Internet Appendix for

"I Can See Clearly Now: The Impact of Disclosure Requirements on 401(k) Fees"

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In this Internet Appendix, we provide supplementary results to the paper entitled “I Can See Clearly Now: The Impact of Disclosure Requirements on 401(k) Fees”. In Section IA.1 we discuss the 2012 changes in the disclosure requirements mandated by the US Department of Labor. In Section IA. 2, we extend the analysis of Section 4 and provide additional robustness tests for the effect of disclosure requirements on service provider compensation. In Section IA.3 we provide additional robustness tests for the impact of disclosure requirements on the demand for new retirement share classes with less revenue sharing by using expense ratios as a proxy for revenue sharing.

IA.1. Fee disclosure requirements

In this section we provide additional details on the fee disclosure requirements that service providers were subject to before 2012 as well as the changes in disclosure requirements that were instituted by the US Department of Labor (DOL) in 2012.

IA.1.1. Fee disclosures prior to 2012

Beginning in 2009 the DOL required that sponsors of 401(k) plans with more than 100 participants disclose to the DOL the amount of both direct compensation paid to third party providers and indirect compensation received by third party service providers that was used to offset plan related expenses. Since then, these disclosures have been made annually by plan sponsors as part of their regulatory filings with the DOL through Schedule C of Form 5500. However, because of concerns that the new disclosure requirements under Schedule C might require service providers to significantly change and update their information management systems, the DOL granted a grace period for service providers that were unable to comply with the new disclosure requirements for the 2009 plan year and delayed full implementation of Schedule C disclosure requirements until the 2010 plan year.[1]

The disclosure requirements under Schedule C of Form 5500 only apply to retrospective fees that plans actually paid and only apply to service providers that received total compensation exceeding $5,000 during a given plan year. Indirect compensation is further classified into eligible and non-eligible indirect compensation and the disclosure requirements on Schedule C for these two types of indirect compensation differ. Broadly speaking, eligible indirect compensation includes compensation that reduces the value of investments held by the plan, such as the management fees or 12b-1 fees charged by mutual funds, and falls under simplified reporting on Schedule C. Under this simplified reporting no dollar amounts of eligible indirect compensation are disclosed on Schedule C as long as plan sponsors receive the required written disclosures by service providers.[2]

All other forms of indirect compensation are considered non-eligible and are required to be reported on Schedule C. This includes compensation paid by investment funds to service providers in

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[1] See https://www.dol.gov/sites/default/files/ebsa/about-ebsa/our-activities/resource-center/faqs/2009-form-5500-schedule-c.pdf.

[2] Shankle (2013) argues that mutual fund prospectuses would likely satisfy these disclosure requirements with respect to the fees charged by mutual funds.

which the investment fund is not simply a conduit for payment, such as revenue sharing payments paid to plan advisors out of 12b-1 fees charged by mutual funds (in essence, the portion of the investment fees paid can vary by service provider).[3] However, while non-eligible indirect compensation that service providers receive may be reported in dollars on Schedule C it does not need to be. Instead, service providers may provide plan sponsors with a formula for how indirect compensation is calculated and indicate that a formula was used on Schedule C.

It is also important to note that while service providers are required to provide all the necessary disclosures to plan sponsors in order for them to file Schedule C of Form 5500, there are no penalties for service providers who fail to provide the required disclosures.

IA.1.2. Disclosures under Rule 408(b)(2)

In addition to the existing fee disclosure requirements under Schedule C reporting, the DOL implemented Rule 408(b)(2) which requires that plan sponsors receive from third party service providers (referred to as "covered service providers" or CSPs) estimates of all the indirect and direct compensation they expect to be paid from plan assets. Unlike Schedule C, disclosures under 408(b)(2) cover both small and large retirement plans and all compensation expected to exceed $1,000 must be reported.[4] Moreover, Rule 408(b)(2) also requires plan sponsors to consider this prospective compensation when assessing the reasonableness of the service provider's compensation

