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CENTER *for* RETIREMENT RESEARCH *at* BOSTON COLLEGE

THE ECONOMIC IMPLICATIONS OF THE DEPARTMENT OF LABOR'S 2010 PROPOSALS FOR BROKER-DEALERS

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Abstract

In 2010, the U.S. Department of Labor (DOL) proposed changes that would eliminate third-party incentive payments, such as 12b-1 fees, that may encourage broker-dealers to sell high-fee mutual funds to Individual Retirement Account (IRA) customers. The investment industry argues that eliminating these fees could force broker-dealers to charge directly for advice, which could result in less advice being provided and customers making poor investment decisions. This paper examines the tradeoff between lower fees and investor mistakes due to forgoing advice. The analysis draws on existing pricing and cost evidence from the United States and on the experience of ongoing reforms in the United Kingdom aimed at lowering fees and improving investment advice. An educated guess suggests that the elimination of 12b-1 fees would reduce IRA customer costs by 4 basis points. If broker-dealers responded by moving customers away from high-cost, actively-managed funds into low-cost index funds, IRA customers could save another 7 basis points on their IRAs. Additional savings might be possible to the extent that actively-managed funds underperform their relevant indices. It is unlikely that broker-dealers would change their business model with respect to the provision of advice as a result of the loss of 12b-1 fees. The paper also uses an inter-temporal optimization model to quantify the potential benefits and costs of reform in the United States. The results of the optimization exercise point to relatively modest potential benefits, but even more modest costs under plausible assumptions. Given the size of the policy problem, several more extensive reforms should be considered to ensure that retirement saving in tax-advantaged accounts is invested more effectively. These ideas include: making it easier to retain accumulated assets in the 401(k) system; 2) making the rollover from a 401(k) to an IRA an ERISA-covered event; 3) extending ERISA to all rollover IRAs; and 4) instituting changes to further control fees in both 401(k)s and rollover IRAs.

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Introduction

Both the U.S. Department of Labor (DOL) and the U.S. Securities and Exchange Commission (SEC) are considering changes that would affect the conduct of broker-dealers serving retail clients. (The DOL issued a formal regulatory proposal in 2010 and is expected to issue a new proposal shortly; the SEC staff made recommendations to the Commission in a 2011 report.) The motivation for the DOL changes is to reduce the likelihood that third-party incentive payments encourage broker-dealers to sell high-fee mutual funds that will substantially reduce ultimate asset accumulations for customers with Individual Retirement Accounts (IRA). The SEC has the broader concern that investors do not recognize the differences in standards to which investment professionals are held and wants to level the playing field.

The two agencies, which administer different statutes, necessarily take different approaches. The SEC would extend fiduciary conduct standards to broker-dealers who provide investment advice to both retirement and non-retirement accounts. The SEC change would mean that broker-dealers must act "in the best interest" of the customers, as opposed to the current standard of "suitability." The new standard would be somewhat higher. The SEC might also require broker-dealers to disclose whether they have a potential conflict of interest – for example, whether they will receive a commission from the provider for selling a particular product.

The 2010 DOL proposal, by broadening the activities that would be considered the provision of advice, would extend *different* fiduciary obligations to anyone who gives advice to IRAs (banks, insurance companies, Registered Investment Advisers, and broker-dealers).[1] This paper focuses on broker-dealers because they account for the bulk of IRA investments and their compensation arrangements involve the most prohibited transactions. The DOL proposal would not require a change in the standard of conduct toward clients, which makes it different from the SEC proposal. Rather, it would make more broker-dealers "fiduciaries" under the Internal Revenue Code (IRC) and thus subject to IRS prohibited transaction rules. Importantly, under the self-

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[1] The DOL proposal would also extend fiduciary obligations to broker-dealers advising 401(k) participants through self-directed brokerage accounts. But given that only a tiny fraction of 401(k) accounts have a self-directed component, this part of the proposal is not the major source of controversy.

dealing provision, it would eliminate third-party fees, such as 12b-1 and other revenue-sharing fees. The 12b-1 fees are paid by mutual fund providers to broker-dealers for marketing, distribution, and servicing expenses; they continue as long as the customer holds the shares; and they provide a clear incentive for broker-dealers to sell high-fee products.

The 2010 DOL proposal, which has been met with a storm of criticism from the investment industry, is the primary focus of this paper. The thrust of the criticism is that a large number of IRAs, especially those with smaller balances, are brokerage accounts. Brokers handling these accounts offer advice in the process of performing transactions, and that advice is often paid for by third-party payments such as 12b-1 fees. According to the industry, eliminating these fees could force brokers to charge directly for their advice by instituting an explicit charge in the form of a percent of assets under management. The industry asserts that such a pricing approach would raise costs generally and, by increasing the visibility of the cost of advice, result in less advice being provided for low- and moderate-income IRA holders.

Thus, the impact of the proposed reform involves assessing the trade-off between: 1) the beneficial effects of lowering fees by eliminating 12b-1 fees and reducing the incentive to sell high-cost, actively-managed funds; and 2) the deleterious effects on saving rates and portfolio allocation of any reduction in the availability of advice.

The paper proceeds as follows. The first section describes the nature of the problem – namely, that, by rolling over money from 401(k)s to IRAs, more people are coming into contact with broker-dealers, and broker-sold products are often expensive. The second section discusses the current regulatory environment and the proposed changes. The third and fourth sections assess the likely impact of the proposed DOL reform on fees, on the provision of advice, and on the industry. The third section makes an educated guess about the potential impact of the proposed DOL reform, drawing on the experience to date of the United Kingdom's Retail Distribution Review, where the evidence suggests that the reform – far more radical than that suggested by the DOL – has lowered fees but not substantially reduced the availability of advice. The fourth section uses an inter-temporal optimization model to identify the benefits and possible costs of reform. The results point to relatively modest potential benefits from eliminating 12b-1 fees, but also show that costs will outweigh benefits only under quite implausible assumptions as to the availability of advice and the mistakes made by those forgoing advice. In short, the modest DOL proposal will reduce fees slightly, have virtually no effect on the business model of broker-dealers, and any diminution in access to advice, which is likely to be small, will have little effect.

Given the modest impact of the DOL proposal, the fifth section offers several more extensive reform options – some could be accomplished through rule-making and some would require legislation. The most extensive would be to subject roll-over IRAs to ERISA's fiduciary standards for those rendering advice, as the money in these accounts comes from the employer plan arena. The same legislation could ban actively-managed mutual funds – and their high fees – from both 401(k) plans and the newly classified IRAs. A less ambitious proposal would clarify that the transition from a 401(k) plan to an IRA is an ERISA-covered event and set a low-fee target date fund as the default within the IRA. Other steps could be taken to keep the money in the 401(k) system, such as requiring employers to accept rollovers from any former 401(k) plan.

The overall conclusion is that additional protections are required in the IRA market. As long as accumulations are held in 401(k) plans, participants are operating in a world in which sponsors must operate as fiduciaries and fees are under a spotlight. Once they roll over their accounts into IRAs, they enter a world where suitability becomes the standard of care and broker-dealers are paid commissions that encourage the sale of high-priced mutual funds. If a fiduciary standard and attention to fees are appropriate for retirement assets when they are in the plan, such safeguards are clearly still appropriate when they are rolled over. The DOL recognizes this logic, but, with its authority limited to defining who is a fiduciary under the IRC, has put forth a very modest proposal.

The Nature of the Problem

The problem is that the average individual who rolls over his 401(k) plan into an IRA enters a world in which broker-dealers face incentives to sell high-fee investments. Fees have a significant effect on how much an individual will have at retirement: an additional 100 basis points over a 40-year period reduces final assets by about one fifth.[2] The problem needs to be addressed because the number of people rolling over into IRAs has increased dramatically, the distinctions between the players in the retail market have become blurred, and the evidence suggests that broker-sold assets are expensive.

Increase in IRA Customers

The demand for IRAs has grown significantly in the wake of the shift in retirement plans from defined benefit to defined contribution – typically 401(k)s. In 1983, the majority of those with an employer-sponsored plan were covered by a defined benefit plan; by 2010, the vast majority relied solely on a 401(k) (see Figure 1). While the changing nature of plans has been widely recognized, the recent shift from 401(k)s to IRAs has received less attention. The increase in IRAs has occurred because individuals roll over their balances when they shift jobs during their worklives and when they withdraw their funds at retirement. By 2010, according to the Federal Reserve's *Survey of Consumer Finances*, 44 million individuals had an IRA (see Table 1). And total IRA assets now exceed the money in 401(k)s (see Figure 2).

The rollover of balances from 401(k)s to IRAs is extraordinary given that participants are typically passive in their interactions with their 401(k) plans. They rarely change their contribution rate or rebalance their portfolios in response to market fluctuations or as they age.[3] Because inertia has been identified as a major problem, reforms have focused on automatic mechanisms, such as automatic enrollment, automatic increases in the default contribution rate, and target date funds.[4] Thus, one would think that the force of inertia would lead participants to leave their balances in their 401(k) accounts until they draw them down in retirement. The fact that they actually take the trouble to move their funds suggests a strong motivating force. Some households may be attracted by the opportunity to obtain a wider menu of investment options or to consolidate their account holdings. But others may be seduced by advertisements from

[2] The calculations assume real stock and bond returns of 7 percent and 3 percent respectively, a stock asset allocation of two thirds, 40 years of savings, and real wage growth of 1.1 percent per year. If individuals respond to the decline in projected balances by saving more, the ultimate impact on wealth at retirement will be smaller.
[3] Munnell and Sundén (2004); and Ameriks and Zeldes (2001).
[4] Madrian and Shea (2001); Thaler and Benartzi (2004); and Young (2012).

financial service firms urging participants to move their funds out of their "old," "tired" 401(k) plan into a new IRA.[5]

The assumption by participants must be that the firms advertising rollovers are operating in the participants' interest, but, in fact, participants are very often moving from being protected by a fiduciary, low-fee environment into a relatively unprotected and potentially high-fee arena.[6]

Blurring of Distinction between Retail Financial Service Providers

The landscape for retail financial services used to be quite simple. Investment advisers provided expert assistance for retail customers in selecting financial instruments.[7] A separate group of traditional broker-dealers facilitated the buying and selling of financial instruments and any advice they provided was incidental. Investment advisers were required to register with the SEC under the Investment Advisers Act or with their state securities authority, while traditional broker-dealers were not.[8] The retail customers were typically higher-income individuals, who had their retirement provided by defined benefit plans and were investing supplementary resources.

