Leeds University Business School

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What Fees do Investors Really Pay for Private Capital Funds?

Oliver Bell, Leeds University Business School and ClearGlass

Iain Clacher, Leeds University Business School

Tim Jenkinson, University of Oxford, Saïd Business School

Christopher Sier, ClearGlass

ClearGlass

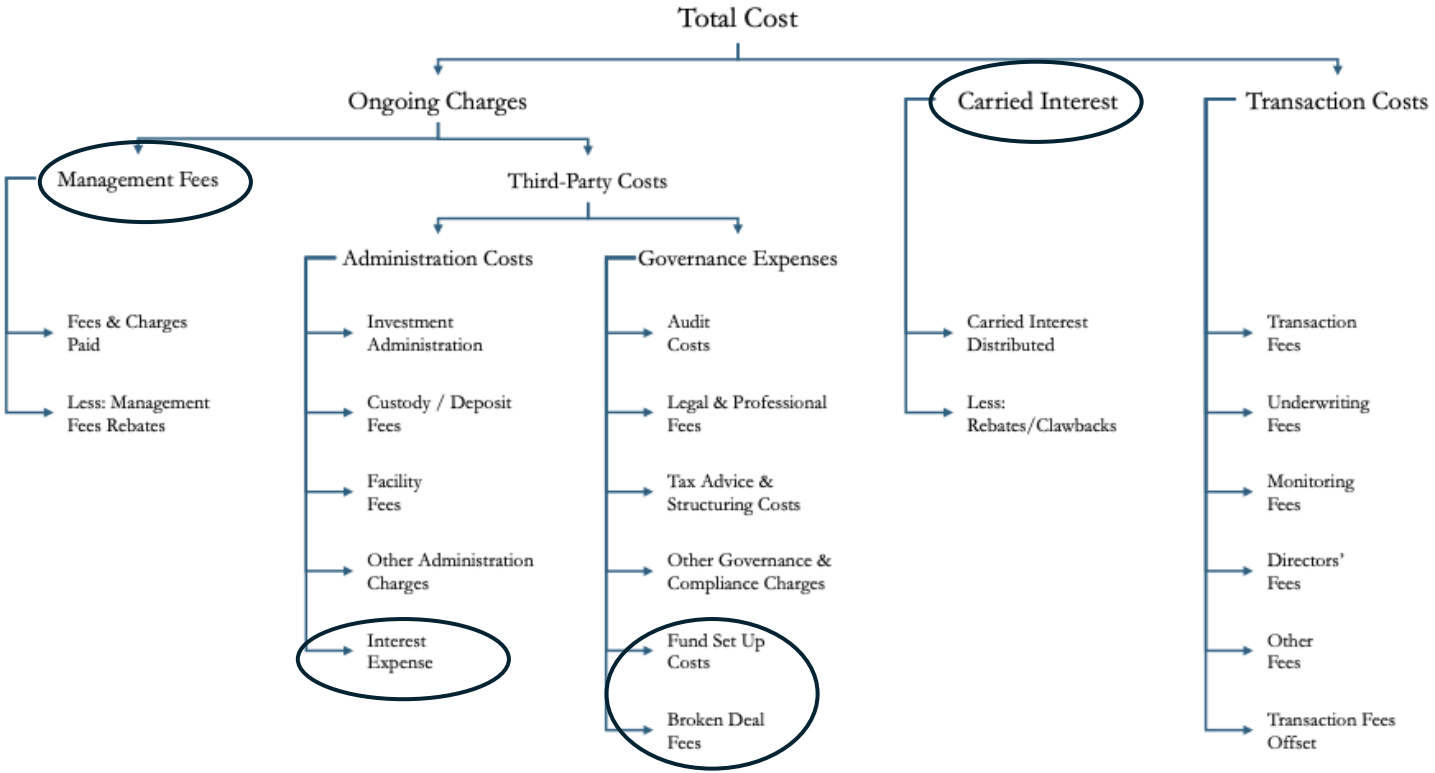
Research Objectives

- Investigate the level of fees LPs pay in private equity funds.
- Determine which fee categories make up a significant amount of the total cost burden.
- Establish the level to which economies-of-scale are significant in management fees.
- Investigate unusual costs outside of the management fee-carry structure.

