A Bird In Hand is Worth Two In The Bush?...A Case Study

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Show of Hands

- You come into my plan with $40,000 from your previous employer's plan.
- I give you two choices:
  - – Give me $117 to manage your assets over the next 3 months and I will give you back $50 in 6 months plus your gains/losses, OR
  - – Give me $92 to manage your assets over the next 3 months and I will give you back $10 in 6 months, plus your gains/losses

Plan Demographics

- 3929 Participants, 2775 active
- Average ppt. account balance: $24,787
- Average deferral rate: 5.89%
- Participation rate: 91%
- 21 individual mutual fund choices no more than two from same fund family
- 5 additional Target Date Model Allocations
- Very Diverse

Investment Options

- Average expense ratio: 1.18%
- Asset weighted expense ratio: 1.14%
- Assets: $94,487,880
- Assets in TDF’s: 72%
- Elections in TDF’s: 89%

Plan Summary

- Company matches half of deferral up to 5% (2.5%) company contribution
- Annual profit sharing contribution 1.5%
- Auto enroll at 3%
- Auto escalate 1% per year up to 5%
- QDIA were target date model allocations of core funds in 10 year vintages
  - Assigned by age/birth date

Plan Platform

- Bundled service provider for:
  - Custody
  - Recordkeeping,
  - Investment advice at plan level – "Kinda"
- Plan expenses paid to the bundled provider through revenue sharing

Conversion Goals

- Decided to “Unbundle” our plan services
  - Separate record keeping and investment advisor to the Plan.
  - Unbundle the fees for services
- Existing plan had numerous retail “A” share class funds with revenue shares paying for the bundled services

Background

- Plan utilized 5 target date model allocations of the core investment lineup
  – 10 year increments, vintages
- It was the responsibility of the Investment Committee/Plan Sponsor to maintain and update those allocations as time passed.
  – We did not wish to continue that arrangement and looked for “off the shelf” solutions.

Background Cont’d

- We decided that all Plan expenses that were assignable to the Plan would be paid by the Plan.
- We decided that all revenue share generated by the Plan investments would be kept by the Plan to pay Plan expenses.
- RFP’s went out to service providers requesting that service fees be quoted based on driving costs and not by Plan assets.
  - Inv. Advisor fees based on annual basis
  - Record keeping based on per participant or loan, etc.

Background Cont'd

- Existing investment alternatives were re-assessed, both in due diligence/monitoring and expenses
- After the RFP process and re-structuring of fees, the existing "A" class funds were generating more revenue share than the Plan services would generate expenses.
  – How to fairly re-allocate surplus?

New Platform

- Revenue sharing generated by participant investments would be credited back to the individual participant that "earned" the revenue share.
  - Credited to the account just like a dividend or income distribution.

Then Came The Dilemma
One Fund Example

	A share class	I share class
Expense ratio	1.03%	0.78%
Total rev. share	0.50%	0.15%
Net expense to ppt.	0.53%	0.63%

- Can participants actually come out 10 basis points ahead by using A share classes?

0.25% difference in Expense Ratios, 0.35% difference in revenue share.

Large Value Fund
NAV Return Comparisons

Year	I share	A share	Difference
Yr. 1	21.81%	21.50%	0.31%
Yr. 2	-5.48%	- 5.69%	$\boxed{0.21\%}$
Yr. 3	-31.77%	-32.02%	0.25%
Yr. 4	11.74%	11.41%	0.33%
Yr. 5	23.47%	23.16%	0.31%

Source: Returns from Morningstar

More Dilemma

2030 Target Date Fund Example

	A share class	I share class
Expense ratio	1.14%	0.89%
Total rev. share	0.50%	0.10%
Net expense to ppt.	0.64%	0.79%

- Can participants actually come out 15 basis points ahead by using A share classes?

2030 TDF Return Comparisons (Net of Expense Ratios)

Year	I share	A share	Difference
Yr. 1	16.55%	16.11%	0.44%
Yr. 2	-8.72%	-9.03%	0.31%
Yr. 3	-13.75%	-14.13%	0.38%
Yr. 4	16.92	16.61%	0.31%
Yr. 5	17.67%	17.38%	0.29%

A Share Exp. Ratio = 1.14%   I Share Exp. Ratio = 0.89%
Difference of 0.25%

Source: Returns from Morningstar

2030 TDF Return Comparisons (Net of Expenses Adding Rev Shr.)

Year	I share	A share	Difference
Yr. 1	16.65%	16.61%	0.04%
Yr. 2	-8.62%	-8.53%	-0.09%
Yr. 3	-13.65%	-13.63%	-0.02%
Yr. 4	17.02%	17.11%	-0.09%
Yr. 5	17.77%	17.88%	-0.11%