At the same time that the number and type of people dealing with broker-dealers has increased, the distinction between investment advisers and broker-dealers has become blurred. Banks, mutual funds, stockbrokers, investment advisers, insurance brokers, and financial planners offer

[5] A Charles Schwab ad shows a man with a 1980s boombox and the tag line "Let's talk about that 401(k) that you picked up back in the '80s." Merrill Edge (launched by Bank of America, owner of Merrill Lynch) depicts a woman with her arms spread and the phrase "Catching up with my old 401(k)s." TDAmeritrade shows a sad young woman with writing in the background that says "roll over your old 401(k)." Fidelity's "follow the green line" campaign includes an ad with a woman speaking to a Fidelity representative about how to roll over her "old 401(k)."
[6] This situation generally holds for 401(k) participants at large firms. 401(k) participants at small firms sometimes face higher fees, in which case they may be able to reduce expenses by rolling over 401(k) assets to an IRA.
[7] Frankel (2011) argues that financial markets have grown considerably more complex and that the "contract model" that has prevailed for 60 years should therefore be eliminated, and broker-dealers should, instead, be held to a fiduciary standard.
[8] The SEC website sets out the criteria for state registration: "Investment advisers that are prohibited from registering with the Commission (e.g. advisers that do not have assets under management of $25 million) generally must register with the state(s) in which they transact advisory business (e.g., have advisory clients or have a place of business), unless they are exempt from investment adviser regulation under state law. These advisers will be regulated primarily under state law administered by state securities authorities, rather than federal law administered by the SEC."

a wide variety of investment products and services. In some cases, the roles performed by these service providers overlap. For example, a financial planner who trades securities for a client must also be a broker-dealer. Brokers no longer merely execute trades, but also advise on asset allocation and portfolio selection. Many brokers through advertising and by referring to themselves as “financial planners” or “financial consultants” suggest that their services include planning or consulting services that also involve expert advice. Many individuals and firms that call themselves “financial advisers” may not be considered investment advisers under the law; instead they are regulated as broker-dealers.[9]

Since the IRA market is the retail segment that falls under the DOL’s interpretive authority, it is useful to look at the types of arrangements that individuals have with their financial service provider. Basically, IRA holders investing in stocks, bonds, and mutual funds can have an advisory or a brokerage relationship or both.[10]

Advisory IRAs include those accounts with ongoing services, such as investment-specific advice, portfolio allocation recommendations, active monitoring, and investment suitability assessments. These accounts involve a relationship with an investment adviser or a dual-registered broker, generally are fee-based, and tend to represent the most expensive model. Data from a survey by industry consultants suggest that the share of IRAs using an advisory relationship is miniscule for those with low balances and increases to 34 percent for those with balances greater than $250,000 (see Figure 3).

Brokerage accounts come in two forms: full-service and discount. Full-service account holders have access to a registered broker on an infrequent, point-of-transaction basis. Brokers receive payment in the form of *direct* transaction-based commissions, periodic account fees, and *indirect* commissions through mutual fund loads and 12b-1 fees.[11] These payments are typically less than those in advisory accounts but more than those charged by discount brokers.

[9] Bromberg and Cackley (2012).
[10] As noted in the introduction, a minority of IRA assets (18 percent as of 2012:1 according to the Federal Reserve’s Flow of Funds) are invested with depository institutions, credit unions, and insurers.
[11] 12b-1 fees, discussed further below, are paid to brokers by mutual funds from management fees levied on investors.

The discount brokerage model offers the least in financial advisory services and access. Investment decisions are typically self-directed with access limited to branch and call centers and a library of tools to help the investor transact online. Fees within the discount brokerage model are the lowest of the three and are incurred typically through transaction-specific commissions, modest periodic account fees, and indirect charges.

Each component of the IRA market will be affected differently by the DOL's proposal to limit third-party fees. Individuals dealing with registered investment advisers, who are regulated by the SEC, and those investing through discount brokers, whose fees are already low, will be the least affected.[12] It is the middle group – those who have full-service brokerage accounts – that will be most impacted. As discussed below, they could gain, for example, from a reduction in fees as 12b-1 fees are rebated or eliminated and as they are directed to low-cost index funds. These gains, however, could be offset if making the cost of advice more transparent leads to a decline in advice and poor decisions by investors concerning asset allocation (how a portfolio is allocated between asset classes) and portfolio selection (which securities are held within each asset class). Unfortunately, the industry data do not indicate how IRAs are distributed between discount and full-service brokers.

To the extent that the concern is the impact of the change on low- and middle-income households, it is useful to look at who holds IRAs by household income. Roughly one third of households with IRAs fall in the bottom three quintiles of the income distribution (see Table 2). These lower income households are likely to have smaller balances and a brokerage rather than an advisory relationship.

High-Cost Investments

When investing, households need to know: 1) how much to save; and 2) how to invest their

[12] While the statement is generally true, some Registered Investment Advisers receive compensation that would be prohibited if they newly became fiduciaries under a new DOL rule and some of the computer model advice given through discount brokers could become fiduciary advice.

savings to optimize the trade-off between risk and return. This trade-off involves making decisions about asset allocation and portfolio selection. Although financial advisers can perform a valuable service by advising households how much to save, how to diversify, and how to select an appropriate asset allocation, in the current system this advice appears to come at high cost.

Mullainathan, Noeth, and Schoar (2012) report that instead of steering clients towards low-cost index funds, advisers often encourage investment in high-cost, actively-managed funds. Many studies have also shown that actively-managed funds underperform index funds, even before accounting for the higher fees charged by the former.[13] But broker-sold mutual funds perform worst of all. Bergstresser, Chalmers, and Tufano (2009) estimate that broker-sold funds underperform average actively-managed stock funds by 23 to 255 basis points a year. Cumulated over a 40-year working career, the disparity between the performances of broker- and direct-sold funds substantially reduces wealth accumulated by retirement. Further, Gil-Bazo and Ruiz-Verdu (2008, 2009) argue that fee-setting by the brokerage community involves charging higher fees on funds with lower expected returns to extract surpluses from unsophisticated investors. Researchers found that brokerage-advised accounts for participants in the Oregon University System's defined contribution plan underperformed self-directed accounts and target date funds while taking on more risk. The underperformance was significant – 154 basis points – and the total difference is even larger once fees are taken into account (Chalmers and Reuter, 2012).

Used as stock and mutual fund pickers, brokers and financial advisers can destroy value. But it does not necessarily follow that households would be better off on their own. Bergstresser, Chalmers, and Tufano (2009) hypothesize that brokers may perform valuable services, not only advising households on saving rates and asset allocation, but also putting a brake on behavioral biases, for example by dissuading clients from panic-selling during market downturns. It is difficult to test these hypotheses because households using brokers may differ in terms of financial knowledge, risk aversion, and temperament from those who invest on their own. But a later section of this paper presents an optimization model that calculates how large the impact on

[13] For example, see Malkiel (1995, 2005).

these behavioral biases would need to be in order to offset the impact of fees.

Thus, as noted in the introduction, the impact of the proposed reform involves a trade-off between: 1) lower costs as a result of eliminating 12b-1 fees and getting rid of incentives to invest in high-cost, actively-managed funds; and 2) any harm created by a reduction in the availability of advice on saving rates and asset allocation.[14]

The Current Regulatory Environment and Proposed Changes

For households holding IRAs, the providers of financial services may well look very similar, but they are regulated by two different entities that apply different standards of conduct.

The Current Regulatory Environment

Investment advisers are regulated by the SEC under the Investment Advisers Act of 1940, and the courts have construed the legislation to require that they act as fiduciaries when providing advice to their clients. The fiduciary standard, which applies to the adviser's entire relationship with his clients, imposes a duty of loyalty and care.[15] The duty of loyalty requires that the fiduciary act in the best interest of the client regardless of the financial implications for the fiduciary. The duty of care requires that fiduciaries investigate to ensure they are providing accurate and complete information to their clients. An adviser who has a material conflict of interest must either eliminate that conflict or fully disclose all material facts relating to that conflict. Investment advisers have traditionally derived most of their revenue from higher

[14] Industry advocates have argued that, under the DOL's proposal, investors would end up paying "twice" for investment advice. If the investor's advisor cannot be compensated via 12b-1 fees from the fund he sells or revenue sharing from the fund's adviser, then he will have to charge the investor directly for his advice. But the fund will not lower its expense ratio, so the investor will still pay the same 12b-1 fees and management fees. (See, for example, Fischel and Kendall 2011). This argument is unpersuasive for two reasons. First, it ignores the likelihood that the advisor who charges directly will simply recommend a lower cost alternative fund. Second, while it may be true that one advisor shifting from indirect compensation to direct charging would have no impact on funds' 12b-1 or management fees, outlawing such indirect compensation for a large market segment should create competition that would push such fees down.

