012).

Within specification (1), there are three objects of interest. First is the straightforward difference-in-differences estimator, which is  $\alpha_1 - \alpha_2$  in this formulation. Under the null hypothesis that fiduciary duty has no equilibrium impact on market outcomes, we should estimate  $\alpha_1 - \alpha_2$  to be zero. One may worry that counties on either side of a state border differ from each other in the underlying demand for financial products. However, the difference-in-differences estimator should alleviate this concern: as long as the demand break is equal for broker-dealers and registered investment advisers, we would still expect  $\alpha_1 - \alpha_2$  to be 0.<sup>26</sup> In the results in the following subsections, we will largely reject that  $\alpha_1 - \alpha_2 = 0$  for most outcomes of interest, suggesting that fiduciary duty does indeed have an equilibrium impact. Moreover, under the assumption that there are no spillover effects onto registered investment advisers, one can interpret this difference-in-difference estimate as the causal effect of fiduciary duty on broker-dealers.

We interpret two further objects of interest in the regression above:  $\alpha_1$  and  $\alpha_2$ . Under the assumption that there are no demand breaks at the border,  $\alpha_1$  alone is the causal impact of fiduciary duty on broker-dealer sales, and  $\alpha_2$  can be interpreted as the spillover effect of broker-dealer fiduciary duty onto registered investment advisers. That is, interpreting  $\alpha_1$  and  $\alpha_2$  as causal effects requires no demand breaks at the border but provides the ability to accommodate spillover effects.

Overall, we find evidence in favor of significant causal impacts of fiduciary duty on broker-dealer sales, with  $\alpha_1$  being significantly different than zero for a variety of outcomes. However, we find no evidence of spillover effects on RIAs, with  $\alpha_2$  being economically and statistically close to zero for most outcomes. In Section VII, in which we analyze extreme outcomes for RIAs, we also find limited effects. Moreover, we find limited evidence throughout this paper for within-firm changes in the behavior of RIAs as well as on entry.

We also show four main arguments in favor of the assumption that there are no demand breaks at the border. First, many demographic characteristics are balanced across the border; Appendix B.1 provides the statistical tests. Second, even with covariate balance, one may be worried about differential selection of consumers to advisers as a function of the fiduciary status of the state. However, there is a considerable amount of survey evidence arguing against this critique. Extensive survey evidence discussed in SEC (2011, 2013a,b) and Hung, Clancy, Dominitz, Talley, Berrebi, and

<sup>26</sup>See Appendix B.4 for an explanation through the context of the model we develop in Section V.

Suvankulov (2008) suggests that consumers have very little information about which type of advisor they visit. Of course, there can still be selection on observables—certain consumers may choose to visit large companies, which are more likely to have dually registered advisers—but the extent of this selection would have to vary significantly across state for this to be a legitimate concern. Third, one can test for differential selection by using client and contract characteristics as outcomes in equation (1). While we have limited information about clients in our dataset, we see no significant effects on client age or incidence of cross-state shopping (i.e., whether the adviser and client are from the same state), providing more suggestive evidence against differential selection. Table B.3 in Appendix B.1 shows the results. Finally, the evidence that broker-dealer fiduciary duty has no spillover effects on RIAs also weighs in favor of no systematic breaks in demand existing across state borders. We believe that it is a priori unlikely that the demand break at the border exactly counteracts the spillover effect over a wide set of outcomes, and we thus argue that the border differences are interpretable in their own right.<sup>27</sup>

We apply this strategy to three categories of outcomes to highlight that fiduciary duty has a compositional effect on the types of products sold. In Section IV.B, we study the effect of fiduciary duty on the choice of a variable, rather than a fixed indexed, annuity. While we view this shift mostly as evidence about general compositional effects, it may provide some suggestive evidence on consumer welfare: regulators and the popular press have often negative views of the financial value of variable annuities. However, we should be explicit that since variable and fixed annuities have multidimensional fee structures, and these fee structures are not comparable across the types of products, this outcome does not establish whether consumers are better off under fiduciary duty.

To address this issue, we focus on comparisons within variable annuities in Section IV.C. Prospectuses filed with the SEC provide us with details about the products and their historical rates, so we can compare the choice of product characteristics across state borders. These characteristics have welfare-relevant properties and get us closer to establishing welfare effects on consumers. Then, we collapse all products into a single net present value calculation based on a model of optimal execution of the annuity by a risk-neutral individual.<sup>28</sup> Using the same border strategy, the

<sup>27</sup>The model does not put structure on how RIAs would behave in the presence of a difference across the border but in the absence of any direct impact from fiduciary standards. Appendix B.4 discusses these tests and finds support for the two sides of the border being similar.

<sup>28</sup>Unfortunately, we are unable to conduct a similar analysis of fixed annuities due to data quality. Since fixed and indexed annuities do not have to file prospectuses with the SEC, there is no analogous archive of historical

difference-in-difference suggests there is an impact on these NPVs, and fiduciary status does cause broker-dealers to steer customers to higher NPV products.

#### IV.B. Types of Annuities Sold

A natural question to ask is whether fiduciary duty does *anything*, or whether it simply lowers adviser profits without impacting choices.<sup>29</sup> To address this question, we begin by comparing sales of variable versus fixed and fixed indexed annuities. This comparison is coarse, as there are dozens of variable and fixed/fixed indexed annuity products, but it allows us to establish in a parsimonious way that relevant changes are happening across markets with and without fiduciary standards. Moreover, these are two sets of products that provide similar benefits—the opportunity for growth leading to potential annuitization, with some safeguards for bequest in the case of early death—but are usually pitched as competing options in the popular literature on personal finance. Finally, variable annuities have received particular scrutiny in the popular press and by regulators.<sup>30</sup>

Table II presents the results from Specification (1), where the left-hand side variable is a dummy for whether the transaction is for a variable annuity. Column (1) is our baseline specification, restricting to the border and including border fixed effects. The difference-in-difference estimate, in Row 1, shows that there is a significant impact of fiduciary duty on equilibrium sales. The magnitude is large, with a drop in VA sales of nearly 11 percentage points, or 12.5% of the base mean. Breaking the effect down into the BD and RIA effect separately, we report coefficients that correspond to  $\alpha_1$  and  $\alpha_2$  in Rows 2 and 3 of the table. We estimate an economically and statistically significant drop of 8.5 pp in the proportion of VAs that are sold by broker-dealers, which amount to 10% of the base mean. The estimate on the difference for RIAs suggests they have a similar propensity to sell variable annuities on either side of the border: the point estimate is about 2.3 pp with a reasonably small standard error. This is consistent with the fact that RIAs face the same regulatory regime and with the assumption that there are no preference changes at the border. Column (2) adds firm

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information for fixed annuities. We attempted to make some progress with archived versions of rate sheets for fixed annuities on FSP's website, but our dataset is missing a large portion of products—especially ones that are distribution-channel specific. We are hesitant to draw conclusions from this partial list, especially given some predictions in Section VII depend on the tails of advice.

<sup>29</sup>Detractors of the extension of federal fiduciary standards to broker-dealers have argued that this legislation will essentially add a set of forms for the customer to sign, without actually changing recommendations or choices.

<sup>30</sup>See, for example, <https://www.thinkadvisor.com/2014/07/28/variable-annuities-a-top-source-of-customer-compla/?slreturn=20181123212558> or <https://www.finra.org/sites/default/files/InvestorDocument/p125846.pdf>.

Table II: Variable vs. fixed annuities

	Border Counties		All Counties	
	(1)	(2)	(3)	(4)
DID	-0.109*** (0.038)	-0.043 (0.031)	-0.049*** (0.016)	-0.019 (0.013)
FD on BD	-0.085** (0.035)	-0.025 (0.033)	-0.072*** (0.020)	-0.035** (0.013)
FD on RIA	0.023 (0.026)	0.018 (0.012)	-0.022 (0.016)	-0.016*** (0.005)
Firm Fixed Effects	No	Yes	No	Yes
Border Fixed Effects	Yes	Yes	No	No
Base Group Mean	0.869	0.869	0.877	0.877
<i>N</i>	22,803	22,781	215,967	215,925

Transaction-level regression of whether the contract is a variable annuity on a full interaction of fiduciary status and broker-dealer status as in Specification (1), with contract-month fixed effects and border fixed effects when restricting to the border in Columns (1) and (2). Standard errors are clustered at the state level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

fixed effects to the analysis to evaluate whether the effect persists even within firms. Including these fixed effects dampens the differences substantially—especially for broker-dealers—which suggests that much of the variation comes from differences across firms rather than differences in advisers within firms. We return to the issue of within-firm variation below. Appendix B.4 connects the regressions with firm fixed-effects to the model to validate the identifying assumption that both sides of the border are similar.

Columns (3) and (4) extend the analysis to the entire state and drop border fixed effects. The main difference when expanding the sample to the whole state appears to be one of magnitude, as border county differences are about twice as large as state wide differences. With firm fixed effects, the estimates are much smaller and indeed fairly close to zero. While we do not want to interpret the results in Columns (3) and (4) causally, as there are many potential confounding factors when comparing across whole states, the fact that the cross-state estimate is smaller in magnitude is reassuring since it suggests that the cross-border regression does not merely dampen unobserved differences across states. To be precise, one might worry that while counties on either side of the border are more similar than entire states, they are *still* unobservably different from each other in the same way states are different from each other. In this case, however, we would likely expect

that estimate off the border to have a *lower* magnitude than the cross-state effect. This concern is analogous to the concern one might have when successively including controls in a regression dampens the coefficient of interest. For the rest of this paper, we will focus mainly on regressions at the border county level.

Appendix B.2 performs several robustness checks for these results, among them adding New York transactions and focusing on advisers who only transact FSP products. Results are broadly consistent with those in Table II.

In this paper, we do not make claims about whether the shift to fixed and fixed indexed annuities is welfare-enhancing for clients. As mentioned earlier, it is not the case that one set of products strictly dominates the other. However, under the assumption of no discontinuity in preferences at the border it is quite stark to find such a large shift in the set of chosen products.<sup>31</sup> This leads us to delve into an analysis of other measures of product quality in Section IV.C.

#### IV.C. Variable Annuity Characteristics

In this section, we run the same regression as in (1), but with the left-hand side replaced by various quality metrics. Table III shows outcomes for metrics related to fees. Column (1) shows results for the mortality and expense ratio, a yearly (percentage) fee that is taken from the contract amount. Column (2) shows the minimum expense ratio among all subaccounts offered in the variable annuity sold, and Column (3) shows the average. Column (4) shows the average surrender charge, which is the percentage of assets that would be paid out as a back-end fee for early withdrawal, for the surrender period.<sup>32</sup>

The first row shows the difference-in-differences estimates. Broker-dealers subject to fiduciary duty sell VAs with lower minimum but higher average expense ratios. Breaking the effect down further, we find this result is driven by broker-dealers responding, not by a shift in outcomes for RIAs. The results in Row 2 of Table III shows a small decrease of 4.6 bp in the contract fee, off a mean of about 109 bp. While the minimum subaccount fee decreases by about 0.7 bp off the baseline of 50 bp, the *average* subaccount fee increases by about 6.2 bp. These opposing results

<sup>31</sup>Even without this assumption, we find a difference-in-differences coefficient of about the same magnitude as the border difference for broker-dealers.

<sup>32</sup>The surrender charge changes as a function of years since contract purchase, but for FSP contracts it always drops to 0 within 10 years. As such, we report the average of the charge over these years, filling in zeros until year 10.

Table III: Variable annuity fees

	Subaccount Expense Ratios			Surrender Charge (4)
	M&E (1)	Minimum (2)	Average (3)	
DID	-0.055 (0.038)	-0.006* (0.003)	0.054** (0.022)	0.214 (0.153)
FD on BD	-0.046 (0.035)	-0.007** (0.003)	0.062*** (0.020)	0.121 (0.158)
FD on RIA	0.009 (0.020)	-0.001 (0.002)	0.009 (0.010)	-0.093 (0.078)
Base Mean	1.088	0.501	1.263	3.106
<i>N</i>	19,808	19,808	19,808	19,808

Mortality and expense ratios, subaccount expense ratios (minimum and average across subaccounts), and average surrender charges. Contracts are restricted to borders, specifications include border fixed effects, and standard errors are clustered at the state. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

can be traced back to broker-dealers with fiduciary duty steering customers to products with more investment options. Interestingly, we see that fiduciary duty tends to increase the average surrender charge by about 0.1% off a baseline of 3.1%, although the estimate is small and noisier than the others. We should note that unlike M&E ratios and expense ratios for subaccounts, the surrender charge is not necessarily paid out, and high surrender charges may be beneficial if the client is sure to not withdraw the money, as they always also imply lower fees.<sup>33</sup> Finally note that for Columns (1)–(3), the estimated difference in RIAs are fairly precise zeros, and the difference-in-differences estimate agrees in sign and magnitude (approximately) with the effect on broker-dealers.

As discussed earlier, an important driver of the returns of a variable annuity is set of investment options provided to investors. A drawback of our dataset is that we have no information on which investment options a client elects upon purchasing a variable annuity. We will thus first evaluate investment options using the philosophy that more choice is better. We also use quality metrics for the underlying funds provided by Morningstar. Morningstar rates each fund on a scale of 1–5 stars based on its historical risk-adjusted return (net of expenses) relative to a peer group of funds. We consider a fund to be “high-quality” if it receives at least 4 stars and “low-quality” if it receives 2 or fewer. Second, Morningstar categorizes the “style” of both the equity and fixed-income investment

<sup>33</sup>The fact that higher surrender charges are tied to lower fees precludes strict domination of a subset of products.

Table IV: Variable annuity investment options

	# Funds			# Equity Styles			# FI Styles			Return	
	All (1)	$\geq 4\star$ (2)	$\leq 2\star$ (3)	High Quality (4)	Only Low Quality (5)	High Quality (6)	Only Low Quality (7)	High Quality (8)	Only Low Quality (9)	Optimal (8)	Equal (9)
DID	8.51* (4.25)	3.83** (1.87)	1.93 (2.06)	0.748** (0.328)	-0.503* (0.249)	0.274 (0.186)	-0.078** (0.034)	0.0077* (0.0039)	0.0014** (0.0006)		
FD on BD	10.90*** (3.88)	3.57** (1.56)	3.55 (2.15)	0.762*** (0.260)	-0.565** (0.212)	0.165 (0.171)	-0.091*** (0.029)	0.0062* (0.0033)	0.0010* (0.0005)		
FD on RIA	2.38 (2.20)	-0.26 (0.85)	1.62 (1.30)	0.014 (0.147)	-0.062 (0.127)	-0.109 (0.091)	-0.013 (0.015)	-0.0014 (0.001)	-0.0003 (0.0003)		
Base Mean	96.82	32.04	31.35	7.214	0.865	4.407	3.027	0.080	0.025		
N	19,808	19,808	19,808	19,808	19,808	19,808	19,808	15,785	15,785		

Various investment quality metrics for the subaccounts in the variable annuities sold. Contracts are restricted to borders, specifications include border fixed effects, and standard errors are clustered at the state. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

of each fund. Each fund has one of nine potential styles based on where it lies on two dimensions.<sup>34</sup> We will interpret access to high quality funds of many different styles as evidence of quality.

Columns (1)–(3) of Table IV show effects on the number of investment options, disregarding restrictions on maximum allocations placed in each option. We estimate that fiduciary duty leads BDs to sell products with about 8.5 more funds, including almost 4 more “high-quality” funds (as measured by having a Morningstar rating of at least 4 stars), relative to the difference in RIA sales. However, more choice comes with costs: just as the average expense ratio increases, so does the number of low-quality funds (as measured by a rating of 2 stars or less), albeit by a small number that is noisily estimated. Column (4) shows that products sold by BDs under fiduciary duty have on average 0.76 more equity styles in which there is at least one high-quality investment (off a baseline of 7.2); furthermore, Column (5) shows there are fewer styles in which all options are low-quality. Columns (6) and (7) repeat the analysis for fixed-income styles, but the effects are noisier and of economically smaller magnitudes.

While Columns (1)–(7) implicitly assume a desire for diversification, Columns (8) and (9) instead simply tabulate effects on mean returns. For each subaccount, we estimate the mean return using historical data from CRSP, controlling for market returns; the procedure is described in Appendix C. This return is net of expense ratio, so funds with higher expense ratios are penalized. We then compute the returns attainable by the variable annuity under two assumptions. Column (8) studies the maximum mean attainable, subject to the investment restrictions imposed by the contract. Column (9) studies the mean that would be attained if the client invested equally across funds while meeting investment restrictions, which we interpret as a naive benchmark.<sup>35</sup> Both columns show a positive effect on the means, increasing the mean returns by about 4–8% of the base mean.

As in previous specifications, the results in Rows 1 and 2 are similar, meaning that the difference in within-broker-dealer means is similar to the difference-in-difference estimate. The third row results are essentially zeros, meaning that there are few estimated spillovers onto RIAs for all columns.

<sup>34</sup>The dimensions are value vs. growth and large cap vs. small cap for equity; for fixed income, they are interest rate sensitivity and credit quality. More details about Morningstar’s methodology for style boxes can be found on [http://www.morningstar.com/invGLOSSARY/morningstar\\_style\\_box.aspx](http://www.morningstar.com/invGLOSSARY/morningstar_style_box.aspx).

<sup>35</sup>Investment restrictions involve limiting the share of the investment that can be placed in various groups of the subaccounts. The outcomes in Column (8) are thus just solutions to a linear program. To compute the outcomes in Column (9), we minimize the share of the investment placed in the investment restriction group with the maximum required share, and then we allocate equally to each investment in the group.

Table V: Returns on variable annuity products

	Optimal Portfolio Choice		Equal Portfolio Choice	
	(1)	(2)	(3)	(4)
DID	0.0051* (0.0027)	0.0046* (0.0026)	-0.0010 (0.0009)	0.0005 (0.0008)
FD on BD	0.0038 (0.0024)	0.0036 (0.0026)	-0.0000 (0.0009)	0.0011 (0.0008)
FD on RIA	-0.0014 (0.0017)	-0.0009 (0.0010)	0.0010** (0.0004)	0.0006 (0.0004)
Contract-Month FE	Yes	Yes	Yes	Yes
Firm FE	No	Yes	No	Yes
Border FE	Yes	Yes	Yes	Yes
Mean of Dep. Var	0.090	0.090	0.063	0.063
$N$	15,785	15,768	15,785	15,768

Annualized returns for variable annuities sold. Contracts are restricted to borders, specifications include border fixed effects, and standard errors are clustered at the state. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

To aggregate these differences—and indeed take into account information that is even more difficult to incorporate into regressions, such as the behavior of riders that clients may purchase, or the effect of investment restrictions—we compute a metric for the value of the financial product to the annuitant. More specifically, we compute the net present value of each variable annuity contract for a risk-neutral individual who values money left to heirs equally as her own consumption. While we observe riders purchased by clients, we do not have any information about their realized execution: thus, we formulate and solve the dynamic programming problem to determine optimal execution by risk-neutral individuals and assume that all clients follow this strategy. Furthermore, we proceed using two possible assumptions on investment allocations. In the first approach, we assume that clients are choosing investments optimally.<sup>36</sup> In the second, we assume that clients are following the equal-allocation strategy outlined above. Details of this procedure are in Appendix D. For each product, age, and transaction account combination, we obtain a net present value.<sup>37</sup> For ease of interpreting these numbers, we calculate the annualized returns necessary in a fixed account

<sup>36</sup>Optimal investment choice need not correspond to maximizing mean, even for a risk-neutral individual. Since many living benefit riders set floors on the income stream obtained upon retirement, even a risk-neutral individual may wish to trade off mean to increase variance. We search over points on the efficient frontier.

<sup>37</sup>Forward simulation of the computed policy functions would yield a distribution of values over time. The computed value function would correspond to the mean of these simulations.

to achieve the same net present value by age 86.<sup>38</sup>

Table V shows results with returns as an outcome. Under the optimal allocation rule, we find that fiduciary duty has a significant impact on broker-dealers, relative to RIAs: the difference-in-difference coefficient is 51 basis points, or about 5% of the mean return. That is, variable annuity contracts sold by broker-dealers with fiduciary duty are about 5% more valuable than the contracts sold by broker-dealers without fiduciary duty, relative to the corresponding difference in RIAs. The within-advisor difference is smaller and noisier, but has a similar magnitude. Under the equal allocation rule, we estimate no difference for broker-dealers, and find a negative point estimate for the difference-in-differences that is smaller in magnitude. Interestingly, we find that in these regressions adding firm fixed effects increases the point estimates for broker-dealers, but not appreciably for RIAs.<sup>39</sup>

We should be clear that a role of financial advice may well be to help clients select optimal investment portfolios, or advise clients on optimal execution of riders. Our dataset does not allow us to investigate differential prevalence of such advice by fiduciary standards. To the extent that one believes that advisers with fiduciary duty are more likely to advise clients on these matters, our estimated effect on returns will underestimate of the true effect of fiduciary duty.