A specific goal of Rule 408(b)(2) was to shed more light on the indirect fees charged by many service providers such that plan sponsors can fulfill their fiduciary duties to plan participants. As noted above, the existing disclosure requirements under Schedule C did not cover all forms of indirect compensation and failure by service providers to provide the necessary disclosures did not lead to any penalties. Rule 408(b)(2) rectifies these two issues by requiring that CSPs disclose all forms of indirect and direct compensation they expect to receive and also subjects CSPs to substantial penalties if they fail to provide estimates of their expected compensation. At the extreme, service providers can potentially be forced to

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[3] See https://www.drinkerbiddle.com/insights/publications/2010/03/the-5500-nightmare-completing-the-schedule-c as well as https://www.faegrebd.com/en/insights/publications/2010/3/schedule-c-disclosing-and-documenting-eligible-indirect-compensation for a discussion and examples of eligible and non-eligible indirect compensation.

[4] For a summary of CSPs and the disclosure requirements under 408(b)(2) see https://www.dol.gov/sites/default/files/ebsa/about-ebsa/our-activities/resource-center/fact-sheets/final-regulation-service-provider-disclosures-under-408b2.pdf.

reimburse the plan for any service fees paid in violation of ERISA's prohibited transactions rules and the provider could also be subject to a 20% civil penalty by the DOL (see Wagner (2014)).

As under Schedule C, CSPs have some discretion on how best to disclose their expected compensation under Rule 408(b)(2). For example, CSPs can provide estimates of prospective compensation expressed as a dollar amount, a formula, a percentage of plan assets, or a per capita charge for each participant.

IA.1.3. Disclosures under Rule 404(a)(5)

The second regulatory change made in 2012 was Rule 404(a)(5), which required for the first time that plan sponsors disclose to participants the aggregate compensation received by plan service providers (both direct and all indirect compensation), a list of investment alternatives with a standardized way of comparing past performance and investment fees (including investment management expenses and 12b-1 fees). Before 2012, most of the information required to be disclosed under 404(a)(5) was only available to plan participants through mutual fund prospectuses and Statements of Additional Information. The goal of 404(a)(5) was to require plan sponsors to pull together performance and expense information for participants in a way that allowed participants to evaluate the performance of each investment option available on the plan menu.

IA.2. Robustness tests for 401(k) compensation structure

Table IA.1
Propensity for indirect compensation

This table presents linear models where the dependent variable takes a value of one if the plan paid indirect compensation (reported in $ or through formulas on Schedule C), and zero otherwise. The models all control for plan fixed effects. Columns 1 and 2 estimate the model for the full sample, and Columns 3 through 6 partition the sample by pre-2012 size quartiles. *Post* is an indicator variable that takes a value of one for years after 2012, and zero otherwise. The remaining control variables are defined as in Table 1 of the paper. Absolute values of *t*-statistics are in parentheses and standard errors are clustered by plan. Statistical significance is indicated by *, **, and *** at the 10%, 5%, and 1% level, respectively.

	(1)	(2)	(3)	(4)	(5)
Post	0.027***	0.012***	0.019***	0.005	0.004
	(11.67)	(3.44)	(8.44)	(1.42)	(1.04)
Log(Avg. assets (in $mn))		0.041***		0.039***	0.051***
		(5.68)		(5.56)	(5.44)
Mutual funds (in %)			0.002***	0.002***	0.002***
			(17.12)	(17.11)	(17.12)
Log(No. participants)					-0.015**
					(2.03)
Employer contr. (in %)					-0.000
					(1.44)
Participation rate (in %)					0.000
					(1.15)
Log(Plan age)					-0.009
					(0.75)
Plan FEs	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.635	0.636	0.639	0.640	0.640
N	144,316	144,316	144,316	144,316	144,316