Regulatory Background

- The UK Financial Conduct Authority (FCA) undertook a competition investigation of the asset management industry in 2016 and 2017.
- A key finding was weak price competition in the UK Institutional Asset Management, caused in part by a lack of cost transparency (Asset Management Market Study, 2017).
- One of the proposed remedies was creating a standardized disclosure framework for institutional cost reporting to increase cost transparency.
- This led to the set-up of the Institutional Disclosure Working Group (IDWG), to develop a standard framework for asset managers to share client-specific costs and charges at the mandate-level with institutional clients.
- This framework, the Cost Transparency Initiative (CTI), was launched in 2018 and adopted by asset managers operating in the UK market.
- Incorrect reporting of CTI mandates to investors breaches FCA rules on treatment of clients and can result in penalties.

CTI Private Market Template Cost Tree



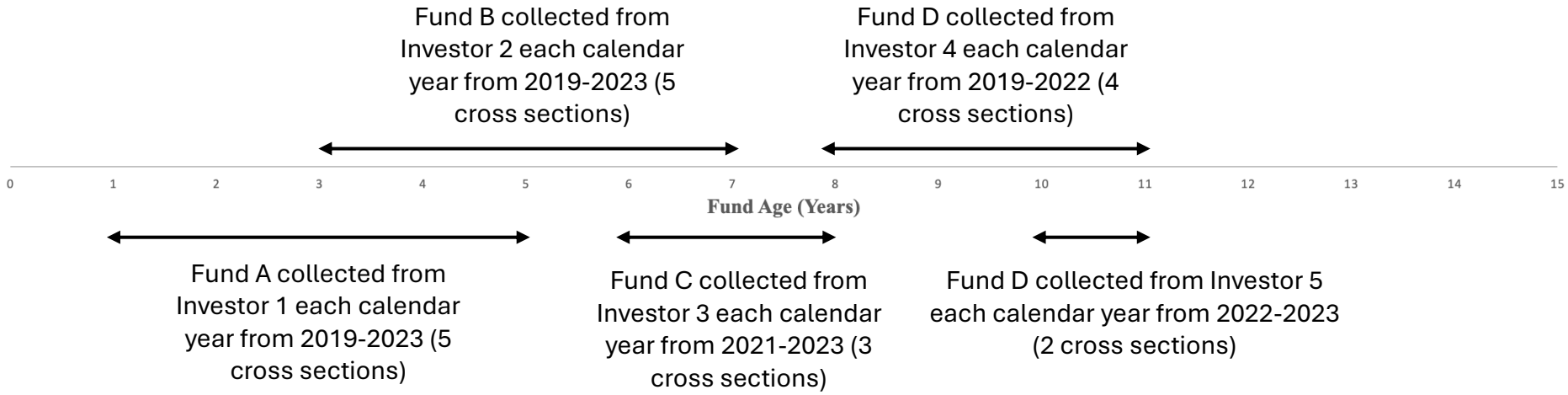
ClearGlass Analytics CTI Dataset

- Our dataset is sourced from ClearGlass Analytics, a data analytics company specializing in the collection and processing of CTI mandates.
- To date, ClearGlass have collected 38,719 mandates from 690 institutional investors, primarily based in the UK, from 628 asset manager firms, and an AuM of £2.7 trillion ($3.38)
- In the 2023 collection, ClearGlass obtained CTI templates from ~70% of total private capital fund assets held by institutional pension schemes in the UK, per the 2023 ONS Financial Survey of Pension Schemes
- This dataset is therefore a near-total market view of how UK institutional pension schemes invest in private capital funds, and the fees they incur
- Our paper focuses on the 'Private Equity' dataset. After selection criterion are applied, the data consists of 1461 mandates, 59 limited partners (LPs),105 asset manager firms, and 424 funds, with a mean and median committed capital of ~£24.6m ($30.8) and £14m ($17.8) respectively.

Data and sample selection

- Partial investment period mandates are removed so that only annual reporting period costs are analyzed.
- CTI mandates consist of raw reporting period cash flows. To standardize these flows for comparison, we use committed capital as the asset base. Mandates with no reported committed capital are removed.
- We use the fund age (years) for much of the analysis. We define the age as the years since first capital call. Mandates with no inception date are removed.
- We use medians due to the non-normal distribution of fees.
- Extreme values have been trimmed where appropriate.
- Certain examples have been anonymized to avoid disclosing commercially sensitive information.