[15] The fiduciary standard applies to the entire advisory relationship, but dual registrants may act as both an adviser and a broker for the same client, operating under different rules when providing different services in connection with different accounts.

income/higher net worth clients and are typically compensated on the basis of assets under management.

Registered representatives of broker-dealers are regulated under the Securities Exchange Act of 1934 through a self-regulatory organization, the Financial Industry Regulatory Authority (FINRA). Brokers and dealers historically were excluded from the definition of advisers under the Investment Advisers Act and thereby from having to comply with the Act's fiduciary standards so long as: 1) the provision of advice is 'solely incidental' to the conduct of business as a broker-dealer; and 2) no 'special compensation' is received for the advisory services. Over the years, however, broker-dealers began to drift into the domain of activities of investment advisers; financial planners emerged as a group of providers that offered a wide range of services; and discount brokers and fee-based accounts further muddied the waters.[16] In response to the blurring of the lines, the SEC in 1999 issued a notice of proposed rulemaking and in 2005 finalized rules that clarified the circumstances under which investment advice from a broker-dealer would be 'solely incidental.' Soon thereafter, the Financial Planning Association challenged the new rule in court and prevailed.[17] The SEC rescinded the rule and began a review of the regulation of broker-dealers and investment advisers.

Broker-dealers must meet a standard of suitability when providing information about financial products and are not required to act solely in the interest of their customers, as specified under ERISA for fiduciaries of employer-sponsored plans. But they do have an obligation to treat their customers fairly, consistent with standards of their profession: their recommendations must be reasonable given their customer's financial situation; they must provide timely and accurate information; and they must disclose conflicts of interest, and so forth.[18] The standard of suitability for broker-dealers raises the possibility that they or their representatives can recommend products that are not necessarily in the interest of the client, but might be considered potentially suitable given the customer's characteristics and needs.

[16] For a more extensive discussion, see RAND Institute for Civil Justice (2008).
[17] *Fin. Planning Ass'n v SEC*, 375 U.S. App. D.C. 389, 2007.
[18] Wrona (2012) argues that interpretations of the suitability standard and other FINRA rules impose detailed and rigorous standards of conduct on broker-dealers.

Broker-dealers have entered the advice business either by relying on the 'solely incidental' exemption of the Investment Advisers Act or by becoming dually registered as investment advisers to provide fee-based advisory services. Broker-dealers generally provide advice focused on specific products or transactions and generally do not monitor a client's financial position on an ongoing basis. They are compensated on a commission basis.

Neither investment advisers nor broker-dealers are regulated under ERISA, which applies to employment-based plans such as 401(k)s and defined benefit plans.

Proposals for Change

Both the SEC and the DOL are considering changes that would affect broker-dealers.

SEC. The SEC proposal grows out of the 2010 Dodd-Frank "Wall Street Reform and Consumer Protection Act," which required a study to assess the adequacy of the existing legal standards for personalized investment advice.[19] The study recommended the adoption of a uniform fiduciary standard for investment advisers and broker-dealers that would require them, when dealing with retail customers, to act in the best interest of the customer without regard to their own financial interest. [20] The industry acknowledges that the cost of demonstrating that their recommendations are not merely suitable but in their client's best interests would be modest. Even under current law, "brokers must know their clients and only recommend products that are suitable based on a particular client's needs, time horizon, and risk profile" (Insured Retirement Institute 2011).[21]

DOL. The DOL proposed changes that would result in broker-dealers being classified as "fiduciaries" under the Internal Revenue Code when providing investment advice for IRAs. As such, they would be subject to IRS prohibited transaction rules (see Figure 4). Specifically,

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[19] An earlier draft of the Dodd-Frank legislation would have eliminated the broker-dealer exemption from the definition of investment adviser under the Investment Advisers Act of 1940.

[20] The extension of fiduciary status under ERISA and the Internal Revenue Code does not in itself result in fiduciary status under the securities law or coverage under the Investment Advisers Act of 1940.

[21] Wrona (2012) argues that the requirements on broker-dealers are detailed and rigorous, under interpretations of the suitability standard and other FINRA rules, and in some respects may be more demanding than the requirements for investment advisers.

under this anti-self-dealing provision, the proposal would prevent broker-dealers from receiving third-party payments, such as 12b-1 fees. The prohibition on 12b-1 fees would apply only to the approximately 20 percent of total mutual fund assets held in IRAs.[22] Several points are important here, because the industry reaction suggests considerable misunderstanding.

First, the DOL proposal does not change the general standard of conduct required of broker-dealers. They can continue to operate under a suitability standard rather than the "solely in the interest" standard required of ERISA fiduciaries. Thus, studies showing the additional hours required to satisfy the higher standard (for example, Oliver Wyman 2011) appear to be in error, since the standard of conduct would not change.

Second, substantial confusion appears around the prohibition of commission payments.[23] Here it is useful to distinguish between two types of commissions. The first is transactional commissions that broker-dealers receive for the purchase or sale of stocks, bonds or mutual funds. The second is ongoing payments from mutual funds. At this point, the DOL proposal would subject brokers who advise IRAs to a prohibition against only the second type of commission, which the agency fears could incent broker-dealers to sell clients excessively expensive products.

Third, the mechanism through which the DOL can make this change is the agency's ability to define who is a fiduciary under ERISA and/or the tax code by reason of giving advice.[24] In 1975, the agency issued a five-part test that said that people are providing investment advice if they: 1) make recommendations on investing in, purchasing or selling securities or other property, or give advice as to their value; 2) on a regular basis; 3) pursuant to a mutual understanding that the advice; 4) will serve as a primary basis for investment decisions; and 5) will be individualized to the particular needs of the plan. Many broker-dealers avoid fiduciary

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[22] In 2011, total mutual fund assets amounted to $11.6 trillion, and mutual funds in IRAs amounted to $2.2 trillion (Investment Company Institute 2012).
[23] See, for example, American Benefits Council (2011); Insured Retirement Institute (2011); and Investment Company Institute (2011).
[24] ERISA gives DOL authority to define "fiduciary" for ERISA purposes. This authority was extended to IRAs under a subsequent reorganization plan that divided up responsibilities (Office of the President of the United States 1978).

status by including disclaimers in their written agreements with IRA holders, for example explaining that their advice will not constitute a “primary basis” for the IRA holder’s decisions or will not meet some other prong of the test.[25]

The DOL proposal would sweep more broker-dealers into fiduciary status under the Internal Revenue Code by replacing the five-part test with a new test. Under the new definition, a person would be a fiduciary if he performs one of the following activities for a fee: 1) appraisals or fairness opinions concerning the value of securities or other property; 2) recommendations as to the advisability of investing in, purchasing, holding or selling securities or other property; or 3) recommendations as to the management of securities or other property, and if he meets one of four specified conditions: 1) represents to a plan, participant or beneficiary that he is acting as an ERISA fiduciary; 2) already functions as an ERISA fiduciary to the plan by virtue of having any control over the management or disposition of plan assets, or by having discretionary authority over the administration of the plan; 3) operates as an investment adviser under the Investment Advisers Act of 1940; or 4) provides the advice pursuant to an agreement or understanding that the advice may be considered in connection with investment or management decisions with respect to plan assets and will be individualized to the needs of the plan.

Assessing the Impact

This section makes an educated guess at the potential impact of the DOL proposal and then, as a consistency check, looks at the expectations for a similar, though more radical, approach in the United Kingdom.

A Likely Outcome for the United States

The most important aspect of the DOL proposal is that, with respect to IRA transactions, it would prohibit broker-dealers who give investment advice from receiving payments from mutual

[25] Their written material often includes phrases like "although we meet with you to discuss your needs, the advice is not individualized," or "the assistance is educational in nature and should not be interpreted as recommendations; you should make your own decision," etc.

funds. (It would also prohibit revenue sharing from other parties, such as advisers to mutual funds, and selling out of the broker-dealer's own inventory.) The goal is to eliminate incentive payments to broker-dealers for selling IRA customers high-cost funds. These payments are primarily 12b-1 fees, which amount to 25 basis points or less for no-load funds and are paid to the broker-dealer for as long as the customer holds the shares.[26] Most likely, mutual fund producers will continue to make the payments because IRAs are only a small portion (about 20 percent) of the mutual fund market, in which case the broker-dealer will be required to rebate the payment to the customer. If nothing else changes, customers will see their fees decline by the amount of the 12b-1 fees. 12b-1 fees were reported to amount to $9.5 billion for all mutual funds in 2009, a year when mutual fund assets were roughly the same as 2011.[27] Assuming that the share of fees attributable to IRA customers is 20 percent, they should expect to receive rebates of about $2 billion.

In addition to receiving rebates, IRA customers would gain from the DOL proposal to the extent that broker-dealers have less incentive to put them into high-fee funds. Since the high-fee funds tend to be actively managed (see Figure 5) and an extensive academic literature has documented that managed funds – at least in the equity arena – do not outperform the benchmarks, IRA holders would benefit by being directed to index funds, in which returns tend to be higher and fees significantly lower.[28]

[26] 12b-1 fees are explicitly limited to 25 basis points or less for funds identifying themselves as "no-load" funds. This restriction does not apply to load funds, whose 12b-1 fees are capped at 100 basis points. For further details, see Investment Company Institute (2004).

[27] Schapiro (2010).