In summary, results in this section largely suggest that fiduciary duty tends to steer consumers to products with slightly lower fees (other than surrender charges), more investment options, and—depending on assumptions on how investments are chosen—higher returns.

## V. A Model of Fiduciary Duty

Having established that fiduciary duty shifts the set of products being purchased by consumers, a natural question to ask is whether this shift is due to the advice channel or to the fixed cost channel. This section develops a model of fiduciary duty with heterogeneous firms and the possibility of entry.

<sup>38</sup>That is, we find the return  $R$  such that

$$(1 + \beta)^{86-A} \cdot (\text{Net Present Value}) = (1 + R)^{86-A} \cdot (\text{Transaction Amount}), \quad (2)$$

where  $A$  is the annuitant's age and  $\beta$  is a discount rate chosen to be 0.05. Note that 85 is the oldest age that these contracts can be purchased. Furthermore, note that this metric mechanically produces high levels of  $R$ , as contracts with living benefit riders and contracts that are annuitized continue to pay out after age 86. Nevertheless, since our main interest is in differences across contracts, this is not a concern.

<sup>39</sup>One may speculate that the true allocations are somehow more informed than the equal allocation rule, but perhaps optimally selected. In that case, we may imagine that the true effect of fiduciary duty on net present values lies between these two estimates.

The model shows that improvements in mean advice quality can be rationalized by either channel, so that the results in Section IV do not allow us to identify the channel through which fiduciary duty operates. Furthermore, the model provides testable implications of the presence of an advice channel, which we can then take to the data.

### V.A. Elements of the Model

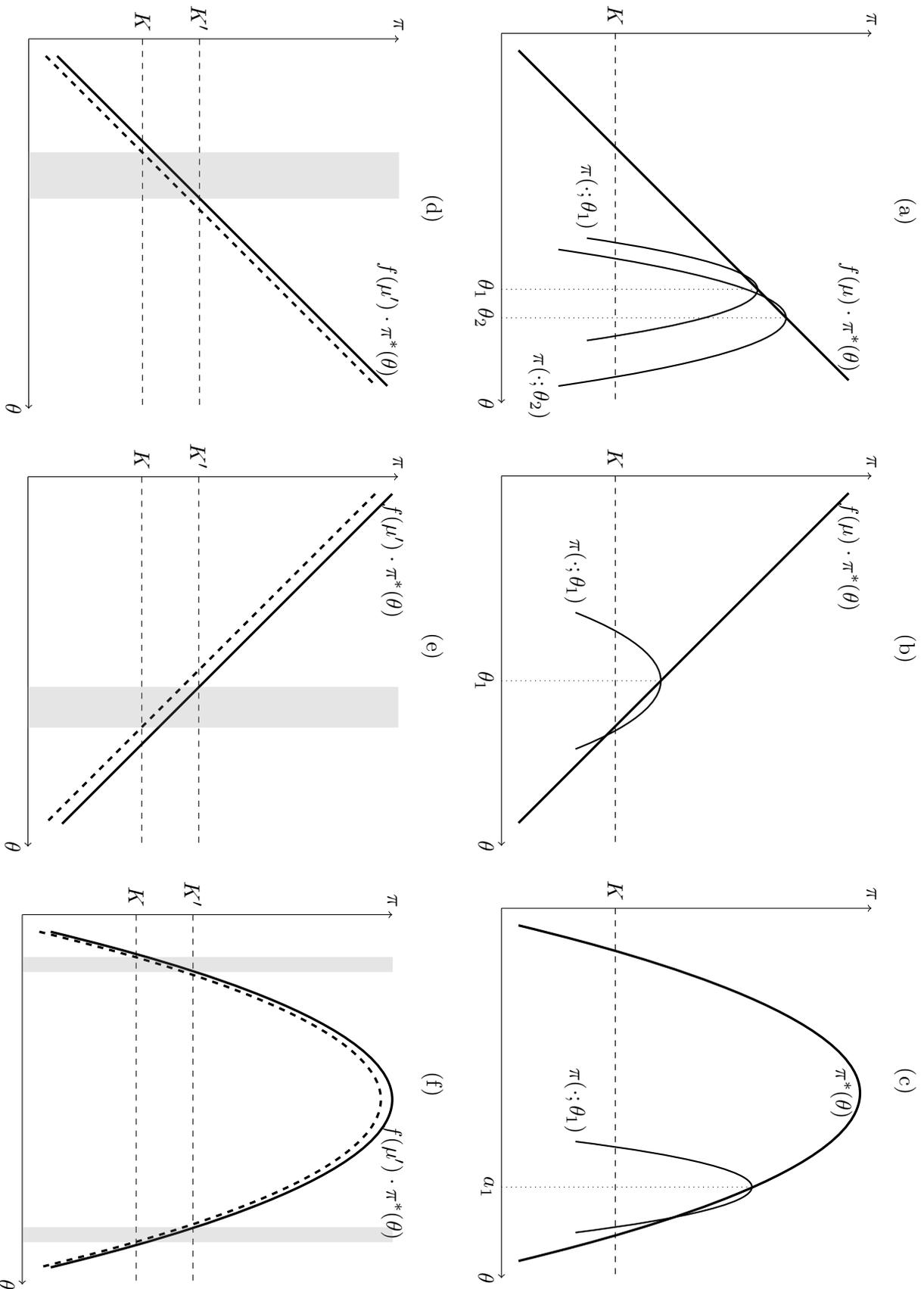
Suppose initially that all firms are broker-dealer firms; we gradually relax assumptions in Appendix A.2 and formally introduce registered investment advisory firms into the analysis in Appendix A.3. Each firm  $j$  has a type  $\theta_j \in [0, 1]$  and can choose advice  $a \in [0, 1]$ ; the distribution of types of potential entrants is  $H(\cdot)$ , which we assume is continuous, and we abuse notation by letting  $H(S)$  denote the mass of types in set  $S$ . We adopt the convention that higher values of  $a$  correspond to worse or more distorted advice. A firm of type  $\theta_j$  has a per-consumer single-peaked profit function  $\pi(a; \theta_j)$ , and we define types so that  $\theta_j$  is the maximizer of  $\pi(\cdot; \theta_j)$ . Upon entering, therefore, a firm of type  $\theta_j$  will set advice  $a = \theta_j$  and earn base profits  $\pi^*(\theta_j) \equiv \pi(\theta_j; \theta_j)$ . Firms have to pay a fixed cost  $K$  to enter the market.

For some intuition for why the maximand of  $\pi(\cdot; \cdot)$  is interior, one may think that worse advice corresponds to more profitable products for the advisory firm but increases the chance of legal recourse. We are agnostic about from where differences in  $\theta_j$  arise. Firms may be differentially susceptible to legal recourse. They may have negotiated different commission schedules with wholesalers and may also provide different splits of the commissions to the individual advisers. They may also place different levels of emphasis on reputational considerations. The key aspect of this model is that in the pure fixed cost channel of fiduciary duty that we define below, shifts in  $K$  are not correlated with  $\theta_j$ .<sup>40</sup>

Given that we do not take a stance on the source of heterogeneity, we also cannot take a stance on the behavior of  $\pi(\cdot; \theta)$ —and thus  $\pi^*(\theta)$ —with  $\theta$ . Figure II(a)–(c) illustrates three possibilities for  $\pi^*(\cdot)$  and sample graphs of  $\pi(\cdot; \cdot)$ . A natural prior is that case (a) is most plausible, with “worse” advice corresponding to the highest commissions and thus higher profits. However, it may be that higher  $\theta$  firms also face a different set of consumers, or perhaps that national firms earn higher

<sup>40</sup>In Appendix A.2, we analyze an extension of the model where different sets of firms get different levels of increases in fixed costs.

Figure II: Illustration of  $\pi(\cdot; \cdot)$  and  $\pi^*(\cdot)$ , and the effects of a pure fixed cost channel



Different possible profit envelopes  $\pi^*(\cdot)$ , along with plots of the underlying  $\pi_i(\cdot; \cdot)$  that generate them. The fixed cost  $K$  is presented, and the fixed cost channel involves increasing this value. Panels (d)–(f) illustrate the effects of a pure fixed cost channel, by increasing the fixed cost from  $K$  to  $K'$ . The shaded types are the ones who exit the market. Note that types map directly to advice (in the same way) in each panel, but we do not show the underlying density  $H(\cdot)$  of types.

profits and also have reasons to distort advice less. Again, as long as these differences are not correlated with the effect of fiduciary duty on fixed cost (discussed below) they can all be subsumed in  $\theta_j$ , and cases such as (b) and (c) are also plausible.

If the mass of firms who enters a market is  $\mu$ , then the profit of a firm of type  $\theta_j$  is

$$f(\mu) \cdot \pi^*(\theta_j) - K,$$

where  $f(\cdot)$  is decreasing in  $\mu$  and independent of  $\theta$ . We can conceptualize  $f(\cdot)$  as the number of customers a firm receives if a mass  $\mu$  enters, and  $K$  is the fixed cost of entry.<sup>41</sup> Denote by  $\mathcal{E}(\mu, K)$  the set of  $\theta_j$  who would enter if they all believe that a mass  $\mu$  of firms will enter and the fixed cost is  $K$ . Then, in an equilibrium a mass  $\mu^*(K)$  of firms would enter such that

$$H(\mathcal{E}(\mu^*(K), K)) = \mu^*(K).$$

Let  $\mathcal{E}^*(K) \equiv \mathcal{E}(\mu^*(K), K)$  be the set of types that enter in equilibrium when the entry cost is  $K$ . Appendix A provides a straightforward argument that the equilibrium exists and is unique.

## V.B. The Fixed Cost Channel

Suppose fiduciary duty operates through a *pure fixed cost* channel: imposing fiduciary duty increases costs from  $K$  to  $K'$  for all  $\theta$  but does not alter  $\pi(\cdot; \cdot)$  (or the distribution of types of potential entrants) in any way. This increase in fixed costs could correspond to having to purchase compliance software, the increased concern of legal exposure, increase in paperwork, more overhead time required to deal with regulatory hassles, etc.<sup>42</sup> What predictions can we make on the set of advice given in the market? First, given the framework, increasing fixed costs does not affect the advice that would be profitable for a type  $\theta_j$ , conditional on entry: this will suggest a firm-level test for the

<sup>41</sup>Importantly,  $f(\cdot)$  is not directly a function of whether the market imposes fiduciary duty on its advisers. This assumption is consistent with survey evidence (SEC, 2011, 2013a,b) that clients are largely unaware of the fiduciary status of their adviser, much less the variation in fiduciary standards by location.

<sup>42</sup>In this section, we write the change in fixed costs as a change to the fixed costs of entry. In the baseline model, we can instead have a constant fixed cost of entry and say that the effect of the fixed cost channel is to change the base profit function from  $\pi(\cdot; \cdot)$  to  $\pi(\cdot; \cdot) - c$ . This would correspond to an increased per-transaction cost due to fiduciary duty. The key similarity, as discussed later, is that  $c$  is independent of advice and the ordering of profitability of types does not change with the imposition of fiduciary duty. Essentially, one should think of the “fixed” cost as fixed across types.

channel through which fiduciary duty operates. Second, an important comparative static, on which our market-level tests for the channels of fiduciary duty will be based, is that if  $K' \geq K$  then

$$\mu^*(K') \leq \mu^*(K) \text{ and } \mathcal{E}^*(K') \subseteq \mathcal{E}^*(K). \quad (3)$$

Intuitively, increasing the fixed cost forces the base profitability of the marginal entrant to increase. Since the set of entrants is the set of types weakly more profitable than the marginal entrant, the set of entrants weakly shrinks. The formalization of this result is in Appendix A. Let  $\underline{\theta}(K) \equiv \min \mathcal{E}^*(K)$  be the minimum type that enters with a fixed cost of  $K$  and  $\bar{\theta}(K) \equiv \max \mathcal{E}^*(K)$  be the maximum. An implication of (3) is that if  $K' \geq K$ , then  $\underline{\theta}(K) \leq \underline{\theta}(K')$  and  $\bar{\theta}(K) \geq \bar{\theta}(K')$ . Since types are one-for-one with advice, if fiduciary duty operates through a pure fixed cost channel, imposing fiduciary duty must weakly improve the worst advice in the market and weakly reduce the best advice.

This baseline model is simple, but lacks many reasonable features of the market for financial advice. In Appendix A we allow for such extensions and show that that the inclusion in (3) continues to apply, sometimes with slight modifications. In particular, we determine that the condition continues to apply if firms have idiosyncratic shocks to their base profit functions, if firms serve heterogeneous consumers and as a result optimal advice varies, if under the fixed cost channel the magnitude of the increase in fixed costs varies by firms, and if competition improves advice quality. We also extend the model to allow for the presence of registered investment advisers who compete with broker-dealers. The key connection between these generalizations is that the inclusion holds as long as fiduciary duty does not change the *relative* profitability of different types of firms. Thus, it simply shrinks the set of types who enter rather than rearranging them, which leads to shrinking the set of advice observed in the data.

Importantly, there are no analogous predictions for how fiduciary duty affects moments such as the mean of the distribution of advice, even if it operates purely through a fixed cost channel. This can be traced back to the fact that we are not taking any stance on the shape of  $\pi^*(\cdot)$  or  $H(\cdot)$ . Panels (d)–(f) of Figure II illustrate the dynamics of increasing the fixed cost in the settings of panels (a) through (c). In each situation,  $K$  increases to  $K'$ , but the effective profit function ( $f(\mu) \cdot \pi^*(\cdot)$ ) also increases slightly due to exit of firms, from the dashed lines to the solid ones. The

types that exit are the ones in the shaded areas. In panel (d), fiduciary duty operating through a fixed cost channel will increase the mean  $a$  since  $\pi^*(\cdot)$  increases in  $\theta$  and increasing the fixed cost simply excludes low- $\theta$  firms from the market. In panel (e), the argument is reversed. In panel (f), the effect on the mean depends on  $H(\cdot)$ . In all three panels, however, the extremes of advice (weakly) decrease.

### V.C. The Advice Channel

Another channel through which fiduciary duty may operate is an *advice channel*, which is arguably the intended channel. The advice channel would make it differentially more costly to offer low-quality advice to clients. Thus, unlike a pure fixed cost channel, an advice channel could alter the ordering of profitability of types. To model this advice channel in the base scenario (in which firms differ along a single dimensional type), we assume that there is a cost function  $c(a)$  such that the profit to type  $\theta_j$  from giving advice  $a$  is  $\pi(a; \theta_j) - c(a)$ , where  $c(a)$  is increasing in  $a$  so that worse advice is more costly.<sup>43</sup>

Under an advice channel of fiduciary duty, the optimal advice  $a_{FD}^*(\theta_j)$  given by type  $\theta_j$  weakly improves:  $a_{FD}^*(\theta_j) \leq \theta_j$ .<sup>44</sup> This leads to a firm-level prediction: if fiduciary duty is imposed on a market, firms that remain in the market must weakly improve their advice.

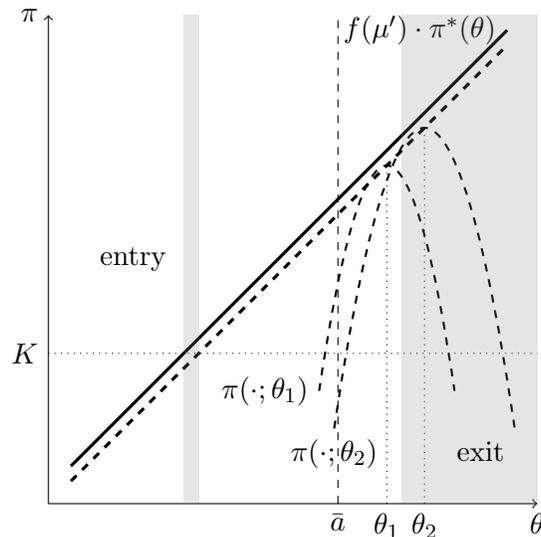
Our second observation is that the predictions on the extreme values of advice need not hold under an advice channel. As an illustration, suppose  $c(\cdot)$  is such that fiduciary duty places a cap on advice:  $c(a) = 0$  for  $a \leq \bar{a}$  and  $c(a)$  is infinite for  $a > \bar{a}$ . Figure III illustrates that firm with sufficiently moderately high values of  $\theta_j$  (e.g.,  $\theta_1$ ) will be forced to adjust their advice to  $\bar{a}$ , which those with especially high values of  $\theta_j$  (e.g.,  $\theta_2$ ) will be forced to exit the market. However, the exit of such firms will induce low- $\theta_j$  firms, who were otherwise not profitable enough, to enter the market. Thus,  $\bar{\theta}$  decreases, and since  $a^*(\theta) \leq \bar{\theta}$ , the advice given by this type improves. Thus, the advice channel effectively handicaps high- $\theta_j$  firms, and the highest-quality advice can actually improve. This is impossible if fiduciary duty were to operate through a pure fixed cost channel.

Note that it is still possible for both extremes of the advice distribution to contract, just like in

<sup>43</sup>Note that the predictions in the case where  $c(\cdot)$  is flat are identical to those in a pure fixed cost channel, and we will thus not say an advice channel is present in such a situation.

<sup>44</sup>Consider the function  $g(a, \lambda) = \pi(a; \theta_j) - \lambda c(a)$ . Let  $a^*(\lambda)$  be the maximizer of  $g(a, \lambda)$ . Note that  $g(a, \lambda)$  has weakly decreasing differences in  $(a, \lambda)$  since  $c(\cdot)$  is weakly increasing. Then, it must be that  $a^*(\lambda)$  is decreasing in  $\lambda$ . The result follows from  $\theta_j = a^*(0)$  and  $a_{FD}^*(\theta_j) = a^*(1)$ .

Figure III: Illustration of the advice channel



Moving from the baseline (thick, dashed lines) to a fiduciary standard in which advice can be no larger than  $\bar{a}$ . The shaded area to the right illustrates types who exit due to the regulation since they cannot profitably adjust their advice. The shaded area to the left illustrates types offering previously unprofitably good advice to enter since the effective profit function increases due to the exit of these types.

a pure fixed cost channel. Moreover, note that if an advice channel is present, then the worst advice *could* also worsen upon imposing fiduciary duty: in the case where firm types are multidimensional (see Appendix A.2), it is possible for the advice channel to induce entry of firms who give low  $a$  to most types of consumers but especially high  $a$  to a small set of them. The key observation, however, is that in an advice channel—unlike in a fixed cost channel—it is *not necessary* that both extremes of the advice distribution contract.

#### V.D. The Importance of Distinguishing These Channels

Why is it important to distinguish these channels, aside from the inherent interest in understanding how an important policy operates? We should note that from the perspective of quantifying the effects of a *particular* policy, it does not matter whether net change in advice comes from a firm that changed its behavior in response to the standard or from a different firm that was able to enter only because others could not. However, the channel is especially important from a regulatory perspective, if we would like to predict the effects of tightening fiduciary standards. In particular, extending fiduciary duty at the federal level to broker-dealers may lead to a standard of care that

Figure IV: Distinguishing the pure fixed cost and the advice channels

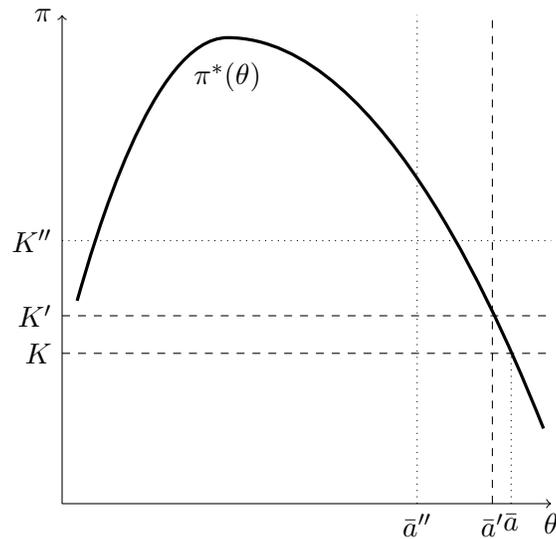


Illustration of a profit envelope under which strengthening fiduciary standards will lead to different results under a pure fixed cost channel and an advice channel (proxied by a cap)

is more stringent than that of common-law fiduciary duty.<sup>45</sup> Consider the situation depicted in Figure IV, and suppose that in the baseline market without any fiduciary standards, the maximum advice is given by  $\bar{a}$ . Imposing fiduciary standards moves the maximum advice to  $\bar{a}'$ . The results could be rationalized by either a fixed cost moving to  $K'$  or a cap of  $\bar{a}'$  being imposed through fiduciary standards.<sup>46</sup> However, if the regulator wishes to make the same policy more stringent, the two channels would offer different predictions. In an advice channel, tightening the cap to  $\bar{a}'' < \bar{a}'$  would push low-quality advice out of the market. Tightening a fixed cost channel to  $K'' > K'$  would *also* cause especially high-quality advice to exit the market. A regulator could avoid this situation by estimating the empirical counterpart of  $\pi^*(\cdot)$  or limit it by ensuring that fiduciary duty does not operate through a pure fixed cost channel.