Building a synthetic fee schedule

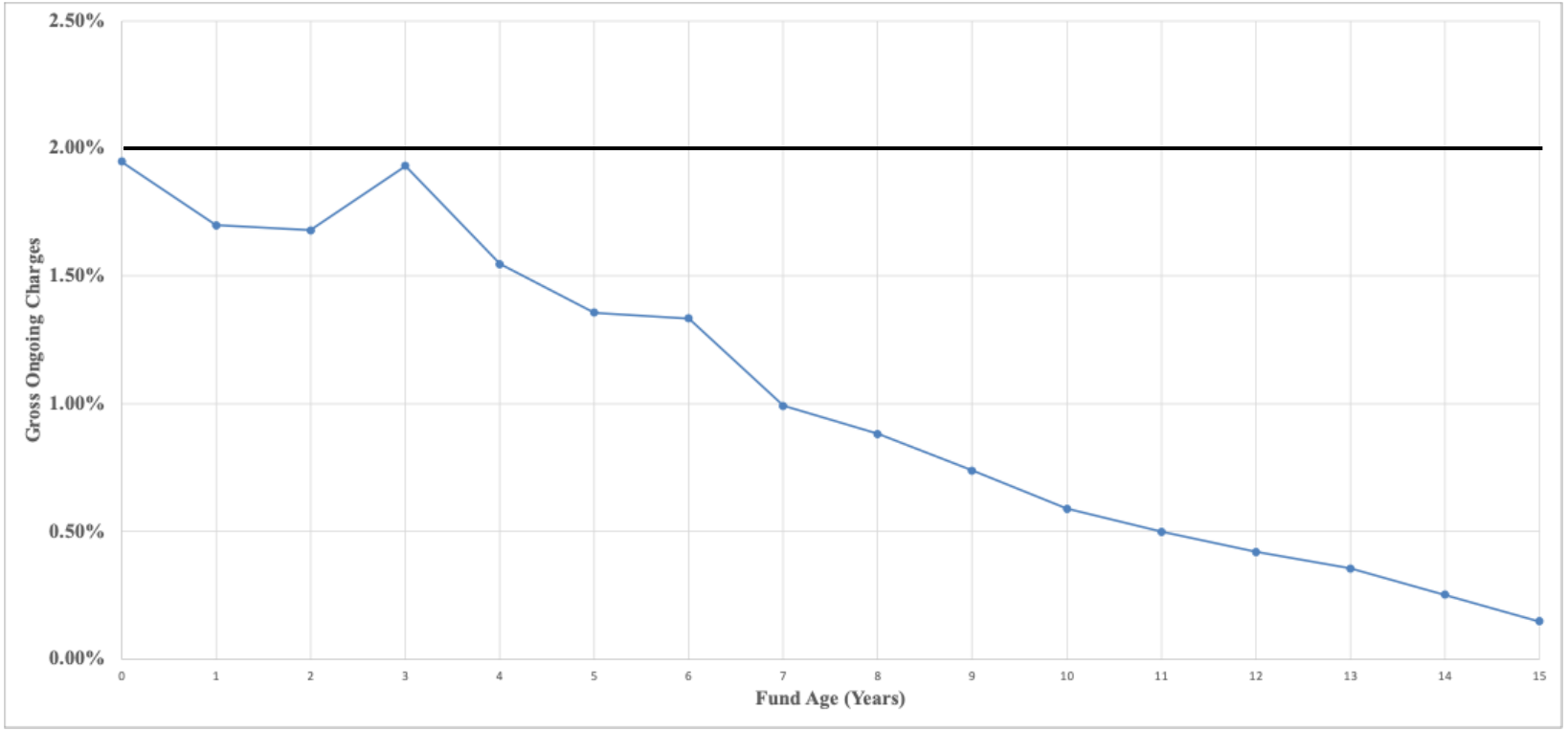


We use 1461 of these cross-sections, collected from 2019-2023, to build a synthetic fee-schedule over 20 years
N per fund age provided in table analysis