[28] A substantial literature analyzes whether mutual funds outperform benchmark indices before or after fees. A consistent finding is that, net of expenses, actively-managed funds underperform relevant indices. But the magnitude of the underperformance is sensitive to the period covered, the model specification, the choice of index, and the use of controls to correct for survivor bias. Malkiel (1995) concluded that, over the period 1982-1991, the average general equity mutual fund underperformed the S&P500 index by 183 basis points. Gruber (1996) estimated the average underperformance of actively-managed equity mutual funds at 194 basis points over the period 1985-1994, but this dropped to 65 basis points after controlling for fund characteristics. Malkiel (2005) estimated the underperformance of equity funds at 224 and 252 basis points over the 29 and 10 years ending December 31, 2003. In contrast, Wermers (2000) found that, over the period 1975-1994, mutual funds outperformed the CRSP value weighted index (a broad market index) by 130 basis points before expenses, but underperformed by 100 basis points after expenses. Using data from 1984 to 2006, Fama and French (2010) concluded that pre-expense returns are close to those of the market portfolio, and that, net of expenses, funds underperform the market by 81 to 100 basis points.

An open question is whether broker-dealers would take actions to offset the loss of the $2 billion. The first step is to put the $2 billion in perspective. According to the SEC, total broker-dealer revenues in 2010 amounted to $247.8 billion (see Table 3).[29] Trading gains and profits from underwriting, which amounted to $48.4 billion, could be subtracted to get a better measure of income from managing other people's money. This adjustment produces a figure of about $200 billion. Thus, the loss of 12b-1 fees for mutual funds in IRAs ($2 billion) would amount to about 1 percent of their total (non-trading/non-underwriting) annual revenue ($200 billion). Broker-dealers could respond in a number of ways. First, they could simply accept lower profits. Second, they could make up the loss by increasing the price of transactional commissions, although such an increase might drive some customers to discount brokers. Third, they could raise their volume of transactional commissions by increased buying and selling of securities. Or fourth, they could institute platform charges; such charges are not prohibited because they are paid by the client and cover account administration.

Alternatively, broker-dealers could make up the $2 billion by shifting to fee-based advisory accounts. Critics of the DOL proposal have argued that charging a percent of assets under management would result in small investors facing substantial additional costs, and in many households forgoing advice (Oliver Wyman 2011). The obvious question is whether broker-dealers are going to change what has been viewed as a successful business model in response to a 1-percent decline in revenues. It seems unlikely. But if broker-dealers did change their business model, the outcome could be positive or negative.

In most markets, transparency of charges is thought to benefit consumers because it enables them to base their consumption decisions on a proper understanding of the cost of the product. The concern of the industry must be that households may not be willing to pay for financial advice. This problem is not unique to financial services; in a market economy, sellers are expected to make the business case for purchase of their product or service.

A second concern is that, if broker-dealers were to adopt a fee-based approach, charges may

[29] U.S. Securities and Exchange Commission (2012).

increase. According to industry advocates, typical asset management fees exceed typical commissions (Oliver Wyman 2011).[30] It is not clear, however, whether this alleged differential reflects differences in costs of provision, scope of services, or in willingness to pay. If the latter explanation is more correct, then a simple comparison of the two models will overstate the additional cost. Alternatively, asset-based pricing may be more expensive if it is associated with a higher quality of care. Although the proposed DOL rule does not impose a "sole interest" fiduciary standard, broker-dealers who switched from transaction to asset-based charging would likely be subject to the Investment Advisers Act of 1940, which does require a full fiduciary standard. Even so, advisers already gather much of the information required to make "sole interest" recommendations, so the shift might result in only modest additional costs (Insured Retirement Institute 2011).

Thus, the best prediction of the impact of the DOL proposal is that broker-dealers will not take any offsetting actions and fees will decline. The minimum decline would be the rebate of the 12b-1 charges, about 4 basis points on total IRA assets.[31] Any additional reduction in fees depends on the extent to which broker-dealers steer customers away from actively-managed mutual funds (with expense ratios of 93 basis points for equity funds and 66 basis points for bond funds, including 12b-1 fees) and towards index funds (14 basis points). If one third of mutual fund assets (including both equity and bond funds) were shifted to low-fee index funds, total IRA fees could fall by another 7 basis points.[32] Additionally, if one believes the estimates

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[30] The Wyman report omitted indirect fees like 12-b1. In response to a DOL request, they later provided this piece, which narrowed the gap between asset-based and commission (plus indirect) fee-based costs. Still, it is unclear whether full service brokerage is less expensive than asset-based advisory account charges, since Wyman included both full service and discount brokerage without any breakdown. Moreover, Wyman assumes that if brokers were to charge directly, they would charge prices as high as investment advisers even though they would be providing more limited services.

[31] Total IRA assets amount to $5,126 billion, so IRA 12b-1 fees of $2 billion amount to about 0.04 percent of assets, or 4 basis points.

[32] The 7-basis point estimate is derived as follows. The first step is to estimate the percentage of mutual funds levying 12b-1 fees. If these fees average 25 basis points, and 45 percent of IRA assets is invested in mutual funds (as reported in Investment Company Institute 2012), an estimate of $2billion of IRA 12b-1 fees is consistent with one-third of IRA mutual funds levying such fees. Using data from the Investment Company Institute (2012), we then assume that fees are reduced on one third of the 45 percent of IRA assets invested in mutual funds. We further assume that 64 percent of such assets are invested in stock funds, and the remaining 36 percent in bond funds, and that fees on stock funds decline from 93 to 14 basis points, and fees on bond funds from 66 to 13 basis points. The final step is to subtract the assumed saving in 12b-1 fees.

that actively-managed equity funds underperform index funds by as much as 224 basis points as reported in Malkiel (2005), then a shift of one third of IRA mutual fund assets to index funds could produce another 13 basis points, but that should be considered a maximum.[33] A reduction in fees between 4 basis points and 24 (4+7+13) basis points would save the consumer between $2 billion and $12 billion. This modest gain for consumers is unlikely to cause a meaningful disruption in the provision of advice.

Speculation from the United Kingdom

In order to assess whether such an outcome is a reasonable prediction for the U.S. DOL proposal, it is useful to look at the U.K.'s Retail Distribution Review (RDR) program, which was launched in 2006 in response to mis-selling scandals.[34] The program, which comes into full effect at the end of 2012, has three objectives: 1) to create a transparent system for charging for financial advice; 2) to ensure that consumers understand whether the advice they are receiving is independent or restricted; and 3) to improve professional standards and knowledge.[35] To achieve these objectives, the program: 1) prohibits financial advisers from receiving all but transaction commissions; 2) requires advisers to disclose whether they are independent, providing unbiased and unrestricted advice; and 3) requires advisers to subscribe to a code of ethics, hold appropriate qualifications, and undertake continuing professional development.[36]

The RDR program is considerably more extensive than the DOL proposal for a number of reasons. First, it affects both retirement and non-retirement accounts. As noted earlier, in the

[33] The 13 basis points equals additional underperformance of 224 minus 93 basis points, multiplied by the 45 percent of IRA assets invested in mutual funds, the 64 percent of IRA mutual funds invested in stocks, and the one third that is assumed to switch from underperforming actively-managed funds to index funds. The calculations further assume that bond mutual funds do not underperform relevant indices, after accounting for fees.

[34] Between 1988 and 1994, more than three million people were incorrectly advised to take out personal pension plans when they would have been better off in their employer scheme. This situation was followed by a scandal in which as many as five million households were sold interest-only mortgages, with repayment to be effected through an endowment policy, being incorrectly informed that their policy was guaranteed to pay off their mortgage. Between 2000 and 2002, about 25,000 individuals lost money in a split capital investment trust scandal, losing as much as £600 million. Finally, as many as 12 million individuals may have been mis-sold payment protection insurance over the past 10 years, leading banks to reserve £7.5 billion.

[35] Financial Services Authority (2011).

[36] Complementing the above reforms is an attempt to increase household "financial capacity." The Money Advice Service, established in 2010 as the Consumer Financial Education Body, is responsible for enhancing the public's understanding and knowledge of financial matters and their ability to manage their financial affairs.

U.S., IRAs hold only 19 percent of mutual funds. Second, total expense ratios on mutual funds are larger in the United Kingdom than in the United States.[37] Third, starting after 12/31/12, the program *requires* that customers are charged explicitly for advice, whereas the DOL proposal has no such requirement. Fourth, the United Kingdom requires a comprehensive and fair analysis of the relevant market, a higher standard than the suitability standard currently required for broker-dealers in the United States.[38]

The question is how the RDR is expected to affect fees.[39] According to experts at the U.K.'s Financial Services Authority (FSA), prior to the RDR, annual management charges on actively-managed unit trusts have averaged around 150 basis points. Post-RDR, the FSA estimates that product manufacturers initially will charge a price of about 75 basis points. An increasing proportion of investors use a "platform" to invest in a portfolio of mutual funds, which will charge 25 basis points. At these cost levels, the fee will decline by 50 basis points, before accounting for the cost of advice, which will be charged separately.

The projected post-RDR fees are still quite high. Surveys suggest that the cost of index funds can be as low as 10 basis points, and those of globally-diversified, actively-managed portfolios can be as low as 51 basis points.[40] Platforms are available for close to zero out-of-pocket cost.[41] If advisers are required to undertake a "comprehensive and fair analysis of the relevant market," it is hard to see how product and platform costs of 75 and 25 basis points, respectively, can

[37] In the United Kingdom, mutual funds are referred to as "unit trusts." Khorana, Servaes, and Tufano (2009) report total sales charges on U.K. and U.S. equity funds at 248 and 153 basis points respectively, and total sales charges on bond funds at 173 and 105 basis points, respectively. Total sales charges include sales loads, where appropriate.