Furthermore, this figure also highlights that one can be more confident of the external validity of the causal effect if fiduciary duty operates through the advice channel than if it operates through the fixed cost channel. In the former, every surviving firm will distort their advice weakly less, leading to an overall improvement of average advice, while in the latter, whether average advice increases or

<sup>45</sup>Furthermore, stringency of fiduciary duty regulations is a matter of current policy debate. Advocates of the defunct DOL Rule argue that the SEC's Best Interest Regulation does not live up the same standards. Proposed state *legislation* (rather than common law) is also anecdotally of different stringencies.

<sup>46</sup>The figure abstracts away from scalings of the effective profit function induced by entry, for simplicity.

decreases depends on whether more low-quality or high-quality advice firms are displaced. This hinges crucially on  $H(\cdot)$  and on the shape of  $\pi^*(\cdot)$ , objects that may be quite heterogenous across markets.

### V.E. Mapping the Model to Data

The model provides testable conditions under which we can reject the notion that fiduciary duty operates through a pure fixed cost channel, and conditions under which an advice channel must be present. Summarizing the discussion above, consider two identical markets, but for the fact that one does not impose fiduciary duty on broker-dealers and the other does. If fiduciary duty were to operate purely through a fixed cost channel, we would have the following two predictions:

1. If a specific broker-dealer firm enters both markets, it offers the same advice in both.
2. The highest-quality advice offered by any broker-dealer in the market with fiduciary duty is (weakly) lower than that offered in the market without. The lowest-quality advice offered by any broker-dealer in the market with fiduciary duty is (weakly) higher than that offered in the market without.

Furthermore, if fiduciary duty constrains low quality advice, we have the following predictions:

3. If a specific broker-dealer firm enters both markets, it offers weakly better advice in the market with fiduciary duty.
4. A sufficient condition for the presence of an advice effect is that the highest-quality advice offered by any broker-dealer in the market with fiduciary duty is strictly higher than that offered in the market without.

It is important to stress that these two channels are neither mutually exclusive nor exhaustive: fiduciary duty could both increase fixed costs and constrain advice, and it could be the case that it affects neither. We focus on testing the hypothesis that there is no advice channel.<sup>47</sup>

As discussed earlier, in Appendix A we extend this baseline model in several directions, mostly without changes to the previous predictions. One exception to this statement occurs if one assumes

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<sup>47</sup>When taking the model to the data, we will use the computed returns of the annuity as our metric for the “quality” of advice, to use the term adopted in the model.

that there are multiple types of broker-dealers, such as local and regional, and that the magnitude of the fixed cost channel differs by type. In this case, predictions 2 and 4 only hold for broker-dealer types whose share of the market does not expand due to competitive effects. Below we show that no broker-dealer type expands with fiduciary duty, so these predictions continue to hold. A similar result emerges when competition directly improves advice. Under this extension, if we see the mass of firms decreases upon imposing fiduciary duty (which we do empirically), then it is not possible to rationalize an improvement in the best advice through a pure fixed cost channel.

However, if competition actually directly harms advice, our model predictions no longer hold. Given there is no motive to undercut competitors on price by offering a worse product—unknownst to the customer—we find it a priori more likely that competition will increase quality.<sup>48</sup> However, the literature on credence goods and information disclosure does highlight that the effect of competition on outcomes depends on the details of the model (Dulleck and Kerschbamer, 2006). Crucially, under the assumption that competition worsens advice for all adviser types, then the fact that we observe fewer firms in markets where broker-dealers have fiduciary duty implies that we should also expect to see an improvement in the *worst* advice in the market, which is a testable implication we can reject in Section VII. However, it could be the case that competition worsens advice for some adviser types, excepting those who provide the worst advice in the market. Under such a model, the above predictions fail to hold.

Moreover, it is important to stress that the model in this section is not fully general. Nevertheless, we find the core intuition robust and the model to be a useful tool to both formalize and test potential mechanisms.

## VI. Does Fiduciary Duty Affect Market Structure?

In this section, we empirically evaluate the concern that fiduciary duty increases the “cost of doing business” and impacts market structure: critics of fiduciary standards often claim that the net impact of such standards may be to decrease the number of firms and advisers in the market, thus limiting access to financial products for clients. Given the absence of time series variation in common law fiduciary duty, our analysis is again cross-sectional. However, we will use a strategy

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<sup>48</sup>Recall that payments to advisers here mostly come from financial services providers, not customers, so that prices and quality are the same object.

Table VI: Composition of firms, by type

	(1) Total Firms	(2) BD Firms	(3) RIA Firms	(4) % BD Firms
$\mathbb{1}[\text{Fiduciary}]$	-0.092 (0.069)	-0.157** (0.076)	-0.037 (0.068)	-0.072 (0.052)
$N$	411	411	411	337

Columns (1)-(3) show regressions of the number of firms of each type (using the  $\log(x+1)$  transformation) on a dummy for fiduciary status of the county. Column (4) shows results of an OLS regression of the proportion of BD firms on the same covariates. All specifications have border fixed effects, control for the log population, log median household income, and median age at the county level. Standard errors are clustered at the border level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

similar to the previous sections of the paper to control for unobservable demand or cost shifters. Taking a market to be a county, we will compare counts of firms per county on either side of the relevant border, controlling for border-level fixed effects. We will further study whether fiduciary duty affects the types of firms who enter on either side of the border. Henceforth, we will maintain the identifying assumption that markets on either side of the border are identical but for fiduciary duty, relying on the small differences in RIA behavior at the border discussed in Section IV as the primary justification.<sup>49</sup>

We expand our sample beyond those advisers and firms who have transacted with FSP and use the Discovery dataset, which provides a snapshot of all registered financial advisers in 2015 able to sell annuities. We say an adviser has entered a market if the adviser is marked as actively selling financial products by Discovery. We consider a firm to have entered a market if it employs at least one adviser who has entered the market. Our main specification is a regression at the county level of the (log of one plus the) number of firms of a particular type on a dummy for the fiduciary status of the county, with fixed effects for the border and a control for the log of the population.<sup>50</sup> We also regress the proportion of firms that are broker-dealer firms, conditioning on the set of counties where there is at least one entrant. Table VI shows results of these regressions.

Columns (1)–(3) of Table VI show evidence of both a level and a compositional effect of fiduciary duty on market structure. The point estimate of fiduciary duty suggests that imposing fiduciary duty reduces the total number of firms in the market by about 9%, although the estimate cannot

<sup>49</sup>Appendix B.4 provides further model-based justification for this assumption.

<sup>50</sup>Poisson regressions return similar results to the ones presented in this section.

rule out a zero effect at the 10% level. Columns (2) and (3) suggest that this level effect comes primarily from a drop in the number of broker-dealer firms, which are affected by the regulation. The number of such firms drop by 16% in counties with fiduciary duty, a number that is significant at the 5% level. By contrast, we do not estimate a statistically (or economically) significant effect on the number of dually registered firms. Column (4) puts these results together and shows a compositional effect of fiduciary duty: we find a a modest decrease, of about 7 pp off a baseline of 31%, in the proportion of firms that are broker-dealers in states in which broker-dealer advisers have fiduciary duty.

We next study whether fiduciary duty induced a compositional shift even within broker-dealer firms, focusing on firm footprint. We use Discovery Data’s classification into local, multistate, regional, and national firms. The rationale behind this investigation is two-fold. First, a natural concern is that local broker-dealers may be more susceptible to increases in costs induced by fiduciary duty—perhaps because they lack the legal and compliance departments to deal with the regulatory costs of such laws. Second, if different groups of broker-dealer firms sustain different increases in fixed costs, then even under a pure fixed cost channel we may see an expansion in advice from broker-dealers. However, Appendix A.2 shows that this expansion cannot happen without an expansion in at least of the groups. As such, the effect of fiduciary duty on entry for a natural grouping of broker-dealer firms is a relevant robustness check for the testable predictions of the model.

Table VII presents results of regressions where the left-hand side is (the log of one plus) the count of the number of firms of each footprint, and the right-hand side has the same set of variables the regressions in Table VI. The numbers presented in the table are the coefficient of the fiduciary dummy in separate regressions. The first row shows that among all firms, the ones that are affected most strongly by regulation are the ones with a local footprint, with the number of local firms dropping by about 13%. Consistent with the notion that the direct incidence falls on broker-dealers, the second row shows that local broker-dealers are affected strongly. The third row suggests no strong compositional effect among dually registered firms. We should note, however, that the compositional shift we identify among broker-dealers is due to “exit” of firms: we do not see any evidence that the decrease in the number of local broker-dealers induces *more* regional or national broker-dealers to enter.

Table VII: Number of firms, by footprint

	(1) Local	(2) Multistate	(3) Regional	(4) National
All Firms	-0.133* (0.0702)	-0.0657 (0.0495)	0.0036 (0.0577)	-0.0398 (0.0580)
BD Firms	-0.115* (0.0681)	-0.0277 (0.0324)	-0.0190 (0.0485)	-0.0645 (0.0679)
DR Firms	-0.0225 (0.0175)	-0.0483 (0.0485)	0.0173 (0.0483)	-0.0296 (0.0639)

Regressions of the number of each type of firm (using the  $\log(x + 1)$  transformation) on fiduciary status, county controls (log population, log median household income, and median age), border fixed effects, and standard errors clustered at the border. Each coefficient shown comes from a separate regression, and the number in the table is the coefficient on the fiduciary dummy. All regressions have  $N = 411$  observations. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

In Appendix B.3, we study the related question of whether fiduciary status affects the probability of entry of different types of firms, taking a stance on who potential entrants are in each county. We find that fiduciary duty decreases the probability of entry for all broker-dealers. When splitting this difference by firm footprint, the effect is stronger for local broker-dealers than those of other footprints, although the estimates are noisy. These results are broadly consistent with the observations in Table VII. While these regressions are conducted in the absence of an explicit structural interpretation, one could think of border fixed effects as controlling for the expected number of rival firms in the market as in a standard entry model. A major difference between this specification and workhorse models such as Seim (2006) is that in our case the location of rivals over counties in the border cannot affect expected profitability of potential entrants.<sup>51</sup>

While fiduciary duty leads to a contraction in the number of broker-dealers and a smaller (albeit noisily measured) contraction in the total number of firms, does it cause a contraction in the market for annuities? To analyze this question, we regress measures of market size on a fiduciary dummy, county controls, and border fixed-effects. We use three measures of market size: (i) total dollar sales of variable annuities at the county, which FSP has provided us through its membership in a consortium of annuity providers;<sup>52</sup> (ii) total number of FSP contracts sold; and (iii) total dollar

<sup>51</sup>One may also wonder about the number of individual advisers in the market. We can repeat the analysis using counts and proportions of advisers of each type. We find small but especially noisy *positive* effects on the number of BD and RIA advisers. This can be attributed to the fact that national firms often enter with teams of advisers, which mechanically increases the number of individual advisers.

<sup>52</sup>We do not have data on total annuity sales by county.

Table VIII: Total sales

	All Products	FSP Products	
	VA Sales (1)	Number of Contracts (2)	Total Sales (3)
$\mathbb{1}[\text{Fiduciary}]$	0.001 (0.049)	-0.023 (0.064)	0.043 (0.046)
Mean of Variable	\$51.1 M	55.5	\$8.1 M
$N$	411	411	411

Regression of various metrics for total sales on the fiduciary status of the county, controlling for log population, log median household income, and median age. Column (1) shows total sales of variable annuities across all firms. Columns (2) and (3) restrict to FSP and show number of annuity contracts (both fixed and variable) and total dollar sales of these contracts. All specifications use the  $\log(x + 1)$  transformation of the left-hand side, although means are presented without taking logs. Specifications include border fixed effects and standard errors are clustered at the border level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

sales of FSP annuities. Table VIII provides results of these regressions, and we find limited effects on market size. Despite the proportional shift away from variable annuities (for broker-dealers), we estimate a zero effect of fiduciary status on dollar sales of variable annuities (across all providers). The standard errors allow us to rule out especially large shifts of 10% in either direction with 95% confidence. We do not have data on sales of fixed and indexed annuities outside FSP, so Columns (2) and (3) focus on total FSP sales. We estimate a small negative impact of fiduciary status on the number of annuity contracts sold by FSP and a larger positive impact on total dollar sales of FSP annuities. Both estimates, however, are statistically indistinguishable from zero.

In summary, evidence from the relevant borders suggests that fiduciary duty does reduce the number of broker-dealer firms operating in a market, with no strong effects on the number of dually registered firms. This leads to a decrease in the total number of firms in a market, although the magnitude of this decrease is estimated noisily. Moreover, we find that most of the incidence of the regulation falls on smaller, local broker-dealers. On net, however, we find limited effects of fiduciary duty on the total size of the market—both in terms of products sold and in terms of the total dollar amount of the products sold.

## VII. Analysis of the Mechanism

In this final section, we first implement the tests motivated by the model in Section V for the presence of an advice channel. We then use the structure of the model to provide further evidence on the validity of the border-county strategy.

### VII.A. Market-Level Tests

We start with market-level tests proposed in Section V.E. These tests are based on the support of the distribution of advice given in identical markets with and without fiduciary duty. To take these predictions to the data, we first need a measure of what we refer to in the model as the quality of advice: since it is most useful if the measure is continuous, we use the return on variable annuities assuming optimal allocation. Second, we make this metric comparable across borders by partialling out border fixed-effects, essentially demeaning the metric within-border. Finally, we need methods to proxy the support of the distribution of advice.

In this section, we proxy the support by (i) extreme quantiles and (ii) share of mass in the distribution above particular (extreme) levels. To formalize our decision to look at quantiles and shares of mass, suppose that we have two distributions  $A$  and  $B$  with the maximum of the support of  $A$  strictly less than the maximum of the support of  $B$ . Letting  $Q_T$  be the quantile function of  $T \in \{A, B\}$ , we thus know that  $Q_A(1) < Q_B(1)$ . As long as the quantile functions is continuous,  $Q_A(\alpha) < Q_B(\alpha)$  for sufficiently high  $\alpha$  as well. Similarly, if we let the maximum of the support of  $A$  by  $M_A$ , we know that  $F_A(M_A) = 1$  and  $F_B(M_A) < 1$ , where  $F_T$  is the cdf of  $T$ . Thus, for sufficiently high values  $x$ , we must have  $1 - F_A(x) < 1 - F_B(x)$  as well, by continuity. Of course, we do not have much guidance on which values of (normalized) advice or quantiles to pick, so we present results with a variety of such choices. All confidence intervals are constructed by bootstrapping the sample by resampling within-county.

Table IX shows the quantiles for this normalized distribution in regions with fiduciary duty, as well as the difference between the regions with and without fiduciary duty.<sup>53</sup> Columns (1)–(3) show results for high quantiles. We estimate a statistically and economically significant expansion in

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<sup>53</sup>Since the entry model is at the firm level, we categorize advice by the regulatory status of the firm rather than the adviser in this section. Results are qualitatively—and usually even quantitatively—similar if using the adviser’s status instead.

Table IX: Differences in quantiles

	High Returns			Low Returns		
	90% (1)	95% (2)	99% (3)	1% (4)	5% (5)	10% (6)
BD Value	0.0148 (0.0020)	0.0196 (0.0020)	0.1057 (0.0335)	-0.0364 (0.0030)	-0.0310 (0.0015)	-0.0281 (0.0012)
BD Difference	0.0078*** (0.0024)	0.0151*** (0.0031)	0.0025 (0.0590)	-0.0038 (0.0036)	-0.0045** (0.0020)	-0.0015 (0.0018)
RIA Value	0.0219 (0.0004)	0.0326 (0.0014)	0.1651 (0.0320)	-0.0383 (0.0018)	-0.0322 (0.0005)	-0.0285 (0.0005)
RIA Difference	-0.0019*** (0.0007)	-0.0012 (0.0027)	-0.0043 (0.0514)	0.0004 (0.0007)	0.0004 (0.0006)	0.0008 (0.0006)

Quantiles of the distribution of returns for broker-dealers and investment advisers without fiduciary duty, and the change in the quantiles with fiduciary duty. Standard errors are computed by bootstrapping, with resampling within county, and significance is only reported for the differences. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

the sale of high-return products by broker-dealers when considering the 90<sup>th</sup> and 95<sup>th</sup> percentiles. As argued in Section V, this expansion cannot be consistent with fiduciary duty operating *purely* through a fixed cost channel. The point estimate on the effect on the 99<sup>th</sup> percentile is smaller but positive, but both the quantile and the difference are estimated especially noisily. Columns (4)–(6) present the effects on especially low returns. Here, we do estimate a small expansion in *low* returns as well when looking at the 5<sup>th</sup> percentile, as well as a small and noisy negative number for the 1<sup>st</sup> percentile. First, we should note that such expansion in advice—even at the end of low returns—is also inconsistent with a pure fixed cost channel and can be rationalized by an advice channel in which newly entering firms do occasionally offer products with lower returns. However, we should also note that the magnitude of the effect on low returns is considerably smaller than than on high returns. Moreover, we do not see any appreciable effect on the 10<sup>th</sup> percentile.

The third and fourth rows of Table IX present the effects on advice provided by registered investment advisory firms. Recall the under either channel, we would expect a weak expansion in both high and low returns provided by these firms, as fiduciary duty only impacts RIAs through entry. Results in Section VI suggest that entry by RIAs, however, is at best limited, and we accordingly see especially small effects on the support of returns for products sold by RIAs. While without parameters, the model does not provide any quantitative predictions on the relative changes

Table X: Differences in shares of extreme advice

Cutoff	High Returns			Low Returns		
	(1)	(2)	(3)	(4)	(5)	(6)
BD Proportion	0.126 (0.015)	0.098 (0.013)	0.047 (0.009)	0.486 (0.022)	0.398 (0.023)	0.293 (0.020)
BD Difference	0.119*** (0.019)	0.095*** (0.021)	0.076*** (0.016)	-0.114*** (0.027)	-0.078*** (0.025)	-0.040 (0.026)
RIA Proportion	0.217 (0.006)	0.167 (0.006)	0.121 (0.004)	0.373 (0.008)	0.312 (0.007)	0.248 (0.007)
RIA Difference	-0.010 (0.008)	0.014 (0.009)	-0.021*** (0.006)	0.008 (0.011)	-0.007 (0.009)	-0.015 (0.010)

Returns are demeaned by the mean return in the border. The first and third rows report the proportion of returns above (for high returns) or below (for low returns) cutoffs, in the region without fiduciary duty. The difference is the change the share when moving to the region with fiduciary duty. Standard errors are computed by bootstrapping, with resampling within county, and significance is only reported for differences. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

in advice by BDs and RIAs, it is intuitively consistent that broker-dealers are affected more strongly by a regulation that has direct incidence on them.

Table X uses the share of returns above and below cutoffs as another proxy for the upper bounds of the supports of the distributions with and without fiduciary duty. As before, the mean return of all transactions at the border is subtracted before reporting these percentages. The results are broadly similar to the ones with quantiles. We see substantial and statistically significant increases in the proportion of returns that is above particular cutoffs for broker-dealers. We also see noticeable decreases the share of low returns,<sup>54</sup> although we estimate a reasonably precise zero for the most extreme cutoff. For RIAs, this metric estimates mixed effects on high returns and no significant effect on the low end of returns. All point estimates are much smaller than the effect on broker-dealers. Once again, these results are consistent with the advice channel on fiduciary duty being empirically relevant.