Key Findings

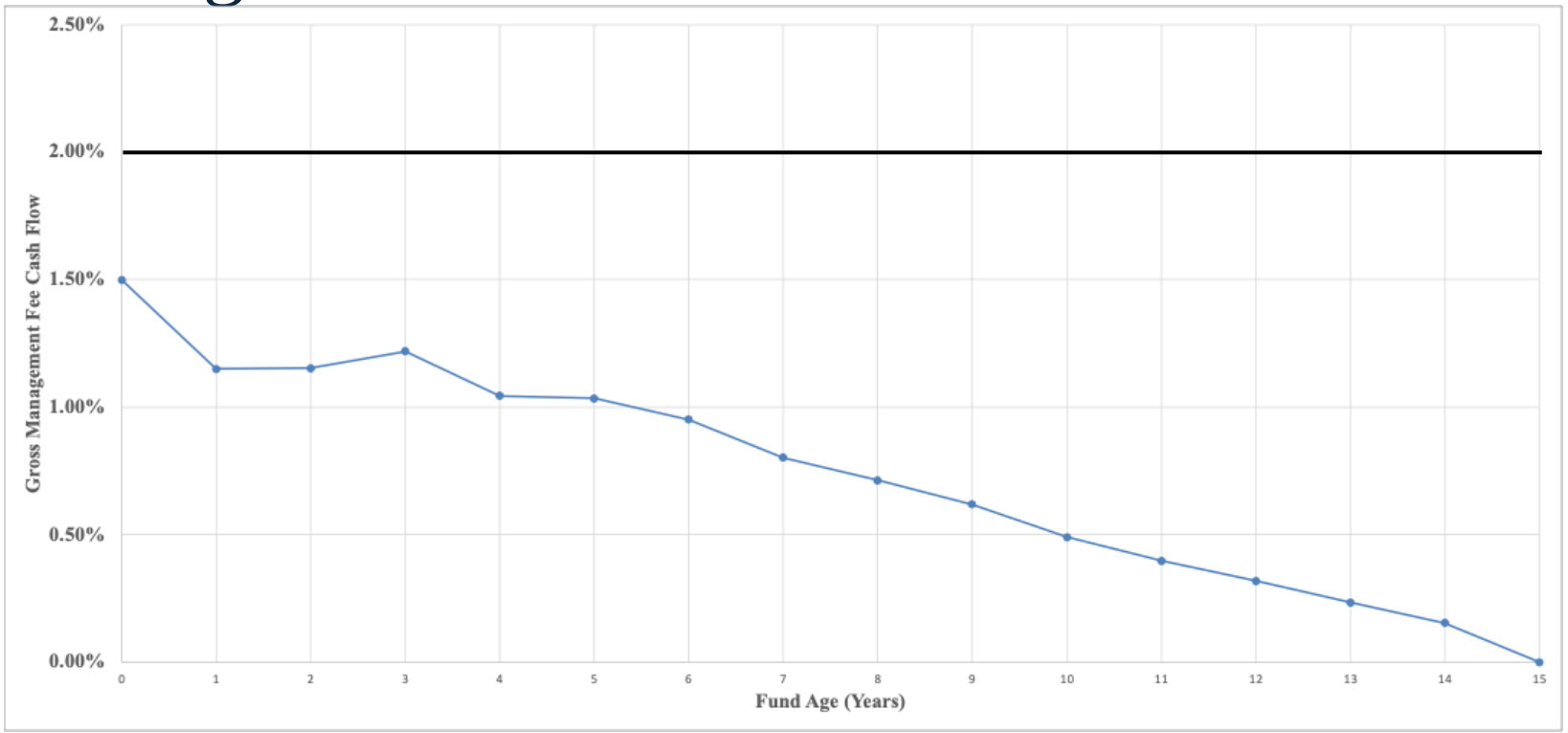
- 2% management fee is not accurate – net AMC cash flows are closer to 1% management fees, but other third-party expenses bring total ongoing charges closer to 2%
- Larger investment scale does not guarantee a better deal. Economies-of-scale fail to explain the majority of management fee variance
- Third-party expenses can be significant, especially in the investment period of a fund
- Transaction costs are essentially irrelevant, as they are rarely charged and nominal
- Carried distributions can be ‘spikey’, with large payments in one year and none in previous or subsequent years