Source: Morningstar

Observations

- The retail funds did not, in all cases underperform by the amount of the difference in expense ratio
- After a strict add back of the revenue share, the “I” shares did not outperform

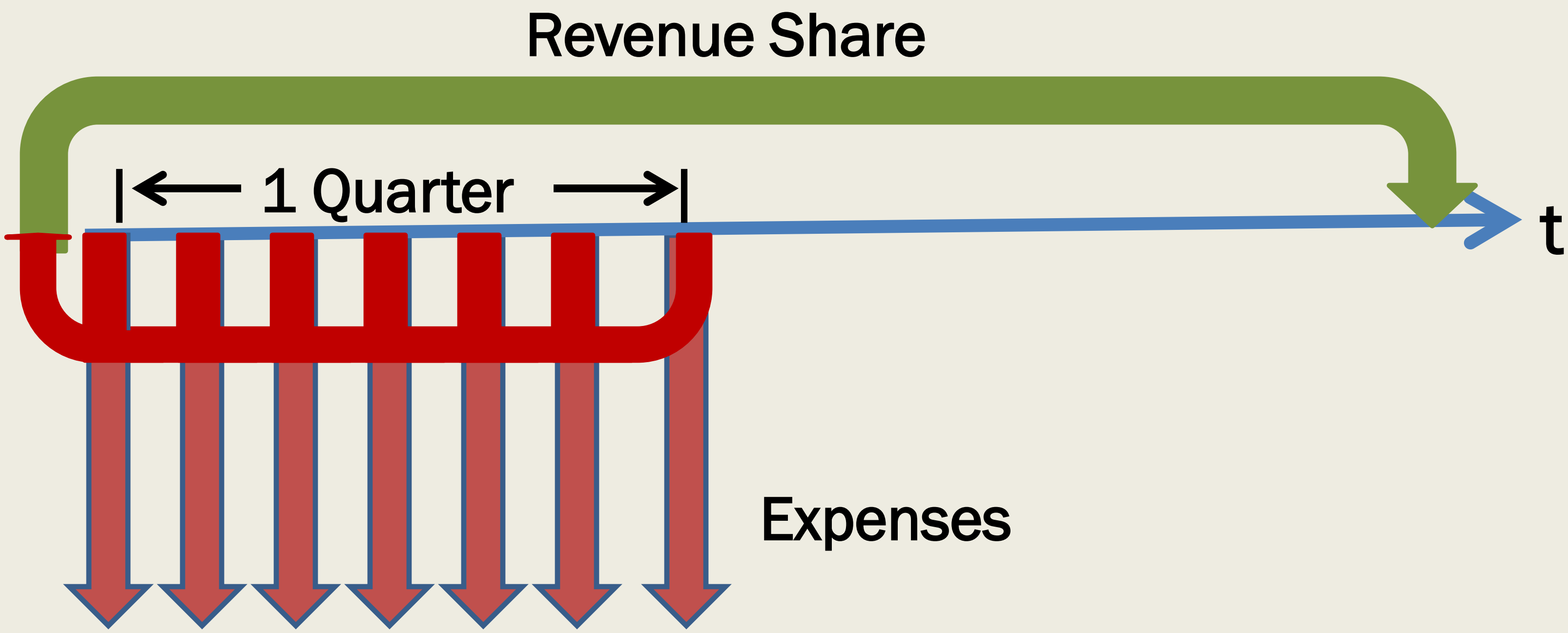
The Assumptions Used In The Analysis

- Expense ratios accrue daily
- Fund companies pay revenue share about three months after the quarter
  - As much as 6 months after the first contribution in the cycle
- Used beginning balance of average ppt. balance
- Used average contributions on bi-weekly payroll
- Expenses are billed quarterly.
- Each ppt. pays the same for recordkeeping and investment advice

Account Structure

- Our record keeper is able to credit revenue share earned by participant back to the participant account, and is credited like a dividend. This simplified the analysis
- Assured those who earned the revenue share received the revenue share, and were not subsidizing other participants

Diagram of Analysis



The Analysis

- Used simple spreadsheet
- Used quarterly data:
  - Returns of retail and institutional share classes
  - Delayed revenue shares by one quarter
  - Quarterly fee payments to service providers

Analysis

Beginning Balance + Rev. Shr. + Gain/loss + Contributions + half the period gain/loss on the contributions – vendor service fees