We should discuss two concerns brought up at the end of Section V.B. First, even if fiduciary duty were to operate through a pure fixed cost channel, we may well expect local, regional, and

<sup>54</sup>As a clarification, recall that a negative number in the low returns section in Table X corresponds to a decrease in low return while a negative number in Table IX corresponds to a decrease in the quantile and thus an expansion in low returns.

national firms to have different shocks to their fixed costs. Appendix A.2 shows that if the number of firms within the same “group” shrinks as a result of fiduciary duty, then the pure fixed cost channel would still predict an overall contraction in advice—and thus the extremes of advice as well—since there would be a contraction in advice within-group. Given that Table VII shows no evidence of expansion of broker-dealers of any footprint, a contraction in advice is still a valid prediction of the pure fixed cost channel. Second, one might be worried that the improvement in the highest-quality advice—as measured by returns—is due not to an advice channel induced by regulation but rather a direct effect that reduced competition directly improves advice. However, if we believe that this direct impact of competition affects all types, then we would expect even the lowest returns in the market to improve in a pure fixed cost channel: the worst types in the market would improve (due to exit), and the types that remain in the market would further improve their advice due to lessened competition. The fact that we do not see this effect in Table IX, where if anything the worst return worsens slightly, is suggestive evidence against this concern. We also do not see a statistically significant effect in the most extreme cutoff in Table X.

## **VII.B. Firm-Level Tests**

Another prediction of the fixed cost channel is that behavior at the firm level should not change across the border, for firms on both sides of the border. Significant changes in behavior at the border within-firm—e.g., by changing the composition of products towards ones that have higher returns or more investment options—would be indicative of the advice channel. Throughout the body of the paper, we have included regressions with firm fixed-effects. The strongest evidence of within-firm changes in advice comes from Column (2) of Table V, which looks at results on our baseline metric for advice. It shows a positive point estimate of 36 basis points (with a standard error of 26 bp)—about the same as the estimate without firm fixed effects—on broker-dealer firms, providing somewhat noisy evidence that products transacted adjust towards higher returns even within firm. The point estimate on RIAs is closer to zero. Comparing Columns (3) and (4) shows that the point estimate under equal portfolio choice is larger with firm fixed effects, but small and noisy as well. Interestingly, Column (2) of Table II shows that the within-firm effect for the class of product—variable or fixed indexed annuity—sold does not respond as strongly within firm as it does across the entire market. We estimate a point estimate of a decrease in 2.5 pp for selling a

variable annuity, relative to 8.5 pp across firm.

However, the drop in the point effect by about 75% seems to be the exception across outcomes. Table B.6 in Appendix B.5 includes the full battery of outcomes investigated in Section IV but runs all regressions with firm fixed effects. The general observation is that while the point estimates are usually dampened relative to the estimate without firm fixed effects, they are often still significant and almost always share the same sign. Indeed, a considerable portion of the net change observed is due to within-firm changes, which lends further credence to the presence of an advice channel.

### VIII. Conclusion

This paper evaluates the effects of extending fiduciary duty to broker-dealers on the set of products consumers purchase, on the quality of purchased products on a variety of dimensions, and on market structure. This question is motivated by the recent regulatory discussion around expanding fiduciary duty to include broker-dealers. Supporters of the expansion argue that imposing fiduciary duty on all advisers will alleviate the conflict of interest and ensure that retirees choose products that are better suited to their needs. Opponents argue that fiduciary duty does not have a noticeable impact on product choice—perhaps because competition already disciplines financial advisers or perhaps because the conflict-of-interest was overblown to begin with—but will instead simply increase the cost of doing business, which will lead to fewer advisers in the market and fewer retirees purchasing beneficial products.

We evaluate these claims empirically, by leveraging transactions-level data from a major financial services provider and a comprehensive dataset on the set of practicing financial advisers. We find that in the market for annuities fiduciary duty shifts the set of products purchased by investors away from variable annuities and towards fixed and fixed indexed annuities. We then focus on variable annuities and find that fiduciary duty leads broker-dealers to sell products with more investment options and higher returns. Finally, we show that fiduciary duty causes exit of broker-dealers from the market, with the incidence most heavily slanted towards local broker-dealers. These results offer a extensive picture of the different effects of fiduciary duty in the market for financial advice.

These results on the mean causal impact of fiduciary duty do not directly speak to the mechanism at play. To uncover this mechanism, we develop a simple model of firms choosing to enter a market

and selecting their advice. This model provides a framework for understanding various mechanisms, and it identifies properties of the *distribution* of advice in the market that are informative of the channel. Using this model, we argue that the distribution of products sold as well as the composition of the entrants provides evidence that the advice channel—in which fiduciary duty directly constraints advice—is empirically relevant. That is, fiduciary duty does not simply increase fixed costs. These results also provide suggestive evidence that further increases in the stringency of fiduciary standards—which could be a natural conceptualization of the regulatory changes under consideration in various agencies—would continue to impact advice similarly.

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## A. Further Analysis of the Model

### A.1. Only Broker-Dealers

Consider the model outlined in Section V.A. There is a continuous distribution of types  $\theta_j \sim H(\cdot)$  on compact support. Each type has a base profit function  $\pi(a; \theta)$  maximized at  $a = \theta$ , and we define  $\pi^*(\theta) \equiv \max_a \pi(a; \theta) = \pi(\theta, \theta)$ . The actual profit a type- $\theta$  firm earns upon entering is  $f(\mu) \cdot \pi^*(\theta) - K$ , where  $K$  is the entry cost and  $f(\cdot)$  is a strictly decreasing function of the mass  $\mu$  of entrants capturing competitive effects. While we do not place much structure on  $\pi$  in general, suppose that  $H(\cdot)$  and  $\pi(\cdot)$  are jointly such that the distribution of  $\pi^*(\theta)$  does not have any mass points; in the following, we will essentially consider the distribution of  $\pi^*(\theta)$ .

While the ordering of  $\theta$  has an interpretation in Section V, we strip it of its interpretation as the quality of advice in this appendix. Instead, relabel and rescale types  $\tilde{\theta}$  be to be one-to-one with base profits  $\pi^*(\theta)$  so that  $\tilde{\theta}' > \tilde{\theta}$  if and only if  $\tilde{\theta}'$  earns lower profits  $\tilde{\pi}(\theta')$  than does  $\tilde{\theta}$ . Moreover, rescale types so that they are uniform on the unit interval. Let  $\tilde{\Theta} : \theta \mapsto \tilde{\theta}$  be this function. Then, an equilibrium is such that  $f(\mu) \cdot \tilde{\pi}(\mu) = K$ , where  $\mu$  is the marginal type who enters, as long as  $\mu \in (0, 1)$ . If  $f(0) \cdot \tilde{\pi}(0) < K$  then no one enters, and if  $f(1) \cdot \tilde{\pi}(1) > K$  then everyone enters.

**Lemma 1.** *There is a unique equilibrium.*

*Proof.* Note that  $f(\mu) \cdot \tilde{\pi}(\mu)$  is strictly decreasing in  $\mu$ . Thus, either  $f(0)\tilde{\pi}(0) < K$  or  $f(1)\tilde{\pi}(1) > K$ , or it can take on a value of  $K$  at most once in  $(0, 1)$ .  $\square$

**Lemma 2.** *The set of types  $\theta_j$  who enter at an entry cost of  $K' > K$  is a subset of the set of types who enter at an entry cost of  $K$ .*

*Proof.* Let  $\mu^*(K)$  be such that  $f(\mu^*(K)) \cdot \tilde{\pi}(\mu^*(K)) = K$ . Then, it is easy to see that  $\mu^*(\cdot)$  is decreasing in its argument. The set of types who enters is simply  $\tilde{\Theta}^{-1}([0, \mu^*(K)])$ , where  $\tilde{\Theta}^{-1}(\cdot)$  is the inverse map of the function defined above. Thus, the set of types who enters under  $K'$  is the image of a smaller set, which means it is a subset of those who enter under  $K$ .  $\square$

Note that these arguments just depend on the fact that there is a unidimensional ordering of types in terms of their base profits, and the base profits are the only component of these types that matter for who enters. This is the case when the type is  $(\theta_i, \epsilon_i)$  with a base profit  $\epsilon_i + \max_a \pi(a; \theta_i)$ , as in the first extension in Section V.B. It is also the case when the type is  $\theta_j = (\theta_{ij})$ , with a base profit  $\sum_i \pi(\theta_{ij}; \theta_{ij}) \nu_i$ .

## A.2. Extensions of the Model with Broker-Dealers

We consider three extensions of the baseline model in Section V.B. The final one considers the case where broker-dealer firms are indexed by an observable characteristic, and the level of the fixed cost change depends on this characteristic. In this final modification, a weaker but still empirically falsifiable result holds.

*Idiosyncratic Entry Costs.* Suppose that each potential entrant is now categorized by an ordered pair  $(\theta_j, \epsilon_j)$ , where  $\epsilon_j \sim G(\cdot|\theta_j)$ . A firm of type  $(\theta_j, \epsilon_j)$  has a base profit function  $\pi(a; \theta_j) + \epsilon_j$ . This extension allows firms who would offer the same profit conditional on entry to be differentially profitable. As before, let  $\mathcal{E}^*(K)$  denote the set of types who would enter with a fixed cost of  $K$ . Appendix A shows, using an argument analogous to the one used to derive (3), that if  $K' \geq K$  then  $\mathcal{E}^*(K') \subseteq \mathcal{E}^*(K)$ . Then, if we define

$$\underline{\theta}(K) \equiv \min \{ \theta : \text{there exists } \epsilon \in \text{supp } G(\cdot|\theta) \text{ such that } (\theta, \epsilon) \in \mathcal{E}^*(K) \}$$

and  $\bar{\theta}(K)$  analogous with the min replaced by the max, we would again have  $\underline{\theta}(K) \leq \underline{\theta}(K')$  and  $\bar{\theta}(K) \geq \bar{\theta}(K')$ . Since  $\theta$  is the component of the type that is one-to-one with advice, the prediction that the extremes of advice weakly contract remains.

*Heterogeneous Consumers.* So far, we have allowed for one dimension of heterogeneity in advice among firms. In reality, firms face a variety of consumers and the advice that the firm offers could be specific to the type of consumer. To accommodate this possibility, let a firm's type be denoted by a vector  $\theta_j$  such that the profit of offering a consumer of type  $i$  advice  $a$  is  $\pi(a; \theta_{ij})$ , maximized at  $a = \theta_{ij}$ . Thus, firms are now categorized by the advice they give to each type of consumer. We assume *random sorting* of consumers to firms so that each consumer receives a mass  $\nu_i$  of consumers of type  $i$ . Then, the profit of a type  $\theta_j$  firm if  $\mu$  people enter is

$$f(\mu) \cdot \sum_i \pi(\theta_{ij}; \theta_{ij}) \nu_i - K.$$

Again, one can show that  $\mathcal{E}^*(K') \subseteq \mathcal{E}^*(K)$ . Denote

$$\underline{\theta}(K) \equiv \min \{ \theta : \theta = \min \theta_j \text{ such that } \theta_j \in \mathcal{E}^*(K) \}$$

as the minimum advice given to some consumer in the market, and define  $\bar{\theta}(K)$  analogously. Then, once again,  $\underline{\theta}(K) \leq \underline{\theta}(K')$  and  $\bar{\theta}(K) \geq \bar{\theta}(K')$  purely from the fact that the set of firms who enter shrinks if fiduciary duty operates through a pure fixed cost framework.

*Multiple Broker-Dealer Types.* A natural concern is that even if fiduciary duty operates through a pure fixed cost channel, national broker-dealers might experience a smaller increase in fixed cost than local broker-dealers. That is, suppose the “type” of a broker-dealer is  $(\theta, m)$  where

$m \in \{1, 2, \dots, M\}$ . A  $(\theta, m)$  broker-dealer has a base profit function  $\pi_m(a; \theta)$  maximized at  $a = \theta$ , and the total profit is  $f_m(\boldsymbol{\mu}) \cdot \pi_m(a; \theta)$ , where  $f(\boldsymbol{\mu})$  is a function of the mass of each type of entrant. Importantly, the fixed cost of entry is  $K_m$  for type  $(\theta, m)$ , and fiduciary duty that operates through a pure fixed cost channel will increase it to  $K'_m \geq K_m$ . In the local-national example, we might imagine that  $K'_{\text{local}} - K_{\text{local}} > K'_{\text{national}} - K_{\text{national}}$ .

In this situation, it is *not* necessarily true that the advice observed in the market without fiduciary duty is a superset of advice observed with. One can construct a simple example in which  $K'_1 > K_1$ ,  $K'_2 = K_2$ , and the support of the advice provided by Type 2 firms is strictly to the right of the support of that provided by Type 1—in the absence of fiduciary duty. Under reasonable conditions on  $f(\cdot)$  (such as the ones in Appendix A.3), fiduciary duty will lead to a decrease in the number of Type 1 firms in the market and an increase in the Type 2 firms. Then, the advice under fiduciary duty will not be a subset of that without.<sup>55</sup> By itself, this possibility poses a difficulty for the testable restrictions discussed in Section V.E, as expansion of advice could *still* be possible under a pure fixed cost channel with heterogeneous changes in fixed cost. However, note that this example required an expansion of the number of Type 2 broker-dealers. Indeed, this is a general requirement for us to see an expansion of advice upon imposing of fiduciary duty, in a pure fixed cost channel.

Let  $\mu_m$  denote the equilibrium mass of type- $m$  firms in a world without fiduciary duty, and let  $\mu'_m$  denote this mass in a world with fiduciary duty operating through a pure fixed cost channel (even with potentially heterogeneous effects on entry costs). Suppose  $\mu'_m < \mu_m$ . Then,  $(\theta, m)$  enters with fiduciary duty if  $f_m(\boldsymbol{\mu}') \cdot \pi_m^*(\theta) \geq K'$ , or  $\pi_m^*(\theta) \geq K'/f_m(\boldsymbol{\mu}')$ . Similarly,  $(\theta, m)$  enters without fiduciary duty if  $\pi_m^*(\theta) \geq K/f_m(\boldsymbol{\mu})$ . Since  $\mu'_m < \mu_m$ , it must be that  $K'/f_m(\boldsymbol{\mu}') > K/f_m(\boldsymbol{\mu})$ , meaning if  $(\theta, m)$  enters with fiduciary duty, it must enter without fiduciary duty as well. Under a pure fixed cost channel, if the mass of a particular subset of broker-dealers decreases, then the set of advice offered by that broker-dealer must shrink. If the mass of *all*  $M$  subsets of broker-dealers decreases, then the set of advice offered by broker-dealers thus must shrink as well. The key observation is that the relative profitability of types (within  $m$ ) is not affected by the imposition of fiduciary duty.

This argument provides a caveat to the discussion in Section V.E. We can reject a pure fixed cost channel with potential heterogeneity in the impact on fixed costs if we observe a *decrease* in the mass of a particular type of broker-dealers with a corresponding *introduction* of previously unseen advice.

*Direct Impact of Competition on Advice.* Thus far, we have assume that competition only scales the per-transaction profits when affecting total profits. However, one might imagine that competition has a direct impact on advice provided. To model this phenomenon, we let  $\mu$  impact the base profit

<sup>55</sup>One can essentially go through Appendix A.3 and label the broker-dealers as “local broker-dealers” and the investment advisers as “national broker-dealers.”

function directly. That is, we say that

$$\pi(a; \theta, \mu) = \pi(a - g_\theta(\mu); \theta) - k_\theta(\mu), \quad (\text{A.1})$$

for some functions  $g_\theta(\cdot)$  and  $k_\theta(\cdot)$ .

First begin the analysis with the restriction  $k_\theta(\mu) = 0$ . In this situation, competition affects the optimal advice, so that a type  $\theta$  firm offers advice  $\theta + g_\theta(\mu)$  where there is a mass  $\mu$  in the market. However, this firm still makes base profits  $\pi^*(\theta)$ . Thus, the ordering of firms' profits does not change, and as  $K$  increases to  $K'$ , the set of firms who enters becomes a subset of the initial set of firms.

How would the presence of  $g_\theta(\mu)$  affect observed advice? If an increase from  $K$  to  $K'$  decreases  $\mu$ , then the type that offers the best advice in the market would get weakly worse. However, it may be that  $g_\theta(\mu)$  can compensate this reduction in the quality of the type. That is, *if*  $g_\theta(\mu)$  is increasing in  $\mu$ , then it might be the case that we would see an improvement in the best advice even in a pure fixed cost channel, since the competitive effect on advice would counteract the contraction in types. However, it is easy to see that if  $g_\theta(\mu)$  is decreasing in  $\mu$ —increased competition weakly improves advice for all types, even if it is heterogeneous by type—we would still be unable to see an improvement in the best advice in a pure fixed cost channel. The quality of the best type who enters would weakly worsen as  $K$  increases, and this type would then offer weakly worse advice.

It is easy to see that the analysis does not change if  $k_\theta(\mu) = k(\mu)$  for all  $\theta$ . If competition has the same effect on per-transaction profits on all types, then the ordering of profits across types does not change. Then, as long as the set of firms decreases upon imposition of fiduciary duty, the same predictions as above go through in a pure fixed cost channel.

However, if  $k_\theta(\mu)$  differs by  $\theta$ , these predictions need not hold. A sufficient condition for them to hold is that the ordering of types does not change as  $\mu$  changes, and a sufficient condition for this is that

$$\max_a \{\pi(a - g_\theta(\mu); \theta) - k_\theta(\mu)\} \geq \max_a \{\pi(a - g_{\theta'}(\mu); \theta') - k_{\theta'}(\mu)\}$$

for some set  $(\theta, \theta', \mu)$  means that it must hold true for all  $\mu$  (and that pair  $(\theta, \theta')$ ). Note that we can write  $\max_a \pi(a - g_\theta(\mu); \theta)$  as  $\pi^*(\theta)$ . Then, it must be that

$$\pi^*(\theta) - k_\theta(\mu) \geq \pi^*(\theta') - k_{\theta'}(\mu)$$

for all  $\mu$ . Rearranging, we have

$$\pi^*(\theta) - \pi^*(\theta') \geq k_\theta(\mu) - k_{\theta'}(\mu) \quad \forall \mu,$$

so we must have

$$\pi^*(\theta) - \pi^*(\theta') \geq \max_\mu [k_\theta(\mu) - k_{\theta'}(\mu)]. \quad (\text{A.2})$$

While it is possible to find strong conditions on  $\pi^*$  and  $k_\theta(\cdot)$  to let this hold (e.g.,  $\pi^*(\theta)$  is increasing

in  $\theta$  and  $k_\theta(\mu)$  is decreasing in  $\theta$  for all  $\mu$ ), we have been unable to find more general primitive conditions under which (A.2) holds. Heuristically, however, the conclusion of this section is that if (i) competition improves the optimal advice and (ii) the impact on competition does not vary “much” with the type of the firm, then the best advice cannot improve if fiduciary duty operates through a pure fixed cost channel.<sup>56</sup>

### A.3. Adding Registered Investment Advisers

Now suppose that in addition to broker-dealers, there are registered investment advisers in the market as well. Both broker-dealers and RIA firms have a type  $\theta_j$ , and the latent distribution of types for broker-dealers and RIAs is given by  $H_{BD}(\cdot; \theta_j)$  and  $H_{IA}(\cdot; \theta_j)$  respectively. We do not take a stance on how  $H_{BD}(\cdot; \cdot)$  and  $H_{IA}(\cdot; \cdot)$  relate to each other. A type  $\theta_j$  firm has profit function  $\pi_T(\cdot; \theta_j)$  and pays entry cost  $K_T$  to enter, where  $T \in \{BD, IA\}$ . While we will use the notation  $\theta_j$  throughout, note that type can be replaced by any of the extended types from before, e.g.,  $(\theta_j, \epsilon_j)$  or  $\theta_j$ . A firm who enters will earn profits (net of entry costs) equal to

$$f_T(\mu_{BD}, \mu_{IA}) \cdot \pi_T^*(\theta_j) - K_T,$$

where  $\pi_T^*(\theta_j) = \max_a \pi_T(a; \theta_j)$  and  $f_T$  is a share function that is decreasing in both the proportion of broker-dealers who enter and the proportion of RIA firms who enter. An equilibrium is defined to be a pair  $(\mu_{BD}^*, \mu_{IA}^*)$  such that

$$H_T(\mathcal{E}_T(\mu_{BD}^*(K_{BD}, K_{IA}), \mu_{IA}^*(K_{BD}, K_{IA}), K_T)) = \mu_T^*(K_{BD}, K_{IA})$$

for  $T \in \{BD, IA\}$ , where  $\mathcal{E}_T(\mu_{BD}, \mu_{IA}, K_T)$  is the set of firms of type  $T$  who would enter if they believe the share of broker-dealers who enter to be  $\mu_{BD}$ , the share of RIA firms who enter is  $\mu_{IA}$ , and the entry cost of type  $T$  is  $K_T$ .<sup>57</sup> As before, let the equilibrium set of entrants of type  $T$  be  $\mathcal{E}_T^*(K_{BD}, K_{IA})$ . Fiduciary duty influences neither  $\pi_{IA}(\cdot; \theta_j)$  nor  $K_{IA}$ . If fiduciary duty operates through a pure fixed cost channel, then  $K_{BD}$  increases to  $K'_{BD}$ .