Ongoing Charges Gross



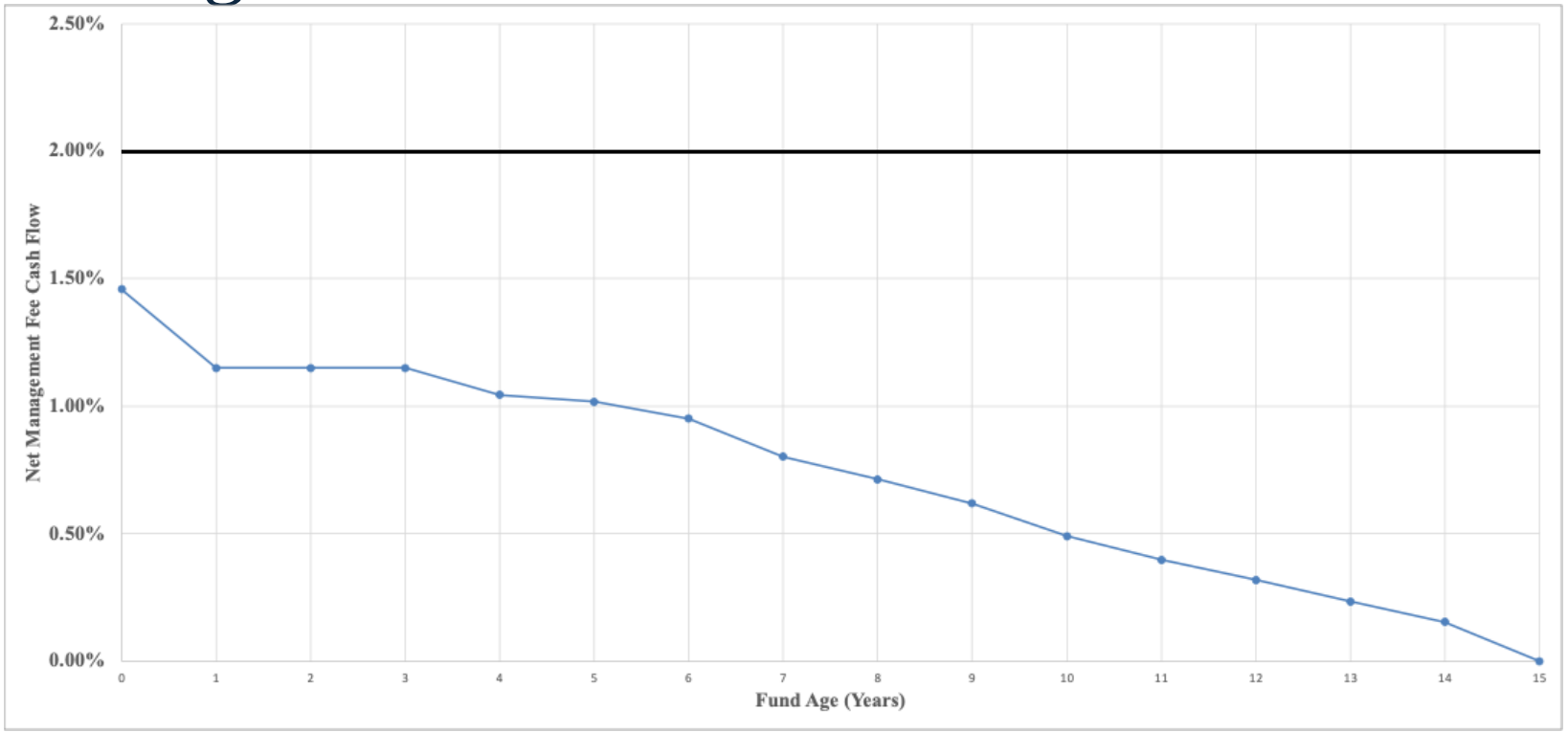
Gross Ongoing Charges: Management Fee (Gross) + Administrative Costs + Governance Expenses