Table IA.2
Change in indirect compensation excluding plans that report formulas

This table presents linear models where the dependent variable is the total indirect compensation paid scaled by average plan assets (measured in percent). The sample excludes plan years in which indirect compensation was only reported through a formula on Schedule C. The models all control for plan fixed effects. Columns 1 and 2 estimate the model for the full sample, and Columns 3 through 6 partition the sample by pre-2012 size quartiles. *Post* is an indicator variable that takes a value of one for years after 2012, and zero otherwise. *Ind. formula* is an indicator variable for whether indirect compensation is reported as a formula. *Small plan* is an indicator variable that takes a value of one if the plan has average assets below the sample median prior to 2012. The remaining control variables are as defined in Table 1 of the paper. Absolute values of *t*-statistics are in parentheses below coefficient estimates and standard errors are clustered by plan. Statistical significance is indicated by *, **, and *** at the 10%, 5%, and 1% level, respectively.

	(1) Full sample	(2) Full sample	(3) Size Q1	(4) Size Q2	(5) Size Q3	(6) Size Q4
Post	-0.061***	-0.050***	-0.075***	-0.072***	-0.056***	-0.032***
	(17.21)	(13.02)	(10.36)	(9.66)	(7.46)	(6.69)
Post x Small plan		-0.023***				
		(4.74)				
Ind. formula	0.077***	0.077***	0.121***	0.084***	0.065***	0.027***
	(11.71)	(11.63)	(6.94)	(6.58)	(6.14)	(2.91)
Log(Avg. assets (in $mn))	-0.031***	-0.029***	-0.014	-0.064***	-0.040**	-0.019
	(3.44)	(3.19)	(0.88)	(3.36)	(2.02)	(1.59)
Log(No. participants)	0.009	0.008	0.001	0.034**	0.009	0.006
	(1.18)	(1.16)	(0.05)	(2.23)	(0.58)	(0.54)
Employer contr. (in %)	-0.000	-0.000	-0.000*	-0.000	0.000	-0.000
	(1.43)	(1.41)	(1.65)	(0.71)	(0.39)	(0.44)
Participation rate (in %)	0.000	-0.000	-0.000	-0.000	0.000	0.000
	(0.12)	(0.02)	(1.41)	(0.21)	(1.47)	(0.79)
Log(Plan age)	0.012	0.019*	0.019	0.041*	-0.006	0.002
	(1.07)	(1.71)	(0.92)	(1.81)	(0.27)	(0.14)
Mutual funds (in %)	0.000**	0.000**	0.000**	0.000	-0.000	-0.000
	(2.20)	(2.21)	(2.46)	(1.58)	(0.73)	(0.84)
Plan FEs	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.538	0.538	0.611	0.470	0.486	0.492
N	86,284	86,284	23,770	22,921	21,361	18,232

Table IA.3
Change in direct compensation (Tobit models)

This table presents Tobit models where the dependent variable is the total direct compensation paid scaled by plan assets. The Tobit model allows us to control for left censoring of the dependent variable at zero. Columns 1 and 2 estimate the model for the full sample, and Columns 3 through 6 partition the sample by pre-2012 size quartiles. *Post* is an indicator variable that takes a value of one for years after 2012, and zero otherwise. *Small plan* is an indicator variable that takes a value of one if the plan has average assets below the sample median prior to 2012. The remaining control variables are as defined in Table 1 of the paper. Absolute values of *t*-statistics are in parentheses and standard errors are clustered by plan. Statistical significance is indicated by *, **, and *** at the 10%, 5%, and 1% level, respectively.