Rearrange the types of these firms in decreasing order of profits so that the distribution of types is  $[0, 1]$ . Then, an equilibrium consists of  $(\mu_{BD}^*(K_{BD}, K_{IA}), \mu_{IA}^*(K_{BD}, K_{IA}))$  such that

$$\begin{aligned} \hat{\pi}_{BD}(\mu_{BD}^*, \mu_{IA}^*) &\equiv f_{BD}(\mu_{BD}^*, \mu_{IA}^*) \cdot \tilde{\pi}_{BD}(\mu_{BD}^*) = K_{BD} \\ \hat{\pi}_{IA}(\mu_{BD}^*, \mu_{IA}^*) &\equiv f_{IA}(\mu_{BD}^*, \mu_{IA}^*) \cdot \tilde{\pi}_{IA}(\mu_{IA}^*) = K_{IA}, \end{aligned} \tag{A.3}$$

where  $f_T(\cdot; \cdot)$  is strictly decreasing in both of its terms and captures the competitive effects. Accordingly, the effective profit functions  $\hat{\pi}_T(\cdot; \cdot)$  are decreasing in both its arguments.

We impose the assumption that cross-price competitive effects are not too strong.

<sup>56</sup>To reiterate, this statement is formal if we drop “much” from it.

<sup>57</sup>The entry decision for broker-dealers does not directly depend on the entry cost for RIA firms, say, but does indirectly depend on it in equilibrium through the entry decision of RIAs.

**Assumption 1.** *Assume*

$$\frac{\partial \hat{\pi}_{BD}}{\partial \mu_{BD}} \cdot \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{IA}} > \frac{\partial \hat{\pi}_{BD}}{\partial \mu_{IA}} \cdot \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{BD}}. \quad (\text{A.4})$$

The left-hand side of (A.4) is the product of the sensitivities of effective profits to the own-type competition, and the right-hand side is the sensitivity of profits to cross-type competition. The following example provides some intuition on Assumption 1.

**Lemma 3.** *Suppose*

$$f_{BD}^{-1}(\mu_{BD}, \mu_{IA}) = \gamma_{11}\mu_{BD} + \gamma_{12}\mu_{IA} \text{ and } f_{IA}^{-1}(\mu_{BD}, \mu_{IA}) = \gamma_{21}\mu_{BD} + \gamma_{22}\mu_{IA}.$$

*Then, if  $\gamma_{11}\gamma_{22} > \gamma_{12}\gamma_{21}$ , then Assumption 1 is satisfied.*

*Proof.* Direct computations show that the left-hand side of (A.4) is

$$L \equiv [\pi'_{BD}(\gamma_{11}\mu_{BD} + \gamma_{12}\mu_{IA}) - \pi_{BD} \cdot \gamma_{11}] \cdot [\pi'_{IA}(\gamma_{21}\mu_{BD} + \gamma_{22}\mu_{IA}) - \pi_{IA} \cdot \gamma_{22}],$$

times a positive constant. Both terms in parentheses are negative, so we can say

$$L > \pi_{BD}\gamma_{11} \cdot \pi_{IA}\gamma_{22}.$$

The right-hand side is

$$\pi_{BD}\gamma_{12} \cdot \pi_{IA}\gamma_{21},$$

times the same positive constant. If  $\gamma_{11}\gamma_{22} > \gamma_{12}\gamma_{21}$ , we thus have the result.  $\square$

Similar calculations show that a sufficient condition for Assumption 1 under more general  $f$  involves replacing  $\hat{\pi}_T$  by  $f_T$  in (A.4). Under Assumption 1, we can prove both uniqueness and intuitive comparative statics.

**Lemma 4.** *If Assumption 1 holds, then (i) there is a unique solution to (A.3); (ii) holding  $K_{IA}$  fixed, the set of broker-dealers who enter under at  $K_{BD}$  is a superset of those who enter at  $K'_{BD} > K_{BD}$ , and (iii) holding  $K_{IA}$  fixed, the set of RIA firms who enter under at  $K_{BD}$  is a subset of those who enter at  $K'_{BD} > K_{BD}$ .*

*Proof.* According to the Gale-Nikaido Theorem, the solution to (A.3) is unique if the matrix

$$\begin{pmatrix} -\frac{\partial \hat{\pi}_{BD}}{\partial \mu_{BD}} & -\frac{\partial \hat{\pi}_{BD}}{\partial \mu_{IA}} \\ -\frac{\partial \hat{\pi}_{IA}}{\partial \mu_{BD}} & -\frac{\partial \hat{\pi}_{IA}}{\partial \mu_{IA}} \end{pmatrix}$$

is a  $P$ -matrix. This conditions means all principal minors must be positive. Both diagonal elements are positive since the effective profit is decreasing in the number of entrants of either type. Under Assumption 1, the determinant is positive as well.

To prove (ii) and (iii), take the total derivative of (A.3) with respect to  $K_{BD}$ . Then,

$$\begin{pmatrix} \frac{\partial \hat{\pi}_{BD}}{\partial \mu_{BD}} & \frac{\partial \hat{\pi}_{BD}}{\partial \mu_{IA}} \\ \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{BD}} & \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{IA}} \end{pmatrix} \begin{pmatrix} \frac{d\mu_{BD}}{dK_{BD}} \\ \frac{d\mu_{IA}}{dK_{BD}} \end{pmatrix} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}. \quad (\text{A.5})$$

Solving (A.5) for the derivatives gives

$$\begin{pmatrix} \frac{d\mu_{BD}}{dK_{BD}} \\ \frac{d\mu_{IA}}{dK_{BD}} \end{pmatrix} = \begin{pmatrix} \frac{\partial \hat{\pi}_{BD}}{\partial \mu_{BD}} & \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{IA}} \\ \frac{\partial \hat{\pi}_{BD}}{\partial \mu_{IA}} & \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{BD}} \end{pmatrix}^{-1} \begin{pmatrix} \frac{\partial \hat{\pi}_{IA}}{\partial \mu_{IA}} & -\frac{\partial \hat{\pi}_{BD}}{\partial \mu_{IA}} \\ -\frac{\partial \hat{\pi}_{IA}}{\partial \mu_{BD}} & \frac{\partial \hat{\pi}_{BD}}{\partial \mu_{BD}} \end{pmatrix} \begin{pmatrix} 1 \\ 0 \end{pmatrix}. \quad (\text{A.6})$$

Assumption 1 ensures the first term in (A.6) is positive. The elements of the first column are negative and positive, respectively, which completes the argument.  $\square$

Thus, we have shown that as long as cross-type competitive effects are not too strong, we have

$$\mathcal{E}_{BD}^*(K'_{BD}, K_{IA}) \subseteq \mathcal{E}_{BD}^*(K_{BD}, K_{IA}) \text{ and } \mathcal{E}_{IA}^*(K_{BD}, K_{IA}) \subseteq \mathcal{E}_{IA}^*(K'_{BD}, K_{IA}). \quad (\text{A.7})$$

The result in (A.7) is important for two reasons. First, it shows that even in the presence of a set of firms unaffected by the regulation, the prediction that a pure fixed cost channel must shrink the set of broker-dealers remains robust—at least with a reasonable condition on how strongly these firms compete with one another. Accordingly, the predictions on the extrema of advice discussed above will still bear out. The second reason this is important is that it provides predictions about *spillover* effects onto RIAs. In particular, since the set of RIA firms expands (weakly), it must be the case that the best advice offered by them improves and the worst advice becomes worse.

An example similar to the cap from Section V.C shows that if fiduciary duty operates through an advice channel as well, then it is still possible for the best advice given by broker-dealers to improve. However, as long as the mass of broker-dealers who enters decreases, the mass of RIA firms would weakly increase. Since the base profit functions of the RIA firms do not change, we would still have an expansion in the set of RIAs, meaning that the predictions on the support of the advice will be isomorphic in both channels.

## B. Additional Empirical Results

### B.1. Summary Statistics and Covariate Balance

While the body of the paper focuses on relevant border counties, we provide further summary statistics on all advisers and transactions in the dataset. Table B.1 shows summary statistics for all advisers in the US between 2013 and 2015 who sell at least one FSP contract. About 19% of advisers are broker-dealers. BDs tend to sell slightly fewer FSP contracts over this time period, amounting to about 5.2 on average compared to 5.5 for RIAs. Half of advisers sell fewer than three contracts in this time period, although there is a sizable tail of advisers selling many more. Conditional on selling an FSP annuity, BDs sell VAs about 75% of the time, while the proportion is

Table B.1: Summary statistics for all counties

	<i>N</i>	Mean	Std.Dev.	Percentiles				
				10%	25%	50%	75%	90%
<i>Advisor-Level Quantities</i>								
Is Broker-Dealer								
FSP Advisors	39,882	0.184						
Contracts per FSP Advisor								
BD	7,338	5.2	8.7	1	1	2	6	12
RIA	32,544	5.5	8.5	1	1	3	6	13
<i>Contract-Level Quantities</i>								
Is Variable Annuity								
BD	38,435	0.770						
RIA	177,532	0.901						
Contract Amounts (\$K, 2015)								
BD	38,435	119.2	147.1	23.4	40.3	77.8	144.6	253.0
RIA	177,532	157.9	197.9	34.4	56.2	101.4	197.8	314.9
Client Age								
BD	38,435	61.8	10.5	49	56	62	68	75
RIA	177,532	64.7	9.9	54	59	65	71	77

somewhat larger for RIAs. Contract amounts are indeed significantly larger for RIAs than BDs, by about \$40,000 off a baseline of about \$120,000 for BDs. Finally, most of the clients are nearing or slightly past retirement, as would be expected in a market for retirement products. BDs and RIAs tend to have similar clientele, although the average age of clients in RIAs is higher by about 3 years.

Comparing Tables I and B.1 suggests that imposing the restriction to the border limits us to about 10% of the sample in terms of advisers and about 11% in terms of contracts. However, somewhat surprisingly, the characteristics of financial advisers and financial transactions are rather representative of the broader US. The proportion of broker-dealers is about 2 pp lower nationally than in the border. Advisers at the border do sell a slightly larger number of contracts on average than the typical adviser in the US, although inspection of the quantiles of this distribution suggests that this result may be driven by a longer upper tail of advisers. The probability of a transaction corresponding to a variable rather than a fixed annuity is similar for advisers at the border relative to advisers overall. Contract amounts tend to be slightly lower at the border, a result driven once again by the tail of contracts, and the ages of the client are not appreciably different from the population of clients in the US.

Our identifying assumption rests on the argument that even though common law fiduciary status of a state may be correlated with average demand in the state, there are no demand discontinuities at the border. For corroborating evidence on this point, we run covariate balance checks for a variety of demographic and economic characteristics. To run these checks, we run regressions at the

Table B.2: Covariate balance

	Transactions			Discovery		
	No Border FE (1)	Border FE (2)	Mean (3)	No Border FE (4)	Border FE (5)	Mean (6)
Population (K)	168.36 (229.25)	-104.71 (96.95)	132.84	35.66 (42.48)	28.46 (26.25)	102.55
Median Age	-0.33 (0.80)	0.29 (0.45)	40.66	-0.57 (0.87)	-0.60 (0.43)	41.37
Pop Black (K)	27.31 (38.03)	-17.27 (25.09)	16.13	7.72 (5.04)	7.13** (2.92)	12.57
Pop Hispanic (K)	130.00 (96.85)	0.14 (20.04)	21.72	15.85 (14.57)	12.83 (9.84)	16.48
Median HH Income (K)	0.12 (6.10)	0.74 (1.96)	45.60	1.99 (2.61)	1.23* (0.68)	44.45
Mean HH Income (K)	-1.27 (7.64)	-0.93 (2.87)	59.82	2.26 (3.04)	1.28 (0.86)	58.38
Pct. Unemployment	0.60 (0.81)	-0.56*** (0.20)	9.35	-0.16 (1.06)	-0.08 (0.31)	9.30
Pct. Poverty	-0.19 (1.81)	-1.02 (0.70)	17.46	-0.68 (1.67)	-0.36 (0.50)	17.72
Pct. HH with less than \$25k	-0.92 (2.09)	-1.21 (1.10)	28.48	-0.99 (1.96)	-0.52 (0.52)	29.14
Pct. HH with less than \$50k	-0.98 (4.10)	-1.35 (1.48)	54.98	-1.82 (2.40)	-1.10* (0.64)	56.11
Pct. HH with less than \$75k	-0.33 (4.66)	-0.59 (1.47)	73.23	-1.52 (2.09)	-0.77 (0.61)	74.31
Pct. HH with less than \$100k	0.25 (4.25)	-0.00 (1.33)	84.53	-1.26 (1.56)	-0.68 (0.48)	85.45
Pct. Pop less than HS	1.52 (1.45)	-0.44 (0.62)	14.58	-0.03 (1.61)	0.36 (0.39)	14.97
Pct. Pop HS	2.31** (0.87)	1.81** (0.87)	32.88	1.66 (1.39)	1.73*** (0.52)	33.68
Pct. Pop BA or Higher	-4.15 (3.07)	-1.98 (1.42)	19.66	-0.35 (1.64)	-0.71 (0.57)	18.65

Covariate balance for various economic and demographic characteristics. Each pair of columns, for each row, corresponds to the results of one regression. The first column in each pair gives the coefficient on the fiduciary duty dummy. All specifications cluster at the border level. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

county level of the demographic quantity on a dummy for whether the county has fiduciary duty. We run specifications with and without fixed effects and sometimes dropping counties that do not have any transactions from FSP. In all specifications, we restrict to the relevant border. Standard errors are clustered at the state level.

Table B.2 shows the results of these regressions. Each row corresponds to an outcome, and each column (except for the mean columns (3) and (6)) corresponds to a regression. Columns (1) and (2) restrict to counties with at least one transaction from FSP, and run the regression with and without border fixed effects. Column (3) represents the mean of the outcome variable on this sample. Columns (4)–(6) repeat this on the set of all counties in the Discovery dataset, restricted to the border. The takeaway from Table B.2 is that on almost all covariates, we estimate fairly tight

Table B.3: Client covariates

	Age of Contract Holder		Cross-Border Shopper		Trans. Amount (\$K)	
	(1)	(2)	(3)	(4)	(5)	(6)
DID	-0.174 (0.834)	0.744 (0.524)	-0.013 (0.028)	0.002 (0.029)	4.85 (15.92)	8.76 (9.706)
FD on BD	-0.239 (0.757)	0.532 (0.507)	0.006 (0.034)	0.021 (0.035)	1.87 (14.74)	4.52 (9.28)
FD on RIA	-0.065 (0.298)	-0.212 (0.163)	0.019 (0.025)	0.019 (0.017)	-2.98 (5.36)	-4.24 (3.32)
Border FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	No	Yes	No	Yes	No	Yes
Mean of Dep. Var	64.0	64.0	0.320	0.320	146.1	146.1
<i>N</i>	22,803	22,781	22,803	22,781	22,803	22,781

Contract-level regression using Specification (1), with age of the contract holder, whether the contract is due to cross-border shopping (client state is different from adviser state), and transaction amount on the left-hand side. All specifications include border fixed effects and contract-month fixed effects, and Columns (2), (4), and (6) also include firm fixed effects. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

zeros on the difference between means for counties with and without fiduciary duty.

Table B.3 shows evidence that there is no differential selection at the border into broker-dealers and registered investment advisers on some limited client dimensions we do observe. In particular, we view the age of the contract holder (at the time of purchase) and whether the client is a cross-border shopper—i.e., the client state is different from the adviser’s state of business. We run the same regression as in Specification (1) with these as the left-hand side variables. We find no evidence that there is differential selection by age induced by fiduciary duty. One may also wonder that clients would be willing to travel across the border to a state with fiduciary standards to purchase an annuity from a broker-dealer. This does have difficulties associated with it: for instance, the adviser would have to be licensed in the client’s home state (although this is not an especially binding constraint in our dataset, since many advisers are licensed in all states). Columns (3) and (4) show that there is no differential cross-border shopping that induces excess shopping onto the side with fiduciary duty: even if we believe that unobservably different (on sophistication, say) shoppers are the ones engaging in cross-border shopping, this effect is the same across the border. We also see from Columns (5) and (6) that running the same regression with transaction amount of the left-hand side returns statistically insignificant, albeit slightly noisier, coefficients. To the extent that transaction amount is a proxy for consumer income or wealth, this would indicate a lack of differential selection on this consumer characteristic as well. However, we interpret this result with some caution: one might be concerned that advisers influence the transaction amount, and fiduciary duty might affect how much they try to do so.

Table B.4: Further robustness checks on purchase of variable vs. fixed indexed annuity

	Including NY (1)	Excluding Mecklenburg (2)	FSP Only Advisers (3)
DID	-0.144*** (0.025)	-0.101** (0.041)	-0.048 (0.053)
FD on BD	-0.160*** (0.026)	-0.069** (0.031)	-0.070* (0.037)
FD on DR	-0.016 (0.023)	0.032 (0.028)	-0.022 (0.024)
Base Group Mean	0.887	0.871	0.764
<i>N</i>	35,661	21,351	5,995

Main specification, with a dummy for whether the contract is a variable annuity on the left-hand side, on different samples. Column (1) includes New York (using the classification of it as a state without heightened duty, as per Finke and Langdon (2012)). Column (2) excludes Mecklenburg County, NC, which contains Charlotte. Column (3) restricts to advisers who are flagged as only carrying FSP products. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## B.2. Further Robustness Checks

In this appendix, we present three further robustness checks on the result that fiduciary duty affects the composition of products sold. The results are presented in Table B.4.

In the baseline dataset in the body of the paper, we have excluded contracts sold in the state of New York. New York has a complex system of financial regulations that, to our knowledge, differs significantly from that of other states. Indeed, it has a different suite of annuities as well: every type of annuity in our dataset has a New York-specific version that differs on some dimensions. Thus, we are hesitant to compare across borders with New York, even using RIAs as a control. Nevertheless, Column (1) of Table B.4 adds these contracts back into the dataset, along with relevant borders. We use the classification from Finke and Langdon (2012) that New York common law does not impose heightened fiduciary duty on its advisers. We see that including these advisers strengthens the result significantly, and we still do not see a significant difference between RIAs on each side of the border. This is despite the fact that the sample size increases considerably given the large number of contracts in this border.

The borders studied in the baseline specification mostly do not include large metropolitan areas. The key exception is that the North Carolina/South Carolina border encompasses Mecklenburg County, where Charlotte, NC is located. Given that Charlotte is a large city and a finance hub, one may wonder whether advisers are different in this city. Column (2) runs the regression excluding all advisers in Mecklenburg County and obtains similar results to the baseline.

Finally, advisers in our sample can carry financial products from not just FSP but also other financial service providers. Given that we do not observe sales of non-FSP products, a concern may be that fiduciary duty induces advisers to shift to products from other providers, and that

this selection is differential by type of annuity. That is, imposing fiduciary duty causes a shift away from FSP variable annuities to other variable annuities. We find this to be unlikely a priori, since FSP is representative of the market in terms of financial health and product rates. However, we can partially address this concern by using information in Discovery about the advisers' carrier affiliations. Given we observe which financial service providers' products each adviser carries, we can restrict to advisers who are marked to only carry FSP products. Column (3) shows that the difference for broker-dealers is noisier than the baseline but around the same magnitude. The difference-in-difference coefficient has the same sign but is about half the magnitude of the baseline, although the difference seems to come mostly from the noisy effect on RIAs. While the result is still broadly consistent with the baseline, we should note that restricting to advisers that only sell FSP products does lead to an especially selected sample. Advisers and clients in this sample may well be different than the baseline sample, and we should expect changes in the estimated treatment effect.