[38] Intermediaries are also permitted to provide "restricted advice," recommending products supplied by a single financial institution. An intermediary providing "restricted advice" must disclose the fact. He will not carry out a "comprehensive and fair analysis of the relevant market," but must ensure that any recommendations are "suitable" (see Financial Services Authority 2012).

[39] The focus of the analysis is the "fee wedge" for investment products. Data are not yet available on post-RDR insurance product prices, and many products have been redesigned in ways that render price comparisons difficult.

[40] For example, the Vanguard FTSE 100 ETF has a total expense ratio of 10 basis points. The Association of Investment Companies publishes data on the ongoing charges of closed-end investment funds. Ongoing charges for global growth and income funds average 73 basis points, but charges can be as low as 51 basis points.

[41] Platforms currently receive rebates from unit trusts, which some pass on to their clients. These rebates will be prohibited by the RDR. Platforms are currently revising their pricing to reflect this prohibition. Offerings include on-line dealing charges as low as £9.95, with either a zero or nominal annual charge. Except for the smallest accounts, these charges would be far less than 25 basis points, consistent with our very low estimates of the costs of maintaining platforms.

survive. But financial advisers may continue to recommend high-cost, actively-managed unit trusts that they know and understand. Indeed, a recent financial report notes that publicly-traded unit trust companies have reported that they do not expect the RDR to adversely affect their profitability.[42]

The other issue is the impact of the RDR on the cost and availability of advice. The RDR requires households to make an explicit payment for advice. The cost of that advice depends on hours required and hourly rates. The Association of British Insurers (2010) estimated the average time for the full advice process at 7.5 hours. Based on an hourly labor cost of £200 (Ernst and Young 2011), this estimate equates to a per-client cost of £1,500.[43] It is as yet unclear whether clients will be willing to pay that level of charges.[44] Some indication can be obtained from surveys of advisers' career plans. Atkin et al. (2011) show that just 8 percent of retail investment advisers reported planning to cease retail advice after 2012. [45] Those planning to quit included a disproportionate number of older advisers. An earlier study (Deloitte LLP 2009) found that only 21 percent of advisers thought they would be unable to move to adviser-based charging, with an additional 33 percent being unsure.[46] The findings suggest that the majority of U.K. advisers think that they will be able to sell their services. Thus, at least at this point, the U.K. reform is not anticipated to disrupt the availability of advice.

In short, reform proposals both here and in the United Kingdom involve a trade-off between the gain from lower fees and any adverse effect from the loss of advice. An overall assessment requires some measure of what consumers might lose if they did not have advice and how that loss compares to the effect of lower fees. The optimization model, described below, attempts to provide such magnitudes.

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[42] St James's Place Wealth Management (2012).
[43] Financial advisers spend considerable amounts of time developing sales leads. Post-RDR, instead of selling a financial product, advisers will be selling a financial plan that may or may not include the use of financial products. But they will still be selling, and must still devote time to prospecting. The 70-percent utilization rate assumed by Ernst and Young (2011) may be too high, resulting in an understatement of costs.
[44] Charges can be paid out of invested assets, making them less visible than they would be if households were required to write a check.
[45] Oxera (2009).
[46] Deloitte LLP (2009).

The Optimization Model

Any U.S. reform will likely reduce fees to some extent, thereby improving net returns for investors. Bolder reforms will likely yield larger improvements. With higher net returns, households can save less to achieve any given level of retirement income and will be able to enjoy higher consumption both before and after retirement. The purported risk is that reform may cause broker-dealers to limit the availability of financial advice, resulting in households choosing inappropriate asset allocations, failing to diversify their portfolios, and failing to save enough for retirement.

The optimization model is first used to calculate risk-adjusted measures of the impact of excessive fees and the risk of making financial mistakes on lifetime consumption for investors holding *all* of their financial assets in IRAs. The impact on investors with only part of their financial assets in IRAs will be proportionately less. Although reforms are unlikely to significantly reduce the availability of financial advice and thus impose offsetting costs, the above calculations are then used to investigate the terms of a potential trade-off between lower fees and poorer financial decision-making. It shows that although it is possible to construct scenarios in which costs exceed benefits, those scenarios require quite extreme assumptions about the percent of households forgoing advice and the types of mistakes made by those that forgo advice.

The exercise starts by calculating optimal behavior for a household facing mortality risk and labor market uncertainty.[47] Data limitations and the limits of computational feasibility require simplifying assumptions. The model is described in more detail in the appendix. The goal of the household is to maximize expected discounted lifetime utility. In each period, the household chooses how much to save and how to allocate its portfolio between stocks and a risk-free

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[47] The logarithmic mean and standard deviation of real stock returns are assumed to be 6.5 percent and 20 percent, respectively. Bonds are assumed to yield a 3-percent, risk-free real return. In reality, the real yield on long-dated bonds fluctuates considerably, while there is also considerable evidence that stock returns exhibit mean reversion. Campbell and Viceira (2002) show that long-term bonds are the true risk-free asset for long-term investors because they provide a guaranteed income. If stock returns exhibit mean reversion, then the optimal equity allocation should reflect whether expected returns are high or low relative to the long-run average. But incorporating the above features would greatly complicate our model, without yielding any important additional insights.

bond.[48] The household chooses the market portfolio that offers an optimal trade-off between risk and return. The household participates in Social Security. It invests in stock and bond index mutual funds with expense ratios of 14 and 13 basis points, respectively.[49] The model assumes a coefficient of risk-aversion of five.

Benefits of Lower Fees

The exercise first considers the potential benefits from reducing fees, measured as the percentage of salary that a household would pay to avoid a high-fee investment. That is, it calculates the percentage of salary that would leave the household indifferent between the optimal portfolio and a higher-fee portfolio.[50] It assumes that households change neither their portfolio allocation nor their saving rate in response to the decline in net returns, so the calculations represent an upper-bound estimate of required compensation.

The model considers three scenarios: 1) 12b-1 fees are eliminated, resulting in an increase in net-of-fee returns of 4 basis points; 2) the returns on actively-managed stock and bond mutual funds are reduced by fees in excess of those for low-cost index funds; and 3) the returns of actively-managed *equity* funds are reduced by the excess fees *and* by underperformance relative to the relevant indices as reported in the literature. The model assumes that actively-managed stock and bond funds have expense ratios of 93 and 66 basis points, respectively.[51] Estimates of the extent to which the average actively-managed stock mutual fund underperforms relevant market indices vary considerably. The calculations assume, based on Malkiel (2005), an upper bound estimate of 224 basis points (including the impact of fees).

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[48] The model does not distinguish between 401(k), IRA, and non-retirement financial assets. Most households hold little financial wealth outside of their 401(k) and IRA.

[49] Investment Company Institute (2012).

[50] This approach is analogous to the annuity equivalent wealth calculation made in the annuitization literature (Brown and Poterba 2000), the percentage increase in age 65 wealth that would leave the household indifferent between an actuarially fair annuity and an optimal decumulation of unannuitized wealth. One cannot simply compare age 65 wealth under the baseline and alternative scenarios because households will optimally choose to enjoy part of the benefit of higher net of expense returns in the form of higher pre-retirement consumption.

[51] Investment Company Institute (2012). Although a substantial literature has investigated the trading costs and underperformance of stock funds, there has been no comparable research into bond funds. We therefore conservatively assume zero trading costs or underperformance for such funds.

The results are reported in Table 4. A household investing in actively-managed funds that did not levy 12b-1 fees would pay 0.3 percent of salary to avoid such fees. A household investing in low-cost index stock and bond funds would pay 6.6 percent to avoid investing in actively-managed funds and 10.0 percent when excess fees and underperformance are taken into account. These amounts closely approximate the percentage impact of higher fees and underperformance on the expected present value of lifetime consumption.

Costs of Investor Mistakes

The model then considers three types of mistakes that investors might make: 1) choosing an inappropriate asset allocation; 2) failing to diversify the stock component of their portfolios[52] so that, while they enjoy the same expected return, they take on uncompensated risk; and 3) saving too little. For (1), it assumes that the household invests too much or too little of its portfolio in stocks at all ages. For (2), it assumes that instead of holding a diversified stock portfolio, the household holds a portfolio of ten, four, or two stocks, with corresponding increases in the standard deviation of the return on its stock portfolio (Statman 1987). For (3), it assumes that a household saves nothing at all. It is assumed that two thirds of IRA investors are in either an advisory relationship or hold a discount brokerage account. It is only the remaining one third who are at risk of forgoing advice. Two scenarios are considered. The first, and most likely, is that the reform has no effect on the availability of advice. The second assumes that 50 percent of the households "at risk" forgo advice and then make one of the above investment mistakes.

Table 5 reports the percentages of salary that households would be willing to pay to avoid making the above mistakes, averaged over both those who forgo advice and those whose use of advice is unaffected by the reform. If zero percent forgo advice, the cost of the reform is zero. But even if an implausible 50 percent of the one third of IRA holders assumed to be "at risk" forgo advice, the impact of substantial asset allocation mistakes is relatively modest. The costs of a 100 percent and a zero percent asset allocation to stocks at all ages amounts to at most 0.42 and 0.63 percent of salary, respectively, and the costs of failing to diversify one's portfolio

[52] Estimates of the standard deviations of undiversified portfolios are taken from Statman (1987).

amount to at most 0.65 to 0.98 percent of salary, and in each case could be as low as zero. These at most moderate effects reflect the fact that only a minority of households is even at risk of forgoing advice, and the insurance provided by labor market earnings, Social Security and, for undiversified stock portfolios, the household's bond holdings.