	(1) Full sample	(2) Full sample	(3) Size Q1	(4) Size Q2	(5) Size Q3	(6) Size Q4
Post	0.031***	0.040***	0.026***	0.044***	0.042***	0.032***
	(19.27)	(29.28)	(4.80)	(9.88)	(14.05)	(21.27)
Post x Small plan		-0.014***				
		(5.37)				
Small plan		0.032***				
		(7.30)				
Log(Avg. assets (in $mn))	-0.098***	-0.105***	-0.091***	-0.170***	-0.115***	-0.073***
	(30.49)	(36.55)	(9.91)	(16.02)	(15.20)	(20.62)
Log(No. participants)	0.086***	0.089***	0.107***	0.120***	0.082***	0.058***
	(30.21)	(31.34)	(11.19)	(16.81)	(16.55)	(16.99)
Employer contr. (in %)	0.001***	0.001***	0.000	0.000*	0.001***	0.001***
	(7.26)	(7.57)	(1.14)	(1.68)	(5.37)	(9.18)
Participation rate (in %)	0.000	-0.000	0.000	0.000	-0.000***	-0.000***
	(0.75)	(0.11)	(1.46)	(0.85)	(2.72)	(4.12)
Log(Plan age)	0.019***	0.018***	0.032***	0.022***	0.011**	0.007***
	(6.95)	(6.63)	(3.76)	(3.54)	(2.55)	(2.92)
Mutual funds (in %)	-0.000***	-0.001***	-0.001***	-0.000***	-0.000***	-0.000***
	(10.79)	(11.16)	(7.77)	(2.85)	(3.13)	(7.55)
Size quartile FEs	Yes	No	No	No	No	No
Industry FEs	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R^2	0.123	0.122	0.019	0.070	0.432	-0.198
N	144,316	144,316	34,867	36,019	36,664	36,766

Table IA.4
Change in total administrative expenses

This table presents linear models where the dependent variable is the total administrative expenses paid from Schedule H of Form 5500 scaled by plan assets. The models all control for plan fixed effects. Columns 1 and 2 estimate the model for the full sample, and Columns 3 through 6 partition the sample by pre-2012 size quartiles. *Post* is an indicator variable that takes a value of one for years after 2012, and zero otherwise. *Small plan* is an indicator variable that takes a value of one if the plan has average assets below the sample median prior to 2012. The remaining control variables are as defined in Table 1 of the paper. Absolute values of *t*-statistics are in parentheses and standard errors are clustered by plan. Statistical significance is indicated by *, **, and *** at the 10%, 5%, and 1% level, respectively.

	(1) Full sample	(2) Full sample	(3) Size Q1	(4) Size Q2	(5) Size Q3	(6) Size Q4
Post	0.011***	0.022***	-0.008	0.006	0.014***	0.013***
	(4.49)	(9.47)	(1.14)	(1.22)	(3.69)	(4.87)
Post x Small plan		-0.029***				
		(10.76)				
Log(Avg. assets (in $mn))	-0.062***	-0.060***	-0.068***	-0.081***	-0.053***	-0.024***
	(8.91)	(8.61)	(4.24)	(6.52)	(4.91)	(2.94)
Log(No. participants)	0.021***	0.021***	0.016	0.034***	0.017	0.013*
	(3.46)	(3.42)	(1.28)	(2.73)	(1.53)	(1.72)
Employer contr. (in %)	-0.000	-0.000	-0.000	-0.000	-0.000	0.000
	(0.89)	(0.84)	(0.67)	(0.28)	(1.00)	(0.81)
Participation rate (in %)	0.000**	0.000**	0.000	0.000*	0.000*	-0.000
	(2.54)	(2.27)	(1.21)	(1.84)	(1.71)	(0.33)
Log(Plan age)	-0.008	0.002	0.007	-0.004	0.020	0.002
	(0.80)	(0.20)	(0.30)	(0.21)	(1.55)	(0.19)
Mutual funds (in %)	-0.000	-0.000	-0.000*	-0.000	0.000	0.000**
	(0.88)	(0.92)	(1.76)	(0.60)	(1.18)	(2.19)
Adj. R^2	0.768	0.769	0.720	0.750	0.774	0.792
N	144,316	144,316	34,867	36,019	36,664	36,766

Table IA.5
Change in the proportion of direct to total compensation

This table presents linear models where the dependent variable is the total direct compensation to total compensation (in percent) from Schedule C of Form 5500. The models all control for plan fixed effects. Columns 1 and 2 estimate the model for the full sample, and Columns 3 through 6 partition the sample by pre-2012 size quartiles. *Post* is an indicator variable that takes a value of one for years after 2012, and zero otherwise. *Small plan* is an indicator variable that takes a value of one if the plan has average assets below the sample median prior to 2012. *Ind. formula* is an indicator variable for whether indirect compensation is reported as a formula. The remaining control variables are as defined in Table 1 of the paper. Absolute values of *t*-statistics are in parentheses and standard errors are clustered by plan. Statistical significance is indicated by *, **, and *** at the 10%, 5%, and 1% level, respectively.