### B.3. Entry Probabilities

We now wish to compute the effect of fiduciary duty on the probability of entry into a market. To do so, we need to take a stance on which firms are potential entrants in a market. While there is no precedent in the entry literature on understanding potential entrants for financial advice, we follow the parallel that firms in "nearby" markets are potential entrants. Based on the intuition that it may be difficult to open locations far away from existing ones and also difficult to open locations in different states, we assume that a firm is a potential entrant in county  $c$  if (i) it has entered a county within 50 miles of  $c$  or (ii) it is a non-local firm which has entered some other county in the same state as  $c$ . We run a sensitivity check in which we allow national firms to be potential entrants in every county in the United States.<sup>58</sup> Given a definition of potential entrants, we then run a linear probability model of a dummy for whether firm  $f$  enters county  $c$ , where an observation exists in the dataset if  $f$  is a potential entrant in  $c$ . The covariates include whether firm is a broker-dealer firm, the fiduciary status of the county, and the interaction of the two so that this regression has an interpretation as a difference-in-differences for the probability of entry. We control for border fixed effects; fixed effects for the firm footprint; and the population, median household income, and median age of the county. We also include a specification in which we include a triple interaction of the fiduciary dummy, the broker-dealer dummy, and dummies for firm footprint. We use two-way clustering at the firm and border levels to compute standard errors.

Table B.5 reports the results of these regressions. Columns (1) and (2) use the assumption that national firms are only potential entrants in states in which they have entered. We estimate a point estimate of -0.2 pp on the fiduciary dummy, which corresponds to the difference in entry probabilities for RIA firms in counties with and without fiduciary duty. Broker-dealers have similar probabilities of entry as RIAs (point estimate of 0.07 pp). In contrast, the coefficient on the interaction of these dummies is an economically and statistically significant 1.2 pp, off a mean of 7.4 pp, suggesting

<sup>58</sup>We have also run other sensitivity checks, e.g., in which we constrain multistate firms to only enter counties that are within 50 miles, and results are similar. We omit these checks from the paper.

Table B.5: Entry probabilities

	Nationals Enter in State		Nationals Enter Everywhere	
	(1)	(2)	(3)	(4)
$\mathbb{1}[\text{Fiduciary}]$	-0.00192 (0.00652)	-0.00298 (0.0515)	-0.00247 (0.00545)	-0.00561 (0.0511)
$\mathbb{1}[\text{BD}]$	0.000645 (0.00947)	0.0824 (0.0992)	-0.00487 (0.00943)	0.0811 (0.0977)
$\mathbb{1}[\text{Fiduciary}] \times \mathbb{1}[\text{BD}]$	-0.0122* (0.00657)	-0.0676 (0.102)	-0.00979* (0.00561)	-0.0659 (0.102)
Multistate	-0.0138 (0.0450)	0.0246 (0.0378)	-0.0202 (0.0443)	0.0169 (0.0367)
Regional	0.00735 (0.0457)	0.0490 (0.0397)	0.000777 (0.0450)	0.0409 (0.0385)
National	0.0637 (0.0487)	0.0920** (0.0453)	0.0367 (0.0474)	0.0693 (0.0435)
$\mathbb{1}[\text{Fiduciary}] \times \mathbb{1}[\text{BD}]$ × Multistate		0.0569 (0.103)		0.0564 (0.102)
$\mathbb{1}[\text{Fiduciary}] \times \mathbb{1}[\text{BD}]$ × Regional		0.0586 (0.101)		0.0573 (0.100)
$\mathbb{1}[\text{Fiduciary}] \times \mathbb{1}[\text{BD}]$ × National		0.0626 (0.102)		0.0608 (0.101)
$N$	61,413	61,413	72,125	72,125
Probability of Entry	0.0735	0.0735	0.0626	0.0626

Regressions of whether a firm entered in a county in which it is a potential entrant on fiduciary status, broker-dealer status, and the interaction. All specifications include fixed effects for the footprint (with local excluded); controls for log population, log median household income, and median age; and border fixed effects. Columns (2) and (4) include a full interaction between fiduciary status, broker-dealer, and footprint, although not all coefficients are shown. Columns (3) and (4) assume national firms are potential entrants in all counties. Standard errors are computed using two-way clustering at the border and the firm levels. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

that fiduciary duty does have a significant impact on the probability of broker-dealer entry. The dummies for firm footprint indicate that firms with larger footprints do in fact have a higher entry probability, even controlling for the mechanical effect that they are potential entrants in a larger set of counties. Column (2) adds the triple interaction of fiduciary duty and broker-dealer with firm footprint. Of interest is that while the coefficient for fiduciary status for local firms is a large and negative (this is the coefficient on the interaction of fiduciary status with broker-dealer status), albeit rather noisy, decrease of 6.8 pp, the result for larger firms moves the total effect towards zero. Indeed, adding the coefficients in the final panel of the table with the point estimate of -6.8 pp yields point estimates that are negative but close to 0. These results are thus in line with the shift away from local broker-dealers documented in Table VI for counties with fiduciary duty, although the effects disaggregated by footprint are especially noisy. Columns (3) and (4) use the alternate assumption on potential entrants, and coefficients are largely similar.

#### B.4. A Model-Based Validation of the Homogeneity Across the Border

A natural concern is that the two markets we use may have unobserved differences in latent demand for financial products. While we do not believe this to be the case in our setting, as we discuss in Section II, it is still informative to discuss whether the model allows for a way to test this identifying assumption through the model. Of course to have any hope of either testing or controlling for cross-market differences, we must put some structure on how the two markets compare to each other. In this section, we impose the (admittedly strong) assumption that the two markets are different in that optimal advice is shifted everywhere by a constant term  $\Delta$ . Letting Market A denote the market with fiduciary duty, and Market B the market without,

$$\pi_T^B(a; \theta_j) = \pi_T^A(a + \Delta; \theta_j)$$

for both  $T$  and all  $\theta_j$ . If Markets A and B are truly identical then we would expect  $\Delta = 0$ . Here, we first provide two methods to test this assertion. Second, we formalize the statements made in the body of the paper that the difference-in-differences estimator would estimate the impact of fiduciary duty in the absence of spillovers, even with demand breaks.

The first method to test  $\Delta = 0$  is at the firm level. Since fiduciary duty does not directly impact the RIA market except through entry, conditional on a RIA firm entering into both Markets A and B, the shift in its advice should be zero. Thus, within-RIA-firm comparisons should give an estimate of  $\Delta$ . Column (2) of Table II and Columns (2) and (4) of Table VII show that the within-firm change in the products sold by RIAs—either in terms of class of product or in terms of returns—is usually smaller than the change for broker-dealers or simply small in magnitude. Table B.6 shows that for almost all the other outcomes considered in the analysis, the RIA difference is close to zero with firm fixed effects.

The second method is at the market level. Let  $\underline{a}_M$  and  $\bar{a}_M$  be the lowest and highest values of advice observed in market  $M \in \{A, B\}$ ; let  $\underline{\theta}_M$  and  $\bar{\theta}_M$  be the lowest and highest types in the

market. Normalize the profit functions so that  $a^*(\theta) = \theta$  in Market A. Then, we know that  $\underline{a}_A = \underline{\theta}_A$  and  $\bar{a}_A = \bar{\theta}_A$ , and  $\underline{a}_B = \underline{\theta}_B - \Delta$  and  $\bar{a}_B = \bar{\theta}_B - \Delta$ . However, we know from (A.7) that  $\underline{\theta}_A \geq \underline{\theta}_B$  and  $\bar{\theta}_A \leq \bar{\theta}_B$ . Substituting, we get the bounds

$$\bar{a}_A - \bar{a}_B \leq \Delta \leq \underline{a}_A - \underline{a}_B. \quad (\text{B.1})$$

For some intuition on (B.1), note that entry of RIA firms would force the set of *types* of entrants to expand. Advice maps to types by a shift of  $\Delta$ , so  $\Delta$  must be such that the set of types implied by observed advice and  $\Delta$  is such that this expansion is respected. Accordingly, if the extremes of advice for dually-registered advisers do not change much, then  $\Delta$  could not have been especially large.

One could imagine implementing this test in our setting by comparing extreme quantiles of the distribution of advice for RIAs. These numbers are presented in Table IX. Taking the 10<sup>th</sup> and 90<sup>th</sup> percentiles as the extremes, we would estimate that  $|\Delta| < 0.0019$ , and using the 5<sup>th</sup> and 95<sup>th</sup> percentiles, we would estimate  $|\Delta| < 0.0012$ . While these numbers are not trivial, they are still smaller than the estimate of 0.0036 in Table V of the change in returns for broker-dealers due to fiduciary duty.<sup>59</sup>

How can we interpret the difference-in-differences estimator through the lens of the mode? First note that this model can also formalize the statement that under the null that fiduciary duty has no effect (the change in  $K$  is 0 and there is no additional cost that depends on advice given), the difference-in-differences in the mean is zero even if  $\Delta \neq 0$ . To see this, simply note that if fiduciary duty has no effect, then the same set of entrants—both broker-dealers and registered investment advisers—enters in Markets A and B. However, in Market B, advice for each firm is shifted to the right by  $\Delta$ . Thus, the difference in mean advice provided by entrants, for both groups, is  $\Delta$ . This means the difference-in-differences is 0. More generally, if the only effect on RIAs is that the demand break induces them to change their advice by  $\Delta$  (“no spillovers”), then the RIA difference is  $\Delta$ . All BDs would shift their advice by  $\Delta$  in addition to any net effect due to entry and recomposition. Thus, the difference-in-difference estimator would subtract off  $\Delta$  and provide an estimate of the effect of fiduciary duty on BDs.

## B.5. Outcomes with Firm Fixed Effects

Table B.6 presents regressions of the form 1, restricting to border counties, but adding firm fixed effects. We report these regressions for all outcomes presented in Section IV. The takeaway from this analysis is that even with firm fixed effects, the differences (and the difference-in-difference) are dampened somewhat but still survive. This suggests that fiduciary duty affects choice even

<sup>59</sup>Moreover, note that these bounds are actually from an implication of (B.1) that

$$|\Delta| \leq \max \{ |\underline{a}_A - \underline{a}_B|, |\bar{a}_A - \bar{a}_B| \}.$$

Given that the point estimates essentially estimate an improvement in low returns and a reduction in high returns for RIAs, the bounds in (B.1) are inconsistent. Of course, although almost all estimates are statistically indistinguishable from zero.

within-firm. In fact, the magnitude of the difference in broker-dealer outcomes is usually comparable to that without firm fixed effects—with the main exception being the regression of the dummy of whether the product is a variable annuity.<sup>60</sup>

Moreover, we find consistently that the RIA difference is closer to zero than without firm fixed-effects. Appendix B.4 argues that even with spillovers onto RIAs through entry, the effect on RIAs with firm fixed effects can be an estimate of  $\Delta$ . Thus, this provides further evidence that  $\Delta \approx 0$ .

## C. Computation of the Investment Possibility Frontier

In this appendix, we detail how we compute investment returns and optimal portfolio allocations when computing (i) maximum returns in Section IV.C and (ii) net present values as discussed in Appendix D.

### C.1. Computing Returns

For each investment option in the variable annuity dataset, we can match by name to CRSP Survivorship-Bias-Free US Mutual Fund Database. CRSP provides a permanent fund number, which is invariant to name changes, which we then track to find monthly net asset values dating from January 1, 1990. We compute monthly returns from changes in this net asset value instead of using CRSP's monthly return, since variable annuity subaccounts do not reinvest dividends on behalf on the annuitants: reinvested dividends accrue to the firm. Since mutual funds are opened over different time spans, historical returns may not be comparable across funds. We thus use a CAPM-style method to impute historical returns. For each fund  $f$ , we run a regression of the form

$$r_{fm} = \alpha_f + \beta_f \cdot r_m^{\text{S\&P}} + \epsilon_{fm}, \quad (\text{C.1})$$

where  $r_m^{\text{S\&P}}$  is the return of the S&P index over the same month, and  $\epsilon_{fm}$  is the abnormal return. We then say that the expected return for fund  $f$  is  $e_f \equiv \hat{\alpha}_f + \hat{\beta}_f \cdot e^{\text{S\&P}}$ , where  $e^{\text{S\&P}}$  is the mean monthly return of the S&P index since 1990. The covariance of funds  $f$  and  $f'$  is then

$$\beta_f \cdot \beta_{f'} \cdot \text{var}(\text{S\&P}) + \text{cov}(\hat{\epsilon}_{fm}, \hat{\epsilon}_{f'm}), \quad (\text{C.2})$$

where the first term is the empirical variance of the monthly S&P returns and the second term is the empirical covariance of the abnormal returns over the months in which they overlap.

Consider the set of investment options for a variable annuity, and denote by  $\hat{V}$  the variance-covariance matrix as computed by (C.1) and (C.2). Since the covariance of the abnormal returns is computed over different time periods,  $\hat{V}$  need not be positive semidefinite in finite samples (although it often is). Thus, to convert it to a valid covariance matrix, we find the closest positive semidefinite

<sup>60</sup>Even in this case, the effect has the same sign, even if it is considerably noisier and drops in magnitude by about 75%.

Table B.6: Summary of outcomes, with firm fixed effects

	# Funds		# Equity Styles			# FI Styles			Return	
	All (1)	$\geq 4\star$ (2)	$\leq 2\star$ (3)	High Qual (4)	Only Low Qual (5)	High Qual (6)	Only Low Qual (7)	Optimal (8)	Equal (9)	
FD on BD	6.82** (3.25)	2.14* (1.26)	2.62* (1.33)	0.367* (0.205)	-0.332* (0.193)	-0.010 (0.060)	-0.067*** (0.018)	0.0029 (0.0028)	0.0004 (0.0004)	
FD on RIA	1.03 (1.63)	-0.32 (0.41)	0.85 (0.93)	-0.028 (0.083)	-0.008 (0.100)	-0.059 (0.054)	-0.001 (0.009)	-0.0011 (0.0013)	0.0003 (0.0002)	
DID	5.79 (3.46)	2.46* (1.35)	1.77 (1.43)	0.395* (0.224)	-0.324 (0.214)	0.049 (0.090)	-0.065*** (0.017)	0.0040 (0.0032)	0.0006 (0.0005)	
Base Mean	96.82	32.04	31.35	7.214	0.865	4.407	3.027	0.080	0.025	
N	19,808	19,808	19,808	19,808	19,808	19,808	19,808	15,785	15,785	
Subaccount Expense										
	M&E (10)	Minimum (11)	Average (12)	Surr. Charge (13)	$\mathbb{1}[VA]$ (14)	Optimal (15)	Equal (16)			
FD on BD	-0.014* (0.008)	-0.004* (0.002)	0.044** (0.018)	-0.070 (0.130)	-0.025 (0.033)	0.0036 (0.0026)	0.0011 (0.0008)			
FD on RIA	0.007 (0.008)	-0.000 (0.001)	0.002 (0.009)	-0.054 (0.055)	0.018 (0.012)	-0.0009 (0.0010)	0.0006 (0.0004)			
DID	-0.021** (0.010)	-0.004 (0.003)	0.042** (0.019)	-0.016 (0.167)	-0.043 (0.031)	0.0046* (0.0026)	(0.0005) (0.0008)			
Base Mean	1.088	0.501	1.263	3.106	0.869	0.090	0.063			
N	19,808	19,808	19,808	19,808	22,781	15,768	15,768			

Summary of all outcomes investigated in the paper, with firm fixed effects. Contracts are restricted to borders, specifications include border fixed effects, and standard errors are clustered at the state. All estimates use a sample of variable annuities except (14), which uses the sample of all annuities. Columns (8), (9), (15) and (16) use the sample of variable annuities where rider choice could be determined unambiguously from the data. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

matrix to it. Letting  $QUQ' \equiv \hat{V}$  denote the Schur decomposition of  $\hat{V}$ , we generate the matrix  $U^+$ , which replaces all negative elements of  $U$  (which will be a diagonal matrix in this case) with zeros. We then use  $\hat{V}^+ \equiv QU^+Q'$  as the estimated variance-covariance matrix.<sup>61</sup>

We compared the investment frontiers generated through this method with ones generated using “excess returns” that impose  $\beta_f \equiv 1$ . We find them to be very similar. Using just the returns over the period over which the fund was active tends to give higher returns, as some funds were not available during the financial crisis.

## C.2. Optimal Portfolio Allocation

Investment restrictions partition the set of funds available into groups and place minimums and maximums on the shares of assets that can be placed in each group. If  $s$  is the vector of shares of each fund, this effectively amounts to a linear restriction  $Ms \geq m$ . If  $r$  is the vector of estimated returns, the maximum possible return is simply the linear program

$$\max_s r \cdot s \text{ s.t. } Ms \geq m \text{ and } s \cdot \mathbb{1} = 1, \quad (\text{C.3})$$

if  $\mathbb{1}$  is a vector of ones. This program can be solved efficiently; we use Gurobi.

Maximizing the net present value might not correspond to maximizing the mean return. However, the optimal allocation must necessarily lie on an extended version of the efficient frontier. We can solve for the typical variance-minimizing portfolios as

$$\min_s s' \hat{V}^+ s \text{ s.t. } Ms \geq m, \quad r \cdot s \geq \bar{r}, \text{ and } s \cdot \mathbb{1} = 1, \quad (\text{C.4})$$

for a fine grid of minimum returns  $\bar{r}$  from the minimum possible return to the maximum one (i.e., the solution to (C.3)). This is a convex quadratic program and can also be solved efficiently by Gurobi. However, given the convexity of the contracts, a risk-neutral individual may also want *higher* risk, so we also solve the version of (C.4) with the min replaced by a max. This problem is non-convex, but we find using KNITRO’s multistart that we can reliably and efficiently find a solution.

## D. Computations of Net Present Values

This appendix section presents the detailed explanation of how variable and fixed income annuities are valued. It is divided into three subsections. The first introduces notation and presents relevant definitions. The second derives how to value a variable annuity contract with a minimum withdrawal living benefit and an account value death benefit, the most prevalent contract in our dataset. The third modifies this derivation for variable annuities and fixed indexed annuities without a living benefit rider.

<sup>61</sup>We have checked for numerical issues by using a semidefinite solver, which achieves the same solution through a different algorithm. Furthermore, the norm of  $\hat{V}^+ - \hat{V}$  is usually very small, suggesting this procedure does not change the matrix appreciably—as one would hope.

### D.1. Definitions and Contract Rules

When a variable annuity contract is signed, the invested amount becomes the contract value at period 0,  $c_0$ . Contracts with living benefit riders also generate an income base  $b_0$ , which is equal to  $c_0$  at this moment, but will typically diverge over time. Let  $c_t \in \mathbb{R}^+$  denote the contract value in period  $t$  and  $b_t \in [c_0, \bar{b}]$  denote the income base in period  $t$ . Contract values are bounded below by zero, as annuitants cannot go into debt with the insurance company, and income bases are bounded above by an amount set by the insurance company (in our data, \$10 million dollars) and below by the original contract value.

Let  $\mathcal{I}_t$  denote the set of feasible asset allocations available to the annuitant in period  $t$ . This is restricted both by the set of funds available given the chosen contract and rider, and by the investment restrictions imposed by the contract-rider combination. Let  $i_t \in \mathcal{I}_t$  denote a vector of chosen allocations in period  $t$ , and let  $r_{t+1}(i_t)$  denote the return of that asset allocation, which is realized in period  $t + 1$ .

Variable annuity contracts have a fixed fee  $f_t$ , which for some contracts is waived for contract values above  $\bar{f}$  and for all contracts is waived after 15 years, a variable fee  $v^c$  on the contract value, and a variable fee on the income base  $v^b$ . In what follows, let  $\bar{f} = \infty$  if the contract does not waive the annual fee for high contract values, and let  $f_t = 0$  after fifteen contract years.