The calculations in Tables 4 and 5 can then be used to evaluate the net effects of reducing fees. The benefit of eliminating 12b-1 fees is equivalent to 0.3 percent of salary. The cost depends on the percent of households that forgo advice and the severity of the resulting investment mistakes they make. Our best estimate is that a 4-basis-point reduction in fees will have no discernible effect on the supply of financial advice.

Larger reductions in fees would, of course, bring larger benefits but might also result in some reductions in the supply of financial advice. Nevertheless, in such a scenario, the benefits would still dwarf the costs. For example, as noted in Table 4, shifting households to index funds would substantially increase the benefits from lower fees – to 6 percent or more of salary. On the cost side, even under the extreme assumption[53] that these lower fees result in half of households forgoing advice, the estimates of the individual investment mistakes are all 1 percent of salary or lower.

Bolder Proposals

Although the optimization model shows that the benefits of a DOL-type proposal resulting from lower fees exceed any likely costs resulting from financial mismanagement due to the lack of advice, the impact of the proposal is modest. Basically, the gain to the consumer is a guaranteed 4 basis points due to the rebate of 12b-1 commissions. Consumers could see a potential additional gain of 7 basis points *if* broker-dealers redirect one third of mutual fund holdings from high-fee, actively-managed mutual funds to low-fee index funds. And *if* one believes the estimates that actively-managed funds underperform index funds, even before fees, consumers

[53] This assumption is extreme because it requires implausible assumptions about the price elasticity of the supply of financial advice.

could see a further gain of perhaps 13 basis points. But the 4 basis points is all that policymakers can really count on.

Given the potentially modest impact of the DOL proposal, more ambitious reforms to reduce investment fees merit consideration. The policy justification for such reforms is that, given the tax advantages provided to 401(k)s and IRAs, the government needs to ensure that the accounts are managed solely in the interests of participants. High fees frustrate this policy objective. The proposed options fall into four categories: 1) making it easier to retain accumulations within the 401(k) system; 2) making the rollover from a 401(k) to an IRA an ERISA-covered event; 3) extending ERISA to all rollover IRAs; and 4) instituting changes to further control fees in both 401(k)s and IRAs. Some of these changes could be accomplished through rule-making, while others would require legislation.

Making It Easier to Keep Money in 401(k)s

At a minimum, participants should be encouraged to keep their money in the 401(k) system when switching jobs, rather than rolling balances over into IRAs. Keeping money in 401(k)s has three advantages: 1) 401(k)s are covered by ERISA fiduciary standards, which require financial advisers to act solely in the participant's interests; 2) recent DOL disclosure requirements have helped shine a spotlight on fees; and 3) 401(k)s operate in a wholesale environment, lending them potential pricing advantages in dealing with investment managers.

Two straightforward changes could help here. First, workers switching jobs should always be allowed to keep their 401(k) assets with their previous employer. This proposal would require a change in the provision that allows employers to cash out account balances of less than $5,000.[54] Second, workers should always be allowed to move their 401(k) assets from a previous employer to a new employer. This proposal would require a change in the provision that gives employers the option to deny a rollover from a previous plan.[55] Conversations with experts suggest that employers would not be opposed to retaining accounts or accepting accounts from former

[54] IRS Code 411(a)11 and ERISA 203(e).
[55] IRS Regulation 1.401(a)(31)-1, A-13.

employers, because higher balances give them more leverage when negotiating fees. Both changes would increase the likelihood that participants stay in the relatively protected 401(k) environment.

Regulating Rollover Transactions

Even with changes to keep money in the 401(k) system, some will want to roll over their balances to IRAs. In this case, it is important that they think carefully before moving their money. One option is to make any rollover transaction subject to ERISA, given that the assets in 401(k)s come from the employer plan arena.[56] Such a change would mean that an adviser could recommend a rollover only when it was solely in the client's interests, as the adviser would be subject to the higher standard required of 401(k) fiduciaries. Participants considering a rollover could also be presented with disclosure forms comparing fees in their 401(k) plan with those in their proposed IRA and showing the respective impacts on projected wealth at retirement. Finally, if a 401(k) participant does decide to go ahead with an IRA rollover, policymakers could set a default investment vehicle of a life-cycle index fund.

Extending ERISA to All Rollover IRAs

The most sweeping reform option would be to extend ERISA protections to all rollover IRAs. The rationale is that rollover money has been accumulated in the employer plan arena, which is protected by ERISA's fiduciary standards and fee disclosure, and that the concern for protecting these funds is not lessened by their movement into another form of account. Most likely, if the enactors of ERISA had envisioned that most defined contribution money would end up in IRAs, they would have ensured ERISA-type protections for these accounts. The change might create its own complications, requiring other modifications to ERISA and creating new overlaps in agency jurisdictions.

[56] The DOL might be able to accomplish this change by regulation. If legislation is required, it would involve amending ERISA Title 1, Section 4(a) to include coverage of rollover IRAs.

Controlling Fees

The DOL has undertaken a major effort to ensure that employees have access to low-cost funds, but four additional options would greatly improve the fee situation. These options include: establishing benchmarks for 401(k) fees; requiring reporting and benchmarks for IRA fees; requiring 401(k) plans to offer index funds; and eliminating high-cost, actively-managed funds.

First, existing 401(k) fee disclosures could be enhanced.[57] Recipients of the current fee disclosures receive information on the fees they are paying, but have no clear benchmark against which to determine whether these fees are excessive. An option here would be to require the disclosure form to compare the costs of the individuals' current investments with those of the typical stock or bond index fund, along with an estimate of the percentage increase in wealth at age 65 from switching to the index fund.[58]

Second, providers of IRAs could be required to report on the asset holdings and fees charged in these accounts. This information would make it possible for people considering rolling over their balances to compare the 401(k) fees with those in IRAs.

Third, all 401(k) plans could be required to offer low-cost index funds, including an equity fund, a bond fund, and a life-cycle fund. As part of this proposal, the government could give a "seal of approval" to low-cost funds that meet certain criteria.

Finally, a more ambitious reform is to limit investment options to low-cost index funds for 401(k)s and, if ERISA were extended, for rollover IRAs as well. As discussed earlier, virtually all researchers agree that most actively-managed equity funds can be expected to underperform index funds once fees are considered. It makes no sense to expose the average participant to

[57] The current fee disclosure requirements have only been in place a short time, so it is not possible to fully gauge their effects. One recent survey (Plan Sponsor Council of America 2012) reported that the requirements have so far had little direct effect. However, anecdotal evidence suggests that some fund providers have already begun to introduce lower fee versions of some of their funds. And the impact of the requirements could increase over time as participants and plan sponsors have more exposure to the new disclosure data.

[58] Small 401(k) plans are more expensive to administer, a concern that could be addressed through an appropriate disclosure on the fee statement.

these options. If people want to buy actively-managed funds with their non-tax-advantaged saving, that is fine. But in plans that cost the taxpayer money, investing should be cost effective. A variant of such a proposal would leave some room for actively-managed funds with low fees.

In short, a number of options are available for controlling fees beyond those already implemented by the DOL.

Conclusion

Additional protections are required in the IRA market. As long as accumulations are held in 401(k) plans, participants remain in a world in which sponsors must operate as fiduciaries and fees are under a spotlight. Once they roll over their accounts into IRAs, they enter a world where suitability becomes the standard of care and broker-dealers are paid commissions that encourage the sale of high-priced mutual funds. If a fiduciary standard and attention to fees are appropriate for retirement assets when they are in a 401(k) plan, then such safeguards are clearly still appropriate when they are rolled over. The SEC and the DOL proposals reflect this logic.

Although the DOL proposal has met with a storm of controversy, it involves a modest change in the form of eliminating 12b-1 and other fees that might incent broker-dealers to misdirect their clients' investments to high-fee products. In the short run, the direct impact of such a change would be rebates to IRA investors of about 4 basis points. Gains could be greater if broker-dealers responded by shifting investments to low-cost index funds. The purported industry concern is that, under the DOL proposal, low- and middle- income households would lose their access to financial advice and make costly mistakes that would reduce their holdings at retirement. Such an outcome seems unlikely for two reasons. First, broker-dealers are unlikely to change their business model in response to a 1-percent reduction in non-trading revenues. Second, even if, in the long run, some IRA holders lost advice as a result of a move to lower-fee funds, such mistakes would have to be both widespread and egregious to offset the gain from lower fees.

Given that the DOL proposal is likely to have only a small impact, it is worth considering bolder and more direct approaches to controlling fees. These steps include: establishing benchmarks for

401(k) fees; requiring reporting and benchmarks for IRA fees; requiring 401(k) plans to offer index funds; and eliminating high-cost actively-managed funds. In addition, broader changes, such as making it easier to retain accumulations within the 401(k) system; making the rollover from a 401(k) to an IRA an ERISA-covered event; and extending ERISA to all rollover IRAs, would greatly enhance protections.

In short, the DOL proposal has highlighted an important issue – namely, the enormous growth in rollover IRAs – but it should be viewed as only a modest first step.

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Table 1. *Number of Individuals with 401(k)s and IRAs, By Age Group, Millions*

Age	401(k) only	IRA only	401(k) & IRA	Total
20-29	4.1	1.2	0.4	5.7
30-39	8.3	3.3	2.3	14.0
40-49	9.8	4.8	3.4	18.0
50-59	7.8	7.7	4.7	20.3
60-69	2.3	7.1	2.1	11.6
70+	0.1	7.1	0.3	7.5
Total	32.5	31.3	13.3	77.1

Note: Total includes 20,000 individuals under age 20 that invest in a 401(k).
Source: U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (2010).