	(1) Full sample	(2) Full sample	(3) Size Q1	(4) Size Q2	(5) Size Q3	(6) Size Q4
Post	1.643***	1.200***	2.480***	2.616***	1.281**	1.341***
	(6.19)	(4.07)	(4.41)	(4.62)	(2.16)	(3.30)
Post x Small plan		1.171***				
		(3.41)				
Ind. Formula	0.064	0.101	-0.274	-0.849	0.281	1.648**
	(0.14)	(0.22)	(0.29)	(0.97)	(0.29)	(2.07)
Log(Avg. assets (in $mn))	-0.161	-0.253	2.067	-1.662	-2.030	-0.909
	(0.22)	(0.34)	(1.44)	(1.02)	(1.23)	(0.84)
Log(No. participants)	0.574	0.584	0.276	-0.425	0.431	2.098**
	(1.00)	(1.02)	(0.28)	(0.31)	(0.32)	(2.43)
Employer contr. (in %)	0.009	0.009	-0.007	0.034	-0.009	0.019
	(0.84)	(0.81)	(0.31)	(1.59)	(0.38)	(0.95)
Participation rate (in %)	-0.015	-0.014	0.012	-0.030	-0.025	-0.015
	(1.36)	(1.25)	(0.59)	(1.28)	(1.00)	(0.84)
Log(Plan age)	1.843*	1.473	0.057	0.555	2.837	1.113
	(1.90)	(1.51)	(0.03)	(0.26)	(1.34)	(0.69)
Mutual funds (in %)	-0.032***	-0.032***	-0.065***	-0.034**	-0.008	0.014
	(3.88)	(3.89)	(4.34)	(2.21)	(0.50)	(0.79)
Adj. R^2	0.646	0.647	0.684	0.622	0.621	0.657
N	133,726	133,726	30,303	33,348	34,676	35,399

Table IA.6
Change in total compensation excluding plans that report formulas

This table presents linear models where the dependent variable is the total compensation paid scaled by average plan assets (measured in percent). The sample excludes plan years in which indirect compensation was only reported through a formula on Schedule C. The models all control for plan fixed effects. Columns 1 and 2 estimate the model for the full sample, and Columns 3 through 6 partition the sample by pre-2012 size quartiles. *Post* is an indicator variable that takes a value of one for years after 2012, and zero otherwise. *Ind. formula* is an indicator variable for whether indirect compensation is reported as a formula. *Small plan* is an indicator variable that takes a value of one if the plan has average assets below the sample median prior to 2012. The remaining control variables are as defined in Table 1. Absolute values of *t*-statistics are in parentheses below coefficient estimates and standard errors are clustered by plan. Statistical significance is indicated by *, **, and *** at the 10%, 5%, and 1% level, respectively..