Management Fee Gross Cash Flow



Management Fees with any rebates unrealized

Management Fee Net Cash Flow

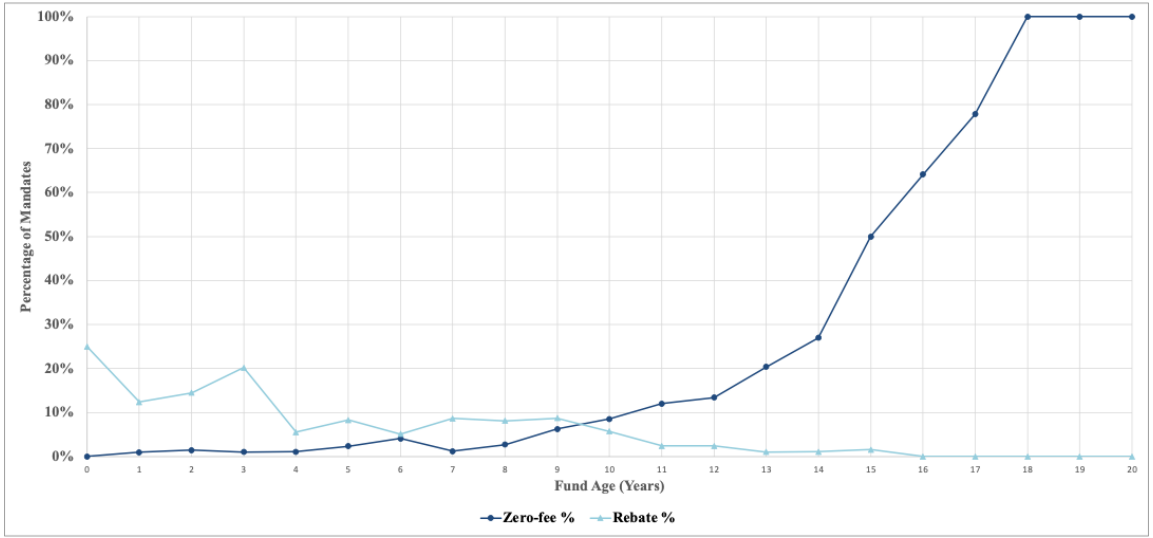


Management Fees inclusive of partial rebates

Kruskal-Wallis p-value = 0.00***

Zero-fee and Rebates

Fund Age	Count	Zero-fee	Percentage	Fee Rebate	Rebate	Total Percentage
0	56	0	0%	14	25%	25%
1	105	1	1%	13	12%	13%
2	138	2	1%	20	14%	16%
3	94	1	1%	19	20%	21%
4	90	1	1%	5	6%	7%
5	84	2	2%	7	8%	11%
6	98	4	4%	5	5%	9%
7	81	1	1%	7	9%	10%
8	74	2	3%	6	8%	11%
9	80	5	6%	7	9%	15%
10	70	6	9%	4	6%	14%
11	83	10	12%	2	2%	14%
12	82	11	13%	2	2%	16%
13	98	20	20%	1	1%	21%
14	89	24	27%	1	1%	28%
15	64	32	50%	1	2%	52%
16	39	25	64%	0	0%	64%
17	18	14	78%	0	0%	78%
18	11	11	100%	0	0%	100%
19	4	4	100%	0	0%	100%
20	3	3	100%	0	0%	100%



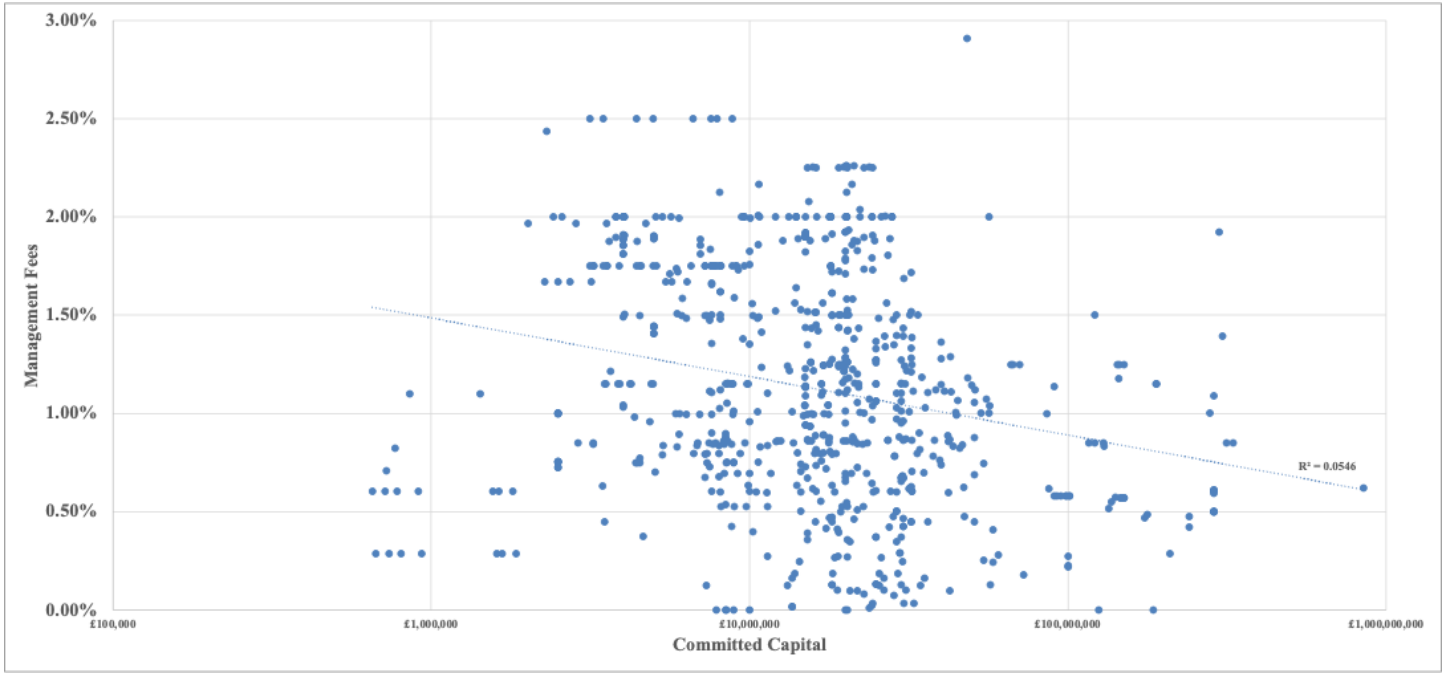
Management fee rebates and zero-fee mandates exist, and are relatively common at the start and end of the fund lifecycle