Analysis - A Shares 2040 TDF

Beg. Bal.	New Deferrals	Rev. Share	Gain/ (Loss)	Serv. Fees	Ending Bal.
24,787	839		1,915	(22)	27,519
27,519	839		3,001	(22)	31,338
31,338	839	34	1,630	(22)	33,819
33,819	839	39	2,370	(22)	37,045
37,045	839	42	1,433	(22)	39,337
39,337	839	46	(138)	(22)	40,062
40,062	839	49	(2,316)	(22)	38,613
38,613	839	50	(27)	(22)	39,453
39,453	839	48	(3,230)	(22)	37,088
37,088	839	49	(6,494)	(22)	31,460
31,460	839	46	(2,374)	(22)	29,950
29,950	839	39	6,683	(22)	37,489
37,489	839	37	7,637	(22)	45,981
45,981	839	47	3,364	(22)	50,209
50,209	839	57	3,163	(22)	54,247
54,247	839	63	(4,351)	(22)	50,776
50,776	839	68	7,528	(22)	59,188
59,188	839	63	6,165	(22)	66,234
66,234	839	74	3,469	(22)	70,594
70,594	839	83	1,285	(22)	**72,779**

Source of Returns used in Analysis: Morningstar

Analysis – I Shares 2040 TDF

Beg. Bal.	New Deferrals	Rev. Share	Gain/ Loss	Serv. Fees	Ending Bal.
24,787	839		1,935	(22)	27,539
27,539	839		3,042	(22)	31,399
31,399	839	6	1,654	(22)	33,876
33,876	839	7	2,417	(22)	37,117
37,117	839	8	1,466	(22)	39,407
39,407	839	8	(100)	(22)	40,132
40,132	839	9	(2,279)	(22)	38,680
38,680	839	10	11	(22)	39,518
39,518	839	10	(3,200)	(22)	37,145
37,145	839	10	(6,482)	(22)	31,489
31,489	839	10	(2,312)	(22)	30,004
30,004	839	9	6,701	(22)	37,532
37,532	839	8	7,688	(22)	46,046
46,046	839	8	3,385	(22)	50,255
50,255	839	9	3,182	(22)	54,263
54,263	839	12	(4,303)	(22)	50,789
50,789	839	13	7,533	(22)	59,152
59,152	839	14	6,220	(22)	66,203
66,203	839	13	3,538	(22)	70,571
70,571	839	15	1,323	(22)	**72,726**
		A Share ending Balance			$72,779

Source of Returns used in Analysis: Morningstar

Target Date Family Share Class Comparison of 5-Yr. Outcomes

Vintage	A Shr.	I Shr.	Diff.
Income	$72,081	$71,988	$93
2015	72,224	72,174	50
2020	72,648	72,599	49
2030	72,593	72,571	22
2040	72,779	72,726	53
2050*	57,999	57,976	23

* Inception 9/1/07,

15 Qtrs.

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		A Share ending Balance			$72,779

Source of Returns used in Analysis: Morningstar

Sensitivity Test- Large Value Fund

Large Value Fund	A Shr.	I Shr.
• Exp. Ratio	1.03%	0.78%
• Revenue Share	0.50%	0.15%
• Outcome	$62,931	$62,913

The relationship holds in a net 10 basis point environment also

Sensitivity Test - Using Constant NAV Returns per Quarter - 5-Yr. Outcomes

Vintage	A Shr.	I Shr.
Income	$71,318	$71,314
2040	69,578	69,575

The gap narrows to nothing if the volatility is removed

Target Date Family Share Class Comparison of Expenses in Basis Points

Vintage	A Shrs.	I Shrs.	CIT Shrs.
Income	90	65	43
2015	101	76	56
2020	106	81	61
2025	110	85	67
2030	114	89	71
2035	116	91	77
2040	117	92	76
2045	116	91	78
2050	116	91	79

CIT's had no Revenue Sharing

Target Date Family Share Class Comparison of 5-Yr. Outcomes

Vintage	A Shr.	I Shr.	CIT Shr.
Income	$72,081	$71,988	$72,247
2015	72,224	72,174	73,292
2020	72,648	72,599	73,568
2030	72,593	72,571	72,716
2040	72,779	72,726	72,872
2050*	57,999	57,976	59,022

* Inception 9/1/07,
15 Qtrs.

Summary

- A bird in hand IS NOT worth more than revenue sharing in the bush, but…
- No one right answer, could be dependent upon
  - Funds (differences in returns and differences in revenue share)
  - Account structure (direct crediting)
  - Total assets and share classes qualifications

Summary Continued

- Changes in income, contribution percentages, fees, number of participants, and beginning balances did not change the relational outcome.
- Try to avoid funds/platforms where this relationship occurs.