Table 2. *Number of Households Investing in 401(k)s and IRAs, by Income Quintile, Millions*

Quintile	401(k) only	IRA only	401(k) & IRA	Total
1	1.0	2.0	0.1	3.1
2	4.3	3.3	0.7	8.4
3	5.4	3.8	1.6	10.9
4	8.1	5.1	3.2	16.4
5	6.0	4.9	8.2	19.1
Total	24.9	19.2	13.8	57.9

Source: U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (2010).

Table 3. *Revenue of Broker-Dealers, 2010*

Revenue source	Billions of dollars
Securities commissions	$45.6
Gains (losses) in trading and investment accounts	24.3
Profits (losses) from underwriting and selling groups	24.0
Margin interest	4.9
Revenues from sale of investment company shares	18.8
All other revenues	130.2
Total revenues	247.8
Total non-trading revenue	199.5

Source: U.S. Securities and Exchange Commission (2011).

Table 4. *Amount a Household Would Pay to Avoid High-Fee Accounts, Percent of Salary*

Avoiding	Percent of salary
Only 12b-1 fees	0.3%
Actively-managed funds	6.6
Actively-managed funds including under performance	10.0

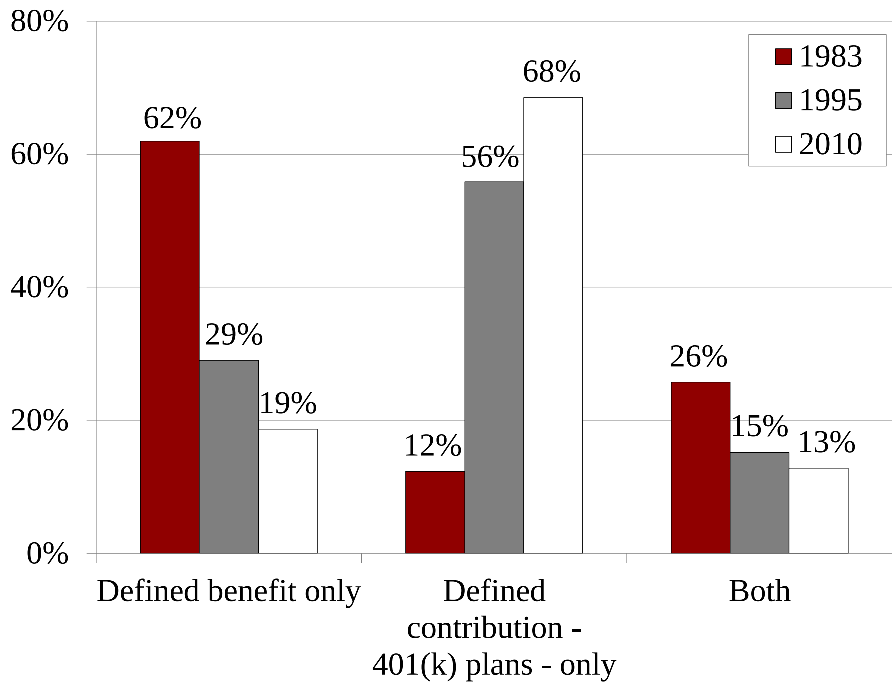
Notes: The first row shows the percentage of salary a household investing in actively-managed funds that were not subject to 12b-1 fees would pay to avoid the imposition of those fees. The second and third rows show the percentage of salary a household investing in low-cost index funds would pay to avoid investing in funds whose returns are reduced by: 1) the excess fees on actively-managed stock and bond funds; and 2) the typical underperformance of actively-managed funds, part of which is attributable to fees and trading costs. The calculations assume constant relative risk aversion utility with a coefficient of risk aversion of five. They also assume that households face the higher fees during both the accumulation and drawdown phases.
Source: Authors' calculations.

Table 5. *Amount a Household Would Pay to Avoid Mistakes, Percent of Salary*

Mistakes	Percent of salary	
	0% "at risk" forgo advice	50% "at risk" forgo advice
Asset allocation mistakes: extreme stock allocation		
100% at all ages	0.00	0.42
0% at all ages	0.00	0.63
Portfolio allocation mistakes: failure to diversify		
10 stocks	0.00	0.65
4 stocks	0.00	0.77
2 stocks	0.00	0.98
Saving rate mistake		
Saving nothing at all	0.00	1.05

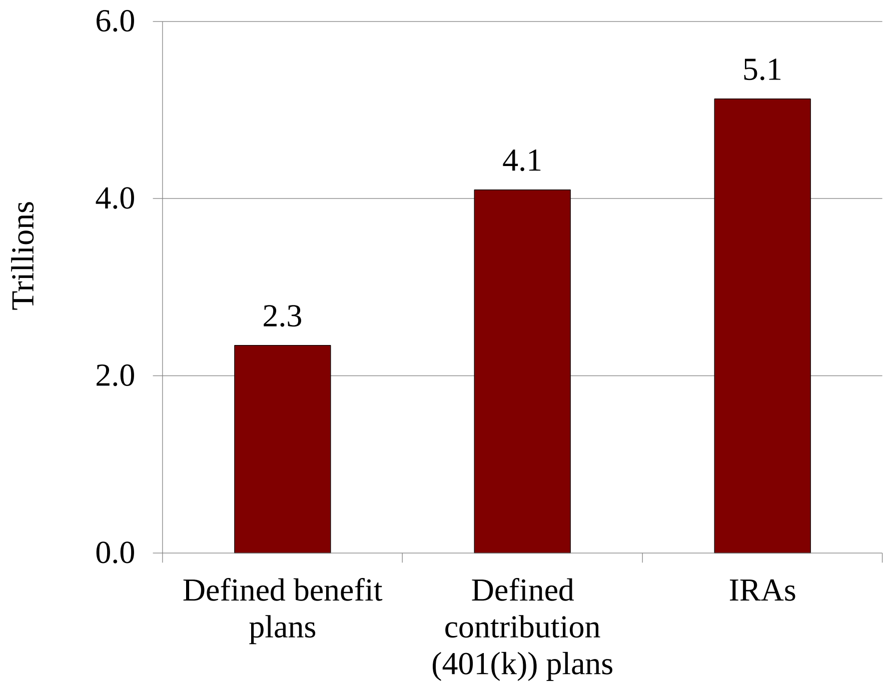
Note: The calculations assume constant relative risk aversion utility with a coefficient of risk aversion of five.
Source: Authors' calculations.

Figure 1. *Workers with Pension Coverage by Type of Plan, 1983, 1995, and 2010*



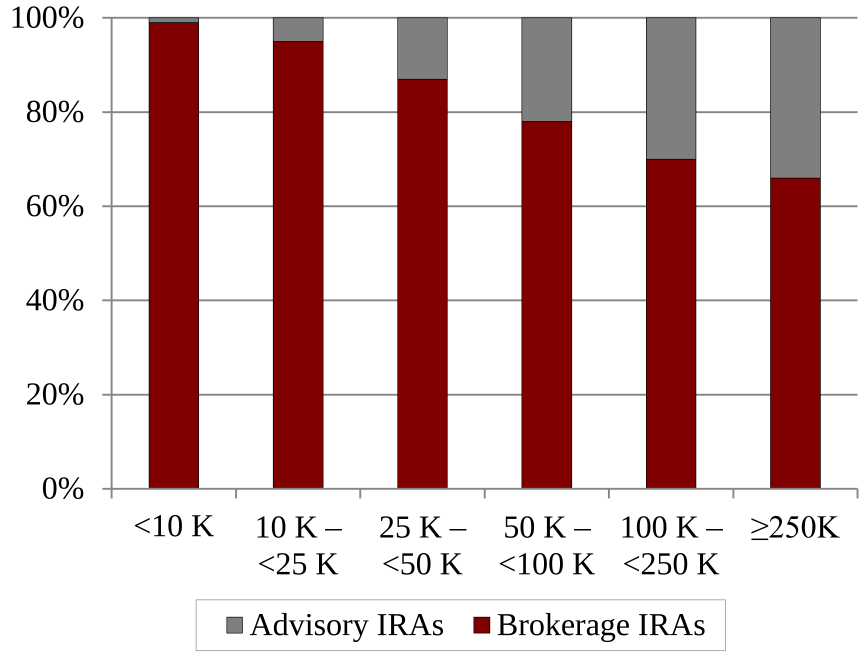
Sources: Authors' calculations based on U.S. Board of Governors of the Federal Reserve System, *Survey of Consumer Finances* (1983, 1995, and 2010).