Dunn's Test with Bonferroni Correction on Management Fees

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
0	-	100%	100%	100%	100%	100%	100%	100%	15%	1%	0%	0%	0%	0%	0%	0%	0%	0%	100%	36%	100%
1	100%	-	100%	100%	100%	100%	100%	54%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	24%	100%
2	100%	100%	-	100%	100%	100%	100%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	21%	100%
3	100%	100%	100%	-	100%	100%	100%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	16%	100%
4	100%	100%	100%	100%	-	100%	100%	100%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	33%	100%
5	100%	100%	100%	100%	100%	-	100%	100%	34%	1%	0%	0%	0%	0%	0%	0%	0%	0%	100%	53%	100%
6	100%	100%	100%	100%	100%	100%	-	100%	100%	13%	0%	0%	0%	0%	0%	0%	0%	1%	100%	87%	100%
7	100%	54%	19%	11%	100%	100%	100%	-	100%	100%	0%	0%	0%	0%	0%	0%	0%	6%	100%	100%	100%
8	15%	0%	0%	0%	3%	34%	100%	100%	-	100%	69%	1%	0%	0%	0%	0%	0%	41%	100%	100%	100%
9	1%	0%	0%	0%	0%	1%	13%	100%	100%	-	100%	12%	0%	0%	0%	0%	0%	100%	100%	100%	100%
10	0%	0%	0%	0%	0%	0%	0%	0%	69%	100%	-	100%	100%	100%	9%	18%	36%	100%	100%	100%	100%
11	0%	0%	0%	0%	0%	0%	0%	0%	1%	12%	100%	-	100%	100%	100%	100%	100%	100%	100%	100%	100%
12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	-	100%	100%	100%	100%	100%	100%	100%	100%
13	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	100%	100%	-	100%	100%	100%	100%	100%	100%	100%
14	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	100%	100%	100%	-	100%	100%	100%	100%	100%	100%
15	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	36%	100%	100%	100%	100%	-	100%	100%	100%	100%	100%
16	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	36%	100%	100%	100%	100%	100%	-	100%	100%	100%	100%
17	0%	0%	0%	0%	0%	0%	1%	6%	41%	100%	100%	100%	100%	100%	100%	100%	100%	-	100%	100%	100%
18	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	100%	100%
19	36%	24%	21%	16%	33%	53%	87%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	-	100%
20	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	-

Data can be pooled by fund age

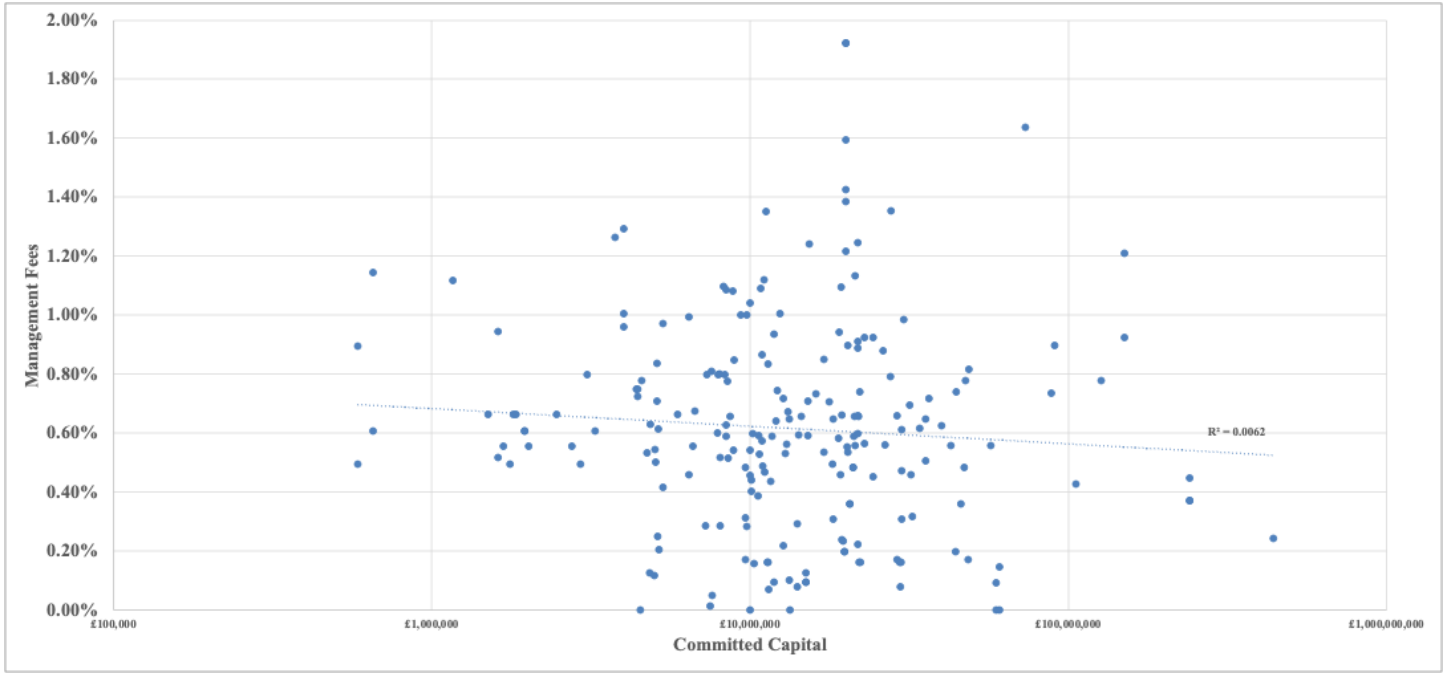
Economies-of-Scale: Visual Analysis (Fund Age 0-7)