Variable annuity contracts with a minimum withdrawal living benefit rider have two additional features that affect transitions of the income base and of the contract value. First, after a given age annuitants have the option of withdrawing the Guaranteed Annual Income (GAI) amount, which is equal to the income base times the relevant GAI rate for the period,  $g_t \in \{g_1, \dots, g_G\}$ . We detail which GAI rate is available to the annuitant in each period below, as it is a complicated function of the sequence of choices made in the past. Let  $w_t \in \{0, 1\}$  denote whether the annuitant decides to withdraw the GAI amount in period  $t$ , so that the GAI withdrawal amount is  $w_t \cdot g_t \cdot b_t$ . Second, for the first  $E$  years of the contract, known as the enhancement period, the income base is guaranteed to grow at least by the enhancement rate  $e$ . Moreover, if certain conditions are met, an additional  $E$  years of enhancement rate eligibility can be earned. We denote the enhancement rate in period  $t$  by  $e_t \in \{0, e\}$ . Typical values of the enhancement period and enhancement rate during our sample period are 10 and 5%, respectively.

Transitions of the contract value and the income base are governed by the following equations:

$$\tilde{c}_t = c_t - (w_t g_t + v^b) b_t - f_t \cdot 1[c_t < \bar{f}] \quad (\text{D.1})$$

$$c_{t+1} = \max[(1 + r_{t+1}(i_t) - v^c(i_t))\tilde{c}_t, 0] \quad (\text{D.2})$$

$$b_{t+1} = \begin{cases} \min[\max[(1 + e_t)b_t, \tilde{c}_t], \bar{b}] & \text{if } a_t < \bar{a} \\ b_t & \text{if } a_t \geq \bar{a} \end{cases} \quad (\text{D.3})$$

Define  $\tilde{c}_t$  as the end-of-period contract value, equal to the contract value minus the annual fee, the fee on the income base, and the GAI withdrawal amount. In an abuse of notation, we

set  $w_t g_t = 0$  in years where GAI withdrawals are not available. The next period contract value is equal to the end of period contract value times the net rate of return, or the difference between the realized return on investments and the contract fee. As mentioned earlier, contract value is bounded below by zero. Finally, in every period where the annuitant's age ( $a_t$ ) is less than the contract's maximum purchase age,  $\bar{a}$ , the income base is equal to the maximum of the contract value and the enhanced income base, provided this amount is below the maximum income base. Because of this transition rule, the income base cannot fall below the initial investment amount. After the contract's maximum purchase age, the income base is locked in and cannot change. Note that GAI withdrawals decrease the contract value but do not decrease the income base, and that they continue even when contract value equals zero.

On a period where contract value exceeds the value of the enhanced income base and no GAI withdrawals take place, the contract is said to have "stepped up." After a step up, the contract is eligible for  $E$  more years of enhancement. Let  $s_t$  denote the number of years since the last step up. Then

$$s_0 = 0 \tag{D.4}$$

$$s_{t+1} = s_t \cdot 1 [b_{t+1} \neq \tilde{c}_t \text{ or } w_t = 1] + 1 \tag{D.5}$$

$$e_t = e \cdot 1 [s_t \leq E] \cdot 1 [a_t < \bar{a}]. \tag{D.6}$$

The GAI rate available in period  $t$  is a function of the age at which the first GAI withdrawal occurs,  $a^{first}$ . GAI withdrawals cannot be taken before a certain age  $a_0$ , typically 55, and they are increasing in the age of first withdrawal, until either 70 or 75. The contract specifies a map  $G(a^{first}) : \{a_0, \dots, \bar{a}\} \rightarrow \{g_1, \dots, g_G\}$  from all possible ages at first withdrawal to GAI rates. For example, a contract might specify that an annuitant who takes a GAI withdrawal for the first time at age 60 receives a 3% GAI rate, while they would receive a 5% rate if they wait until age 75. Annuitants are locked in to the GAI rate at the age of first withdrawal, unless a step up takes place at a later age with a higher GAI rate. Then the GAI rate available in period  $t$  is

$$g_t = \begin{cases} \emptyset & \text{if } a_t < a_0 \\ g_{G(a_t)} & \text{if } a_t \leq a^{first} \\ g_{G(a_{t-1})} & \text{if } a_t > a^{first} \text{ and } \tilde{b}_{t-1} = \tilde{c}_{t-1} \\ g_{t-1} & \text{if } a_t > a^{first} \text{ and } \tilde{b}_{t-1} \neq \tilde{c}_{t-1} \end{cases}. \tag{D.7}$$

In summary, the set of relevant state variables in period  $t$  is  $(c_t, b_t, s_t, g_t)$ , and the annuitant's control variables are whether to take a GAI withdrawal  $w_t$  and the investment allocation  $i_t$ . Finally, annuitants can withdraw the contract value at any time, receiving  $c_t \cdot (1 - d_t)$ , where  $d_t$  is the surrender charge in period  $t$ , or they can annuitize the contract value, receiving an expected present

discounted value of the annuity stream  $z(a_t, c_t)$ . Note that both full withdrawal of the contract value and annuitization induces the loss of the guaranteed annual income.

Defining  $\mu_t$  as the probability of being alive in period  $t$  conditional having lived to period  $t - 1$ , the value of a contract in period  $t$  is equal to

$$V_t(c_t, b_t, s_t, g_t) = \max \left[ \max_{(w_t, i_t)} w_t \cdot g_t \cdot b_t + \delta [\mu_{t+1} E[V_{t+1}(c_{t+1}, b_{t+1}, s_{t+1}, g_{t+1})] + (1 - \mu_{t+1}) \beta E[c_{t+1}]], \right. \\ \left. (1 - d_t)c_t, E[PDV(z(a_t, c_t))] \right].$$

## D.2. Solving for the Value of a Variable Annuity Contract with a Minimum Withdrawal Living Benefit Rider

Assume that the probability of death in period  $T$  is 1, and that annuitants value a dollar left after their death by  $\beta$ . Then in period  $T - 1$  the continuation value of the contract is  $\beta E[c_T]$ . Moreover, since  $a_{T-1} > \bar{a}$ , the income base and GAI rate are locked in (at  $b_{\bar{t}}$  and  $g_{\bar{t}}$ , respectively), so the years since last step up are irrelevant. Then the problem in period  $T - 1$  is

$$V_{T-1}(c_{T-1}, b_{\bar{t}}, g_{\bar{t}}) = \max \left[ \left( \max_{(w_{T-1}, i_{T-1})} w_{T-1} \cdot g_{\bar{t}} \cdot b_{\bar{t}} + \delta \cdot \beta \cdot E[c_T] \right), z(a_{T-1}, c_{T-1}), (1 - d_{T-1}) \cdot c_{T-1} \right] \quad (\text{D.8})$$

$$\text{subject to} \quad E[c_T] = E[\max[(1 + r_T(i_{T-1}) - v_T^c) \tilde{c}_{T-1}, 0]] \quad (\text{D.9})$$

$$\tilde{c}_{T-1} = c_{T-1} - (w_{T-1} g_{\bar{t}} + v_{T-1}^b) b_{\bar{t}} - f_{T-1} \cdot 1[c_{T-1} < \bar{f}]. \quad (\text{D.10})$$

In practice, we are setting  $T$  equal to 120, and contracts cannot be annuitized after age 99, so annuitization is not an option in  $T - 1$ . Rather than introducing notation to keep track of when annuitization is available, we will always include it as an option, and implicitly set  $z(a_{T-1}, c_{T-1}) = 0$  whenever it is not. Furthermore, since the maximum purchase age is 85, and surrender periods are never more than 10 years long, in practice  $d_{T-1} = 0$ . We will also keep surrender charges in the notation and set them to 0 when the surrender period has expired. To solve for the value of continuing with the contract, we discretize both the set of feasible investments,  $\mathcal{I}_t$ , and the space of  $(c_{T-1}, b_{\bar{t}})$ . For every element in the contract value - income base grid,  $(c^k, b^k)$ , and conditional on the GAI rate, we find the asset allocation that yields the highest expected present discounted value for both the case where the annuitant decides to take GAI withdrawals and where they do not. Taking the maximum over the utilities under both withdrawal strategies and over annuitization and full surrender yields  $V_{T-1}^*(c^k, b^k, g_{\bar{t}})$ , the value of following the optimal withdrawal and investment strategy after arriving at period  $T - 1$  with contract value  $c^k$  and income base  $b^k$ . We interpolate linearly over the  $(c_{T-1}, b_{T-1})$  space to obtain  $\hat{V}_{T-1}^*(c_{T-1}, b_{\bar{t}}, g_{\bar{t}})$ , the value function in period  $T - 1$  for all possible combinations of contract value, income base, and GAI rate. In period  $T - 2$ , we

then solve

$$V_{T-2}(c_{T-2}, b_{\bar{t}}, g_{\bar{t}}) = \max \left[ \begin{aligned} & \max_{(w_{T-2}, i_{T-2})} w_{T-2} \cdot g_{\bar{t}} \cdot b_{\bar{t}} + \delta \left( \mu_{T-1} \cdot E \left[ \hat{V}_{T-1}^*(c_{T-1}, b_{\bar{t}}, g_{\bar{t}}) \right] + (1 - \mu_{T-1}) \cdot E[c_{T-1}] \right), \\ & z(a_{T-2}, c_{T-2}), (1 - d_{T-2}) \cdot c_{T-2} \end{aligned} \right], \quad (\text{D.11})$$

$$\text{subject to: } E[c_{T-1}] = E \left[ \max \left[ (1 + r_{T-1}(i_{T-2}) - v_{T-1}^c) \tilde{c}_{T-2}, 0 \right] \right] \quad (\text{D.12})$$

$$\tilde{c}_{T-2} = c_{T-2} - \left( w_{T-2} g_{\bar{t}} + v_{T-2}^b \right) b_{\bar{t}} - f_{T-2} \cdot 1[c_{T-2} < \bar{f}]. \quad (\text{D.13})$$

Again, discretizing over  $(c_{T-1}, b_{\bar{t}})$  and over the set of feasible investments allows us to find  $V_{T-2}^*(c^k, b^k, g_{\bar{t}})$ , the value of following the optimal withdrawal and investment strategy after arriving at period  $T - 2$  with contract value  $c^k$  and income base  $b^k$ , and linear interpolation yields  $\hat{V}_{T-2}^*(c_{T-2}, b_{\bar{t}}, g_{\bar{t}})$ . We continue this process recursively until we reach the maximum purchase age in period  $\bar{t}$ , where we obtain  $\hat{V}_{\bar{t}}^*(c_{\bar{t}}, b_{\bar{t}}, g_{\bar{t}})$ .<sup>62</sup>

In period  $\bar{t} - 1$ , the annuitant can still step up or enhance the income base, and a step up increases the GAI rate to its highest possible level, if the annuitant is not there already. Moreover, having one or more remaining enhancement years is irrelevant. Then, the problem is

$$V_{\bar{t}-1}(c_{\bar{t}-1}, b_{\bar{t}-1}, s_{\bar{t}-1}, g_{\bar{t}-1}) = \max \left[ \begin{aligned} & \max_{(w_{\bar{t}-1}, i_{\bar{t}-1})} w_{\bar{t}-1} \cdot g_{\bar{t}-1} \cdot b_{\bar{t}-1} \\ & + \delta \cdot \left[ \mu_{\bar{t}} \cdot E \left[ \hat{V}_{\bar{t}}^*(c_{\bar{t}}, b_{\bar{t}}, g_{\bar{t}}) \right] + (1 - \mu_{\bar{t}}) \cdot \beta \cdot E[c_{\bar{t}}] \right], \\ & z(a_{\bar{t}-1}, c_{\bar{t}-1}), (1 - d_{\bar{t}-1}) \cdot c_{\bar{t}-1} \end{aligned} \right], \quad (\text{D.14})$$

$$\text{subject to: } E[c_{\bar{t}}] = E \left[ \max \left[ (1 + r_{\bar{t}}(i_{\bar{t}}) - v_{\bar{t}}^c) \tilde{c}_{\bar{t}-1}, 0 \right] \right] \quad (\text{D.15})$$

$$\tilde{c}_{\bar{t}-1} = c_{\bar{t}-1} - \left( w_{\bar{t}-1} g_{\bar{t}-1} + v_{\bar{t}-1}^b \right) b_{\bar{t}-1} - f_{\bar{t}-1} \cdot 1[c_{\bar{t}-1} < \bar{f}] \quad (\text{D.16})$$

$$b_{\bar{t}} = \min \left[ \max \left[ (1 + e_{\bar{t}-1}) b_{\bar{t}-1}, \tilde{c}_{\bar{t}} \right], \bar{b} \right] \quad (\text{D.17})$$

$$g_{\bar{t}} = \begin{cases} g_{A(a_{\bar{t}-1})} & \text{if } b_{\bar{t}} = \tilde{c}_{\bar{t}-1} \text{ or } a^{first} = a_{\bar{t}} \\ g_{\bar{t}-1} & \text{otherwise} \end{cases}. \quad (\text{D.18})$$

As before, we discretize the space of contract value-income base, and solve for the optimal asset allocation for every combination of GAI rate-enhancement availability-withdrawal decision. Taking the maximum over withdrawal decisions, and comparing to the value of both annuitization and full withdrawal yields  $V_{T-2}^*(c^k, b^k, s_{\bar{t}-1}, g_{\bar{t}})$ , the value at each grid point for all combinations of GAI rates and years since the last step up. As argued earlier, in this period  $V_{T-2}^*(c^k, b^k, 1, g_{\bar{t}}) = V_{T-2}^*(c^k, b^k, y, g_{\bar{t}}) \forall y \in \{2, \dots, E\}$ , as the income base is locked in period  $\bar{t}$ . Linear interpolation

<sup>62</sup>Note that when contract value equals zero, we can obtain the value of the problem analytically, as annuitization and withdrawal are not available and the income base is fixed. As a result,  $V_{\bar{t}}^*(0, b_{\bar{t}}, g_{\bar{t}}) = g_{\bar{t}} \cdot b_{\bar{t}} \cdot \left( 1 + \sum_{\tau=\bar{t}+1}^T \delta^{\tau-\bar{t}} \prod_{\tau'=\bar{t}+1}^{\tau} \mu_{\tau'} \right)$ .

yields  $\hat{V}_{\bar{t}-1}^*(c_{\bar{t}-1}, b_{\bar{t}-1}, s_{\bar{t}-1}, g_{\bar{t}-1})$ .

The general recursive formulation for earlier periods is

$$V_t(c_t, b_t, s_t, g_t) = \max \left[ \max_{(w_t, i_t)} w_t \cdot g_t \cdot b_t + \delta \cdot \left[ \mu_t \cdot E \left[ \hat{V}_{t+1}^*(c_{t+1}, b_{t+1}, g_{t+1}) \right] + (1 - \mu_{t+1}) \cdot \beta \cdot E[c_{t+1}] \right], \right. \\ \left. z(a_t, c_t), (1 - d_t) \cdot c_t \right] \quad (\text{D.19})$$

$$\text{subject to: } E[c_{t+1}] = E[\max[(1 + r_{t+1}(i_t) - v_t^c) \tilde{c}_t, 0]] \quad (\text{D.20})$$

$$\tilde{c}_t = c_t - (w_t g_t + v_t^b) b_t - f_t \cdot 1[c_t < \bar{f}] \quad (\text{D.21})$$

$$b_t = \min[\max[(1 + e_t) b_t, \tilde{c}_t], \bar{b}] \quad (\text{D.22})$$

$$g_{\bar{t}} = \begin{cases} g_{A(a_t)} & \text{if } b_t = \tilde{c}_t \text{ or } a^{first} = a_t \\ g_{t-1} & \text{otherwise.} \end{cases} \quad (\text{D.23})$$

Backward induction until the initial period yields the value of the contract,  $\hat{V}_0^*(c_0, c_0, E, g_0)$ . Note that as the periods decrease the set of possible GAI rates decreases, as one need not solve for the value function at age 70 for GAI rates that are only available if the first withdrawal is at age 75. Moreover, the problem is initialized with 0 years since the last step up, and the annuitant is guaranteed E enhancement years, so one need not solve for the value function for infeasible values of years since last step up during the first E years of the contract.

### D.3. Solving for the Value of a Variable Annuity and Fixed Indexed Annuity Contracts without a Living Benefit Rider

The problem is significantly simpler in this case, as there is no income base, no enhancement, and no step up. The problem in period  $T - 1$  is

$$V_{T-1}(c_{T-1}) = \max[\delta \cdot \beta \cdot E[c_T], z(a_{T-1}, c_{T-1}), (1 - d_{T-1}) \cdot c_{T-1}] \quad (\text{D.24})$$

$$\text{subject to: } E[c_T] = E[\max[(1 + r_T(i_{T-1}) - v_T^c) \tilde{c}_{T-1}, 0]] \quad (\text{D.25})$$

$$\tilde{c}_{T-1} = c_{T-1} - f_{T-1} \cdot 1[c_{T-1} < \bar{f}]. \quad (\text{D.26})$$

Discretizing the space of contract value allows us to solve for the optimal asset allocation if the contract is continued, and comparing this value to that of annuitization or full withdrawal yields the optimal strategy in this period for a grid of contract values. Interpolation yields  $\hat{V}_{T-1}^*(c_{T-1})$ , the value of following the optimal strategy in period  $T - 1$  if landing on that period with contract value  $c_{T-1}$ . In this setting, the only difference between a variable annuity contract and a fixed indexed annuity contract will come from the menu of investment strategies available and the value of the fees.

The recursive formulation for previous periods is

$$V_t(c_t) = \max \left[ \delta \cdot (\mu_{t+1} \cdot E[\hat{V}_{t+1}^*(c_{t+1})] + (1 - \mu_{t+1}) \cdot \beta \cdot E[c_{t+1}]), z(a_t, c_t), (1 - d_t) \cdot c_t \right] \quad (\text{D.27})$$

$$\text{s.t.} \quad E[c_{t+1}] = E[\max[(1 + r_{t+1}(i_t) - v_t^c) \tilde{c}_t, 0]] \quad (\text{D.28})$$

$$\tilde{c}_t = c_t - f_t \cdot 1[c_t < \bar{f}]. \quad (\text{D.29})$$

Solving this problem by backward induction yields the value of the contract,  $\hat{V}_0^*(c_0)$ .

## E. Dataset Details

The analysis relies on six main sources of data: Transactions, Discovery, Beacon Annuity Nexus, Morningstar, CRSP, and VA prospectuses. Below, we describe the data in detail, including the collection process and methods used to map across sources.

### E.1. Transactions

The Transaction dataset contains information on each of FSP's transactions of annuity, deferred-contribution, and insurance products sold between January 1, 2008 and February, 2016. We restrict attention to annuity (variable, fixed, and fixed indexed) contracts initiated between 2013 and 2015. The unit of observation is an individual payment, including lump sum and periodic payments, but we aggregate to the contract level. In our final dataset, each observation is a unique contract, and we observe the contract amount at purchase, age of the contract holder, advisor(s) associated with the sale, as well as information on the financial product, importantly the product type and share class, and codes indicating any supplemental rider purchases.

### E.2. Discovery

The Discovery dataset serves two purposes. First, we rely on it to augment the Transaction dataset with detailed information about advisors. The Discovery dataset contains information on advisors and the firms with which they were employed on December 31, 2015. We observe advisor characteristics, such as an indicator of whether the advisor is a BD or DR, the advisor's age, gender, and the location of the branch office. We use this branch location to define the advisor's fiduciary standard. Additionally, the Discovery dataset provides unique identifiers of the advisor's BD firm and RIA firm (if applicable) and includes characteristics such as firm footprint, number of employees, and primary business line. We map information from the Discovery dataset to the Transaction dataset using a unique advisor ID provided by FSP and restrict to advisors and firms available in Discovery.

We also leverage the Discovery dataset for the market structure analysis. We observe the universe of registered financial advisors who are able to sell annuities as of December 31, 2015. For our main specifications, the outcomes of interest are the aggregate number of advisors and associated firm

branches at the county level. We also explore heterogeneity by firm footprint. Discovery defines the firm footprints as follows:

- Local: located in no more than a few offices in one state or close proximity
- Multistate: located in multiple states but not large or concentrated enough to be categorized as a regional firm
- Regional: substantial office and advisor coverage across a region, e.g., the Midwest
- National: substantial office and advisor coverage across the U.S.

### E.3. Beacon Research

For detailed product information, we rely on Beacon Research's Annuity Nexus. This dataset provides historical information on annuity fees and characteristics, as well as changes in availability and characteristics of supplemental riders.