	(1) Full sample	(2) Full sample	(3) Size Q1	(4) Size Q2	(5) Size Q3	(6) Size Q4
Post	-0.058***	-0.039***	-0.091***	-0.064***	-0.044***	-0.020***
	(11.86)	(7.77)	(8.38)	(6.54)	(4.86)	(3.18)
Post x Small plan		-0.041***				
		(6.95)				
Ind. formula	0.037***	0.036***	0.043*	0.042**	0.040***	0.013
	(4.01)	(3.93)	(1.67)	(2.39)	(2.90)	(1.21)
Log(Avg. assets (in $mn))	-0.071***	-0.067***	-0.041*	-0.130***	-0.105***	-0.034*
	(5.43)	(5.13)	(1.65)	(5.06)	(4.22)	(1.91)
Log(No. participants)	0.023**	0.023**	0.010	0.050**	0.044**	0.012
	(2.03)	(2.00)	(0.48)	(2.08)	(2.14)	(0.64)
Employer contr. (in %)	-0.000	-0.000	-0.001*	-0.000	0.000	0.000
	(1.58)	(1.56)	(1.88)	(0.68)	(0.18)	(0.19)
Participation rate (in %)	0.000	0.000	-0.000	0.000	0.001	0.000
	(1.09)	(0.90)	(0.40)	(0.70)	(1.47)	(0.60)
Log(Plan age)	0.011	0.024	0.041	0.015	0.002	-0.000
	(0.68)	(1.45)	(1.26)	(0.43)	(0.07)	(0.02)
Mutual funds (in %)	0.000***	0.001***	0.001**	0.001**	0.000	0.000
	(3.37)	(3.39)	(2.54)	(2.17)	(0.78)	(0.37)
Adj. R^2	0.695	0.696	0.701	0.637	0.639	0.649
N	86,284	86,284	23,770	22,921	21,361	18,232

IA.3. Robustness tests for the demand for low revenue sharing mutual funds

As discussed in Section 2 of the paper, while revenue sharing agreements often involve mutual funds sharing a portion of the 12b-1 fees with 401(k) service providers, mutual funds may also use subtransfer agent fees or shareholder fees for revenue sharing.[5] Because CRSP does not report subtransfer agent fees we focus on 12b-1 fees for the analyses in Section 5 of the paper. However, because both 12b-1 fees and subtransfer agent fees are included in mutual funds' operating expenses we conduct additional robustness tests using mutual fund expense ratios in this section.

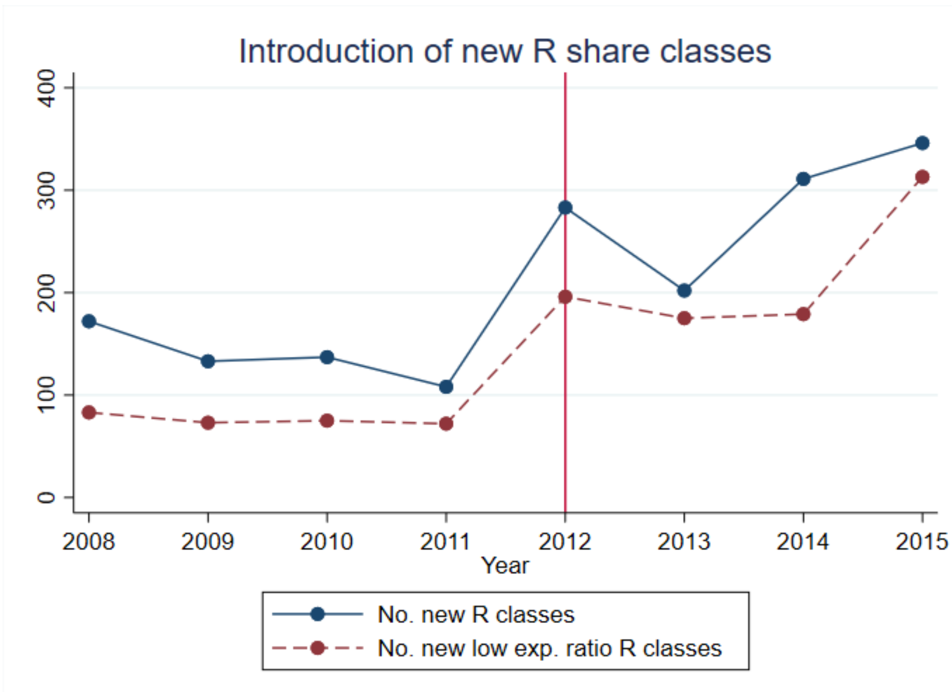

Fig. IA.1. Introduction of new R share classes to existing mutual funds**.** This figure presents the annual number of new retirement share classes (R share classes) added to the lineup of existing mutual funds between 2008 and 2015. The sample is based on the CRSP Survivorship Bias Free US Mutual Fund Database. New share class introductions are identified through the offering date in CRSP and by whether the mutual fund had other share classes outstanding. A new R share class is defined as a having low expense ratio if its expense ratio is less than or equal to the average expense ratio across all other share classes of the mutual fund. The average expense ratio of the mutual fund is measured in the month preceding the introduction of the new R share class.