Figure 2. *Private Retirement Assets, Trillions of Dollars, 2012 Q2*



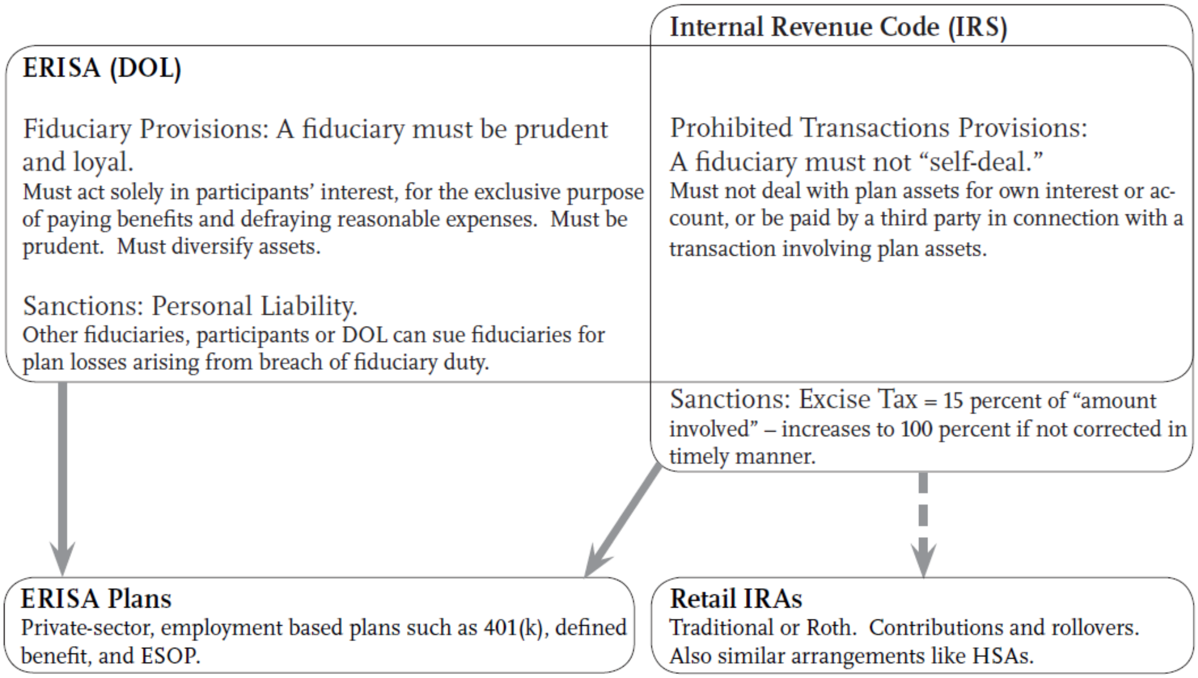
Source: U.S. Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States* (2012).

Figure 3. *Proportion of IRAs with Advisory and Brokerage Arrangements by Asset Size, 2010*



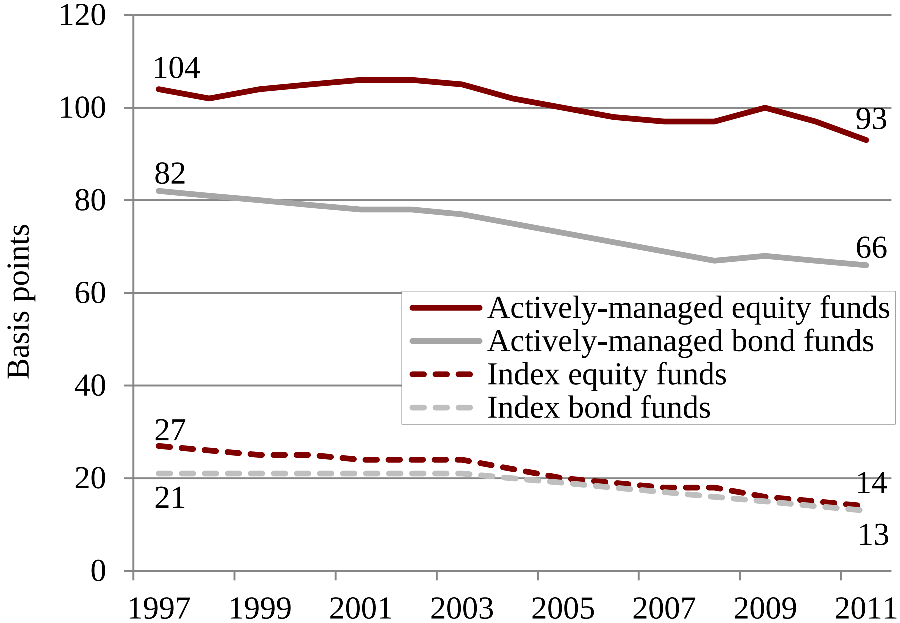
Source: Oliver Wyman (2011).

Figure 4. *Fiduciary Requirements Under ERISA and Internal Revenue Code*



Source: Authors' illustration.

Figure 5. *Expense Ratios of Actively-Managed and Index Funds, 1997-2011*



Notes: Expense ratios are measured as asset-weighted averages. The figure excludes two types of mutual funds: those available as investment choices in variable annuities and those that invest primarily in other mutual funds. Source: Investment Company Institute (2012).

Appendix

The Stochastic Dynamic Optimization Model

The optimization model assumes a married-couple household with a constant relative risk aversion (CRRA) utility function of the following form:

$$U_m(C_t^m, C_t^f) = \frac{(C_t^m + \lambda C_t^f)^{1-\gamma}}{1-\gamma}, U_f(C_t^f, C_t^m) = \frac{(C_t^f + \lambda C_t^m)^{1-\gamma}}{1-\gamma} \qquad (1)$$

where λ measures the jointness of consumption; C_t^m, C_t^f denote the consumption of the husband and wife at time *t*; and γ is the coefficient of risk aversion. When λ equals one, all consumption is joint. When λ equals zero, none of the household's consumption is joint. We assume that λ equals 0.5. Chiappori and Paiella (2011) argue that a CRRA utility function characterizes the risk preferences of typical households.

The household's objective is to maximize:

$$\sum_{t=22}^{T} \sum_{m=1}^{m=3} \beta^{t-22} \rho_{m,t} E_t U(C_{t.m}) \qquad (2)$$

where *m* is marital status (married, surviving male, or surviving female); β is a rate of time preference, assumed to be 0.97; $\rho_{m.t}$ is the probability of being in marital status *m* at time *t*; and $C_{t,m}$ is consumption at time *t* in marital state *m*.[59]

The household faces the following budget and non-negativity constraints:

$$W_{t+1} = (W_t + I_t + SS_t - C_t - \tau_t - FICA_t)(1 + R_{p,t+1}) \qquad (3)$$

$$W_t \geq 0 \text{ for all } t \qquad (4)$$

[59] We assume that the husband and wife have population average mortality for the 1970 birth cohort.

where W is wealth, I is labor income; SS is Social Security benefit; t is federal income tax; $FICA$ is the Social Security tax; and $R_{p,t+1}$ is the portfolio return at time *t+1*. All savings are held in tax-deferred accounts. This approach reduces the number of state variables and enables us to abstract from the asset location decision. Most moderate-income households hold only small amounts of wealth outside of their 401(k)/IRA accounts. We model Social Security benefits as a non-linear function of lifetime earnings.[60] This non-linearity results in households with low lifetime earnings receiving higher rates of return on their contributions, providing partial insurance against bad labor market outcomes. This insurance may affect the optimal allocation of financial assets. We carefully model the taxation of Social Security benefits.[61]

The household faces uncertainty in both the labor and capital markets. We assume that households can invest in both a risk-free bond, yielding a 3-percent real interest rate, and risky stocks, with real returns log normally distributed with a mean of 6.5 percent and standard deviation of 20 percent.[62]

We model labor income uncertainty using model and parameter values in Scholz, Seshadri, and Khitatrakun (2006). They assume that the household model of log earnings is:

[60] The Social Security retired worker benefit payable at the Full Retirement Age is a non-linear function of Average Indexed Monthly Earnings (AIME). AIME is the average of the highest 35 years' earnings, with earnings for years prior to the year in which the individual attained age 60 being indexed to the National Average Wage Index. Reflecting both the limits of computational feasibility and the focus of their research, Maurer, Mitchell, and Rogalla (2010) modeled Social Security benefits as a function of final year earnings, instead of average lifetime earnings. Their approach will likely overstate the riskiness of Social Security and potentially yield biased estimates of optimal portfolio allocations at younger ages. The magnitude of this bias is unclear ex-ante. We follow Benitez-Silva et al. (2007) and model benefits as a function of indexed lifetime earnings, making an adjustment to reflect the fact that the average of the highest 35 years earnings will be somewhat higher.

[61] The taxation treatment of Social Security benefits is as follows. First, the household's "combined income" is calculated. This equals regular taxable income plus 50 percent of Social Security income. The amount of Social Security income that is taxable is the minimum of three tests: (1) 50 percent of combined income over the first threshold ($25,000 for singles and $32,000 for married couples), plus 35 percent of combined income over the second threshold ($34,000 for singles and $44,000 for married couples); (2) 50 percent of benefits plus 85 percent of combined income over the second threshold; and (3) 85 percent of benefits. See Internal Revenue Service (2012).

[62] In reality, the real yield on long-dated bonds fluctuates considerably, while there is also considerable evidence that stock returns exhibit mean reversion. Campbell and Viceira (2002) show that long-term bonds are the true risk-free asset for long-term investors because they provide a guaranteed income. If stock returns exhibit mean reversion, then the optimal equity allocation should reflect whether expected returns are high or low relative to the long-run average. But incorporating the above features would greatly complicate our model without yielding any important additional insights.

$$\log e_j = a^i + b_1 AGE_j + b_2 AGE_j^2 + u_j \tag{5}$$

$$u_j = r u_{j-1} + e_j \tag{6}$$

where e_j is the observed earnings of the household *i* at age *j* in 1992 dollars; a^i is the household specific constant; AGE_j is the age of the head of the household; u_j is an AR(1) error term of the earnings equation; and e_j is a mean zero i.i.d. normally distributed error term. They report parameter estimates in their Appendix Table A1.[63]

We assume coefficients of risk aversion of two and five. These figures rest within the range of 2 to 10 reported in the literature, depending in part on whether the estimates are derived from portfolio theory, purchases of insurance, economic experiments, or preferences over lotteries (Chetty 2003). The retirement age is assumed to be 65.

[63] The model abstracts from the risk of unemployment. Incorporating the risk of unemployment would greatly complicate the analysis because we would need to both model this source of risk and incorporate social insurance programs and labor supply responses within the family.

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