We manually map product names and share classes from Beacon to the detailed descriptions provided in the Transaction dataset. This mapping is straightforward because a high level of detail is provided in the Transaction dataset. The mapping of rider selections is more difficult. The Transaction dataset provides a unique code for each rider selection but does not include a description. Instead, we rely on temporal restrictions on rider availability to match the codes with Beacon. The process is as follows:

- *Rider Availability Restrictions*: Create a crosswalk that lists each rider code combination and any potential corresponding rider name in Beacon. In this step, we rely on rider availability restrictions. Specifically, if a rider is not available for a given product, then it is eliminated as a potential mapping for all rider code combinations associated with that product in the Transaction dataset. Note that, after implementing the availability restrictions, there are certain combinations of rider codes that could only correspond to a single Beacon name, while others could correspond to more than one.
- *Temporal Restrictions*: For the rider code combinations that may correspond to more than one Beacon name, we implement temporal restrictions in an attempt to obtain a unique mapping. We compare the first and last transaction dates (from the Transaction dataset) for a given product and set of rider codes with the Beacon introduction and closing dates. We eliminate a rider as a potential Beacon mapping if the first transaction date is before the introduction date or if the last transaction date is after the closing date. Note again that temporal restrictions are only used if there are multiple potential Beacon mappings.

After implementing the above restrictions, we obtain unique rider mappings for approximately 68% of contracts issued between 2008 and 2016.

#### **E.4. Morningstar**

Morningstar provides data on the subaccounts underlying annuity products, and we use a number of measures contained in Morningstar's data, including subaccount fees, investment styles, and the number of "high quality" funds, as measures of investment quality. We manually map annuity product names from Morningstar to the product descriptions provided in the Transaction dataset.

#### **E.5. CRSP**

CRSP provides returns net of expense ratios for each subaccount. We manually match fund names in the CRSP database with those provided in VA prospectuses (described in Section VI below). The fund names do change over time for the same fund, so we use CRSP's permanent fund number to aggregate historical returns for the fund.

#### **E.6. VA Prospectuses**

For the NPV calculations, we rely on data obtained from VA prospectuses stored in the SEC's EDGAR database. We manually collect information on investment restrictions that contract holders must follow when they elect supplemental riders. Additionally, we obtain the number of accumulation units in the subaccounts for each product, which measure aggregate investment choices. We map this information to the transaction dataset using the Beacon product names and riders obtained through the process described in Appendix E.3.

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**DECLARATION OF Jay Chamberlain**

I, **Jay Chamberlain**, declare under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

**I. Education and Background**

1. I am the Chief of the Revenue and Taxation Section for the California Department of Finance. I have worked for the California Department of Finance for 9 years. Before my current position, I worked at the California Franchise Tax Board performing various revenue estimating functions for 20 years. I received a Ph.D. in economics from the University of California at Davis in 1987.

2. As the California Department of Finance's Chief of the Revenue and Taxation Section, I am responsible for overseeing all major revenue forecasts, including forecasting revenue California will receive from income taxes. The facts stated herein are of my own personal knowledge, and I could and would competently testify to them.

## **II. The Impact of Regulation Best Interest on California**

3. On June 5, 2019, the Securities and Exchange Commission ("SEC") promulgated *Regulation Best Interest: The Broker-Dealer Standard of Conduct*, Securities Exchange Act Release No. 86031, June 5, 2019, published at 84 Fed. Reg. 33,318 (July 12, 2019) ("Regulation Best Interest"). Regulation Best Interest has an implementation date of June 20, 2020.

4. I have been asked by the California Office of the Attorney General to analyze the impact on California state tax revenue of Regulation Best Interest's failure to impose a fiduciary standard on broker-dealers providing investment advice consistent with the fiduciary standard imposed on investment advisers.

5. To the extent that Regulation Best Interest leads to a diminution in the value of retirement accounts, that diminution will directly impact California.

6. First, in California, distributions from tax-deferred retirement plans are taxable just like other income items such as wages and business income and provide revenue to California. *See California Revenue and Taxation Code Sections 17041, 17071, 17072 and 17073.* Reduced balances in these accounts are likely to result in reduced withdrawals. Those reduced withdrawals will translate into less tax revenue for California. In 2017, the total amount of IRA distributions and taxable pension and annuity income reported by California resident taxpayers was \$111 billion.

7. Second, California taxes investment income differently than the federal government. Under federal tax law, net capital gains are taxed at a rate lower than ordinary income rate. *See generally* Internal Revenue Service, Topic NO. 409, <https://www.irs.gov/taxtopics/tc409> (describing capital gains tax rates). Under California law, however, net capital gains are taxed at the same rate as ordinary income. *See California Revenue and Taxation Code Sections 17041, 17071, 17072 and 17073.* To the extent that receiving conflicted investment advice causes economic harm to investors, those harms would not be limited to investment accounts associated with retirement savings. Reduced investment account balances as a general matter would likely reduce gains realized on sales of investments, such as stocks and bonds. As a result, the income realized to California from taxes assessed on that investment income would similarly decrease. In 2017, the total amount of capital gains reported by California resident taxpayers was \$140 billion.

Respectfully submitted,

Date: December [ 27 ], 2019

A handwritten signature in cursive script, appearing to read "Jay Chaudhri".

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**DECLARATION OF MATTHEW F. CLAFLIN**

I, Matthew F. Clafin, declare under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1. I am the manager of the Appeals, Discovery and Processing section at the Oregon Department of Revenue ("DOR"). I have a business degree with emphasis in accounting and auditing, hold a license as a Certified Public Accountant (inactive), and have over 30 years of experience relating to income taxes.

2. While the Oregon DOR is not an authority on federal securities regulations, Oregon's personal income tax structure is based on the federal income tax structure per Oregon Revised Statutes section 316.048.
3. Investment income taxed by Oregon includes:
  - Interest and dividend income
  - Capital gain income, and
  - Retirement income from pensions and retirement plans
4. This income, included in federal adjusted gross income, flows through to the Oregon tax return. Therefore, if the income from investment sources for Oregon residents is negatively affected by the failure of the new SEC Best Interest regulation to adopt a fiduciary standard of care for broker-dealers, and there is no alternative increase to offset the negative impact, the result will be a decrease in Oregon tax revenue.

Respectfully submitted:

Date: December 20, 2019

A handwritten signature in black ink that reads "Matthew F. Clever". The signature is written in a cursive style and is positioned to the right of the date.

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**DECLARATION OF FITZROY LEE**

Fitzroy Lee declares under penalty of perjury pursuant to 28 U.S.C. § 1746 that the following is true and correct:

**I. Education and Background**

1. I was appointed Deputy Chief Financial Officer and Chief Economist for the Office of the Chief Financial Officer, District of Columbia Government (OCFO) in October 2009.

2. Prior to becoming the Chief Economist, I was the Director of Revenue Estimation for the OCFO. I have worked for the Economic Research Service of the United States Department of Agriculture (USDA), where I co-authored a paper on the efficacy of user-fees for funding the meat inspection program. I was also an Assistant Professor of Economics at Tulane University in New Orleans.

3. I have published papers on revenue forecasting and tax policy in nationally recognized academic journals. I served on the board of directors of the National Tax Association and the National Economic Club.

4. I hold a Bachelor of Science degree in Applied Physics and Computer Science from the University of the West Indies (Jamaica) and earned my Ph.D. in Economics at The Andrew Young School of Policy Studies at Georgia State University.

## **II. The Impact of Regulation Best Interest on the District of Columbia**

5. On June 5, 2019, the Securities and Exchange Commission (“SEC”) promulgated *Regulation Best Interest: The Broker-Dealer Standard of Conduct*, Securities Exchange Act Release No. 86031, June 5, 2019, published at 84 Fed. Reg. 33,318 (July 12, 2019) (“Regulation Best Interest”). Regulation Best Interest has an implementation date of June 20, 2020.

6. I have been asked by the District of Columbia Office of the Attorney General to analyze the impact on the District of Columbia’s tax revenue of Regulation Best Interest’s failure to impose a fiduciary standard on broker-dealers providing investment advice consistent with the fiduciary standard imposed on investment advisers.

7. In this analysis, I assume, consistent with multiple studies, that failure to impose a fiduciary standard on broker dealers will result in conflicted advice to investors and harm investors. For example, a 2015 study from the White House Council of Economic Advisers

estimated that retirees would earn returns approximately 1 percentage point lower each year as a result of conflicted advice. *See* White House Council of Economic Advisers, *The Effects of Conflicted Investment Advice on Retirement Savings* 3 (Feb. 2015). The same report found that a retiree who receives conflicted advice when rolling over a 401(k) balance to an Individual Retirement Account (IRA) will lose approximately 12 percent of the value of his or her savings if drawn down over 30 years. *See also* Heidi Shierholz & Ben Zipperer, *Here is what's at stake with the conflict of interest ("fiduciary") rule*, Econ. Policy Inst., 2, 4 & tbl.1 (May 30, 2017), <https://www.epi.org/files/pdf/129541.pdf> (estimating that IRA accounts nationally would lose approximately \$17 billion each year from conflicted advice, with retirees in the District of Columbia losing approximately \$20 million annually).

8. The diminution in value of retirement accounts will directly impact the District of Columbia.

9. First, in the District of Columbia, distributions from tax-deferred retirement plans are taxable and provide revenue to the District of Columbia. D.C. Code § 47-1809.10(b); *see also* 26 U.S.C. § 72(d); D.C. Code § 47-1803.02. The distributions cannot be deducted from the taxpayer's adjusted gross income and remain subject to District of Columbia income tax. *Id.* Reduced balances in these accounts are likely to result in reduced withdrawals. Those reduced withdrawals will translate into less tax revenue for the District of Columbia.

10. The income tax paid by taxpayers on the distributions above provides revenue to the District of Columbia. In 2017, District of Columbia taxpayers reported \$521 million in IRA distributions, of which \$99 million was from taxpayers with less than \$100,000 adjusted gross income. We estimate that annual distributions are 5% of principal or \$2 billion annually, and a 1% reduction in return would mean \$20 million annual loss by taxpayers. We estimate that

lower returns to taxpayers from failure to impose a fiduciary standard on broker dealers could cost the District of Columbia between \$150,000 and \$800,000 in income tax revenue annually with respect to distributions from retirement accounts.

11. Under District of Columbia law, net capital gains are taxed at the same rate as ordinary income. D.C. Code § 47-1806.03(a)(9). The economic harms associated with receiving conflicted investment advice are not limited to investment accounts associated with retirement savings. Reduced investment account balances as a general matter would likely reduce gains realized on sales of investments, such as stocks and bonds. As a result, the income realized to the District of Columbia from taxes assessed on that investment income would similarly decrease.

Respectfully submitted,

Date: December 23, 2019

  
Fitzroy Lee

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**DECLARATION OF MAINE**

DAVID GUNTER, declares under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

**I. Duties and Background**

1. I am an economist in the Office of Tax Policy, Maine Revenue Services. I have worked as a tax economist for Maine since November 2008.

2. In the above capacity, my primary responsibilities include revenue impact analysis of individual and corporate income tax and property tax proposals, income tax revenue forecasting, conducting empirical research on income and property taxes, and the construction and maintenance of microsimulation models and databases used for these tasks.

## **II. The Impact of Regulation Best Interest on the State of Maine**

1. I have been apprised of the following. On June 5, 2019, the Securities and Exchange Commission (“SEC”) promulgated *Regulation Best Interest: The Broker-Dealer Standard of Conduct*, Securities Exchange Act Release No. 86031, June 5, 2019, published at 84 Fed. Reg. 33,318 (July 12, 2019) (“Regulation Best Interest”). Regulation Best Interest has an implementation date of June 20, 2020.

2. I have been asked by the Office of the Maine Attorney General (“Maine OAG”) to identify state tax revenue which may be impacted by Regulation Best Interest’s failure to impose a fiduciary standard on broker-dealers consistent with the fiduciary standard imposed on investment advisers. I have been informed by the Maine OAG of the following: that the Regulation Best Interest creates a standard for broker-dealers that is less than the fiduciary standard; that this means that an individual who holds both broker-dealer agent and investment adviser representative licensures, or securities firms which employ both broker-dealer agents and investment adviser representatives, will be providing clients with advice based on different standards of care; and that because broker-dealer firms and agents are paid through fees and commissions that directly depend on which investments their clients make, the advice they provide is conflicted in that the agent has an incentive to recommend products that make them more money but are not necessarily the best choice for the client.

3. I assume that conflicted advice harms investors, consistent with the extensive literature cited in a 2015 study from the White House Council of Economic Advisers (CEA). *See* White House Council of Economic Advisers, *The Effects of Conflicted Investment Advice on Retirement Savings* 3 (Feb. 2015). This study also estimates that savers receiving conflicted advice earn returns approximately 1 percentage point lower each year, that a retiree who receives conflicted advice when rolling over a 401(k) balance to an Individual Retirement Account (IRA) loses approximately 12 percent of the value of his or her savings if drawn down over 30 years, and that conflicted advice costs IRA holders approximately \$17 billion annually. Another study, based on the national estimates contained in the CEA study, estimates that conflicted advice reduces the annual change in the value of IRA assets held by Maine retirement savers by approximately \$73.3 million. *See* Heidi Shierholz & Ben Zipperer, *Here is what's at stake with the conflict of interest ("fiduciary") rule*, Economic Policy Institute, Table 1, (May 30, 2017), <https://www.epi.org/files/pdf/129541.pdf>.

4. A diminution in value of retirement accounts will directly impact Maine investors and may impact state tax revenue based upon lesser income taxes collected from retirement savers which may not be fully offset by the income taxes collected from broker-dealers or their agents earning more in fees and commissions as a result of providing conflicted advice.

5. More specifically:

- a. The State of Maine raised approximately \$62 million from individual retirement account (IRA) distributions included in Federal Adjusted Gross Income (FAGI) and \$147 million from IRA and pension distributions included in FAGI in tax year 2017.
- b. If the SEC imposes a fiduciary standard on broker-dealers, these sources of taxable income, and consequently tax liability, would increase for taxpayers, taken as a whole, who no longer receive conflicted advice that reduces their investment returns.

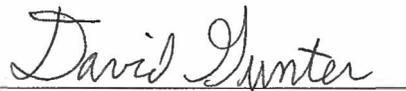
6. Conflicted advice would not only reduce investment returns in retirement accounts but would also affect returns in taxable investment accounts whose owners receive such advice. The state taxes investment income, such as capital gains, dividends, and interest, that are derived from these investment accounts. Moreover, unlike the federal government, the state taxes capital gains and dividend income at ordinary tax rates,<sup>1</sup> increasing the relative importance of capital gains and dividends to state tax revenue.

7. More specifically:

- a. The state raised approximately \$167 million from capital gains income and \$238 million from capital gains, dividends, and taxable interest income combined in tax year 2017.
- b. If the SEC imposes a fiduciary standard on broker-dealers, these sources of taxable income, and consequently tax liability, would increase for taxpayers, taken as a whole, who no longer receive conflicted advice that reduces their investment returns.

Respectfully submitted,

Date: December 20, 2019



David Gunter

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<sup>1</sup> 36 M.R.S. § 5111. For a description of the federal income tax treatment of capital gains and dividend income, see generally Internal Revenue Service Publication 550, *Investment Income and Expenses (Including Capital Gains and Losses)*: <https://www.irs.gov/pub/irs-pdf/p550.pdf>

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19-2893

**DECLARATION OF SCOTT PALLADINO**

Scott Palladino, declares under penalty of perjury pursuant to 28 U.S.C. § 1746, that the following is true and correct:

**I. Education and Background**

1. I am the Deputy Commissioner of the New York State Department of Taxation and Finance (“DTF”). I was appointed to this position in February 2018.

2. As Deputy Commissioner, I oversee the Office of Tax Policy Analysis (“OTPA”), which operates within DTF and is responsible for developing and evaluating tax policy, revenue forecasting and estimation, and related matters.

3. I previously served as Assistant Deputy Commissioner in the Office of Tax Policy Analysis. I was appointed to that position in January of 2011.

4. I previously served for nearly ten years as Deputy Fiscal Director for the Committee on Ways and Means of the New York State Assembly, which has jurisdiction over tax legislation in the New York State Legislature, and as a Senior Policy Analyst at the National Governors Association for nearly three years.

5. I hold a Bachelor’s Degree in Business Administration from Baruch College and a Master’s Degree in Economics from the State University of New York, Albany.

6. My opinions are based on analyses conducted by myself and others at DTF under my direction and supervision, my review of analyses conducted by third parties, and the totality of my professional experience. The following statements are true and accurate to the best of my knowledge.

## **II. The Impact of Regulation Best Interest on New York**

7. On June 5, 2019, the Securities and Exchange Commission (“SEC”) promulgated *Regulation Best Interest: The Broker-Dealer Standard of Conduct*, Securities Exchange Act Release No. 86031, June 5, 2019, published at 84 Fed. Reg. 33,318 (July 12, 2019) (“Regulation Best Interest”). Regulation Best Interest has an implementation date of June 20, 2020.

8. I have been asked by the New York Office of the Attorney General to analyze the impact on New York state tax revenue of Regulation Best Interest's failure to impose a fiduciary standard on broker-dealers providing investment advice consistent with the fiduciary standard imposed on investment advisers.

9. In this analysis, I assume, consistent with multiple studies, that failure to impose a fiduciary standard on broker dealers will result in conflicted advice to investors and harm investors.

10. For example, a 2015 study from the White House Council of Economic Advisers estimated that retirees' investment returns would be approximately 1 percentage point lower each year as a result of conflicted advice. *See* White House Council of Economic Advisers, *The Effects of Conflicted Investment Advice on Retirement Savings* 3 (Feb. 2015). The same report found that a retiree who receives conflicted advice when rolling over a 401(k) balance to an Individual Retirement Account (IRA) will lose approximately 12 percent of the value of his or her savings if drawn down over 30 years. *See also* Heidi Shierholz & Ben Zipperer, *Here is what's at stake with the conflict of interest ("fiduciary") rule*, Econ. Policy Inst., 2, 4 & tbl.1 (May 30, 2017), <https://www.epi.org/files/pdf/129541.pdf> (estimating that IRA accounts nationally would lose approximately \$17 billion each year from conflicted advice, with retirees in New York losing approximately \$945 million annually).

11. The diminution in value of retirement accounts will directly impact New York.

12. First, in New York, distributions from tax-deferred retirement plans in excess of the specified New York State income tax deduction are taxable and provide revenue to New York State. *See* N.Y. Tax Law § 612(c)(3-a). Reduced balances in these accounts are likely to

result in reduced withdrawals. Those reduced withdrawals will translate into less tax revenue for New York State.

13. Specifically, section 612 (c)(3-a) of the New York Tax Law provides that an individual who is at least 59 ½ years old and who has taken distributions from a tax-deferred retirement account during the tax year may reduce his or her annual adjusted gross income up to maximum of \$20,000. N.Y. Tax Law § 612(c)(3-a). Beyond the \$20,000 threshold, however, the distributions cannot be deducted from the taxpayer's adjusted gross income and remain subject to New York State income tax.

14. The income tax paid by taxpayers on the distributions about \$20,000 provide revenue to New York.

15. For example, in 2018, New York taxpayers reported approximately \$19.3 billion in income in excess of the \$20,000 exclusion, all of which would be taxable and provide revenue to New York state. The number of taxpayers reporting such income was approximately 1.3 million. It is highly likely that some portion of these taxpayers' retirement accounts are individual retirement accounts (IRAs) or 401(k) accounts in which the taxpayers' assets are managed by broker dealers, although the data available to me does not enable a precise estimate of that breakdown.

16. Second, under New York law net capital gains are taxed at the same rate as ordinary income. The economic harms associated with receiving conflicted investment advice are not limited to investment accounts associated with retirement savings. Reduced investment account balances as a general matter would likely reduce gains realized on sales of investments, such as stocks and bonds. As a result, the income realized to New York State from taxes assessed on that investment income would similarly decrease.

17. For example, in 2018, New York taxpayers reported approximately \$91 billion in capital gains. The number of taxpayers reporting such income was approximately 1.8 million. Of the \$91 billion in capital gains referenced in this paragraph, it is highly likely that some portion relates to taxpayers whose assets are managed by broker dealers, although the data available to me does not enable a precise estimate of that breakdown.

Respectfully submitted,

Date: December 26, 2019



SCOTT PALLADINO