[5] See GAO (2011).

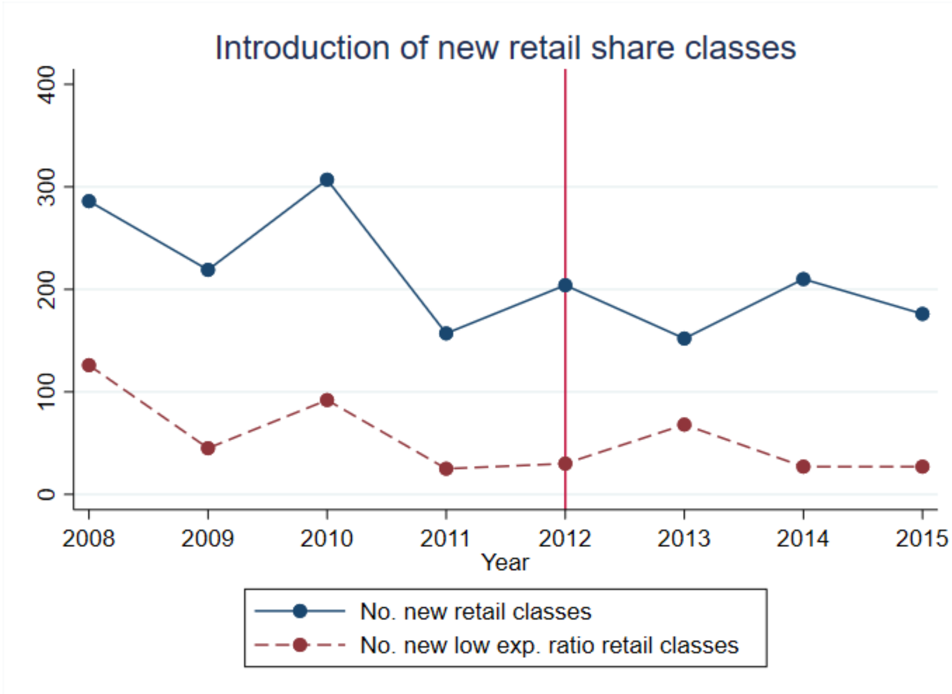

Fig. IA.2. Introduction of new retail share classes to existing mutual funds. This figure presents the annual number of new retail share classes added to the lineup of existing mutual funds between 2008 and 2015. The sample is based on the CRSP Survivorship Bias Free US Mutual Fund Database. New share class introductions are identified through the offering date in CRSP and by whether the mutual fund had other share classes outstanding. A new retail share class is defined as having a low expense ratio if its expense ratio is less than or equal to the average expense ratio across all other share classes of the mutual fund. The average expense ratio of the mutual fund is measured in the month preceding the introduction of the new retail share class.

Table IA.7
Monthly mutual fund flows in a triple-difference setting

This table presents ordinary least squares regressions of mutual fund flows in a triple-difference setting at the mutual fund share class level. The dependent variable is the monthly net flow to a given share class expressed in percent, as defined in Eq. (1), and winsorized at the 0.5% and 99.5% levels to reduce the impact of extreme outliers. The *Post* indicator variable is defined as zero for months taking place prior to 2012 and one for months taking place after 2012. The sample period is from 2010 through 2014 and excludes 2012. *R class* is an indicator variable that takes a value of one if the mutual fund share class is a retirement share class, and zero if it is a retail share class. *Fee* is a measure of expense ratios as indicated by the column labels. In Columns 1 and 2, *Fee* is defined as an indicator variable if the share class has an expense ratio greater or equal to the sample median, while in Columns 3 and 4 *Fee* is defined as the actual percentage expense ratio. *Lag return* is the monthly percentage return of the mutual fund share class lagged by one month. The specifications in Columns 2 and 4 include fund fixed effects for share classes of the same fund, identified through the MFLinks database. Standard errors are clustered by fund share class. Absolute values of *t*-statistics are presented in parentheses and statistical significance is indicated by *, **, and *** at the 10%, 5%, and 1% level, respectively.

	(1)	(2)	(3)	(4)
	High expense ratio		Continuous expense ratio	
Post	-0.246***	-0.834***	-0.615***	-1.227***
	(3.45)	(11.11)	(5.76)	(10.92)
Fee	-0.522***	-0.868***	-0.580***	-1.166***
	(6.49)	(9.94)	(8.14)	(16.52)
R class	1.401***	1.873***	1.632***	1.495***
	(9.95)	(12.14)	(7.57)	(6.25)
Post x Fee	0.431***	0.357***	0.482***	0.435***
	(4.42)	(3.85)	(5.81)	(5.60)
Post x R class	-0.510***	-0.173	-0.065	0.136
	(3.01)	(0.89)	(0.24)	(0.44)
Fee x R class	-0.040	0.783***	-0.316*	0.565***
	(0.21)	(3.96)	(1.78)	(3.02)
Post x Fee x R class	-0.700***	-0.884***	-0.706***	-0.656***
	(2.94)	(3.42)	(3.12)	(2.60)
Lag return	0.106***	0.077***	0.106***	0.077***
	(24.77)	(18.83)	(24.72)	(18.77)
Obj. code FEs	Yes	No	Yes	No
Adj. R^2	0.01	0.06	0.01	0.06
N	766,460	519,154	766,460	519,154

Table IA.8
Placebo tests in triple-difference setting

This table presents the same regression models as in Table IA.6 but assuming different years as the year of the actual breakpoint. Each panel presents regression models using a time period of two years centered on the placebo breakpoint and excluding the placebo year. For brevity only the coefficient estimates on the triple interaction term are displayed. Standard errors are clustered by fund share class. Absolute values of *t*-statistics are presented in parentheses and statistical significance is indicated by *, **, and *** at the 10%, 5%, and 1% level, respectively.

	(1)	(2)	(3)	(4)
	High expense ratio		Continuous expense ratio	
Panel A: Placebo year 2010				
Post x Fee x R class	0.198	-0.101	-0.133	-0.306
	(0.73)	(0.37)	(0.52)	(1.14)
Obj. code FEs	Yes	No	Yes	No
Adj. R^2	0.01	0.07	0.01	0.07
N	759,271	557,426	759,271	557,426
Panel B: Placebo year 2011				
Post x Fee x R class	-0.232	-0.651**	-0.452*	-0.658**
	(0.89)	(2.40)	(1.74)	(2.39)
Obj. code FEs	Yes	No	Yes	No
Adj. R^2	0.01	0.07	0.01	0.07
N	757,675	535,113	757,675	535,113
Panel C: Placebo year 2013				
Post x Fee x R class	-0.436**	-0.460*	-0.282	-0.095
	(1.96)	(1.92)	(1.39)	(0.41)
Obj. code FEs	Yes	No	Yes	No
Adj. R^2	0.01	0.05	0.01	0.05
N	783,296	506,447	783,296	506,447

References

Government Accountability Office, 2011. Improved regulation could better protect participants from conflicts of interest. Report to the Ranking Member, Committee on Education and the Workforce, House of Representatives.

Shankle, C., 2013. Retirement plans – new fee disclosure requirements. American Institute of CPAs.

Wagner Law Group, 2014. Putting 408(b)(2) disclosure rules into practice: A guide for plan sponsors.