Economies-of-scale exist, but they don't explain much of the variance

N = 738

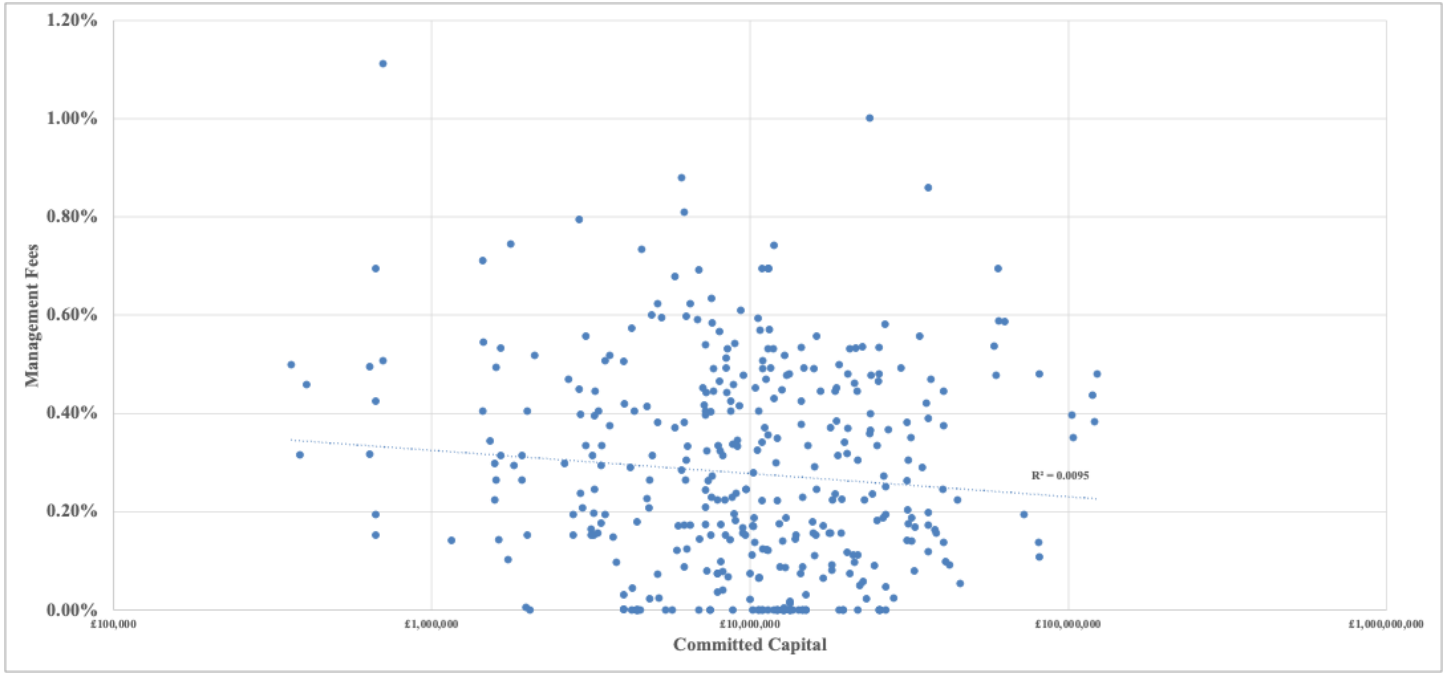
Economies-of-Scale: Visual Analysis (Fund Age 8-10)



Economies-of-scale exist, but they don't explain much of the variance

N = 213

Economies-of-Scale: Visual Analysis (Fund Age 11-20)



Economies-of-scale exist, but they don't explain much of the variance

N = 383

Transaction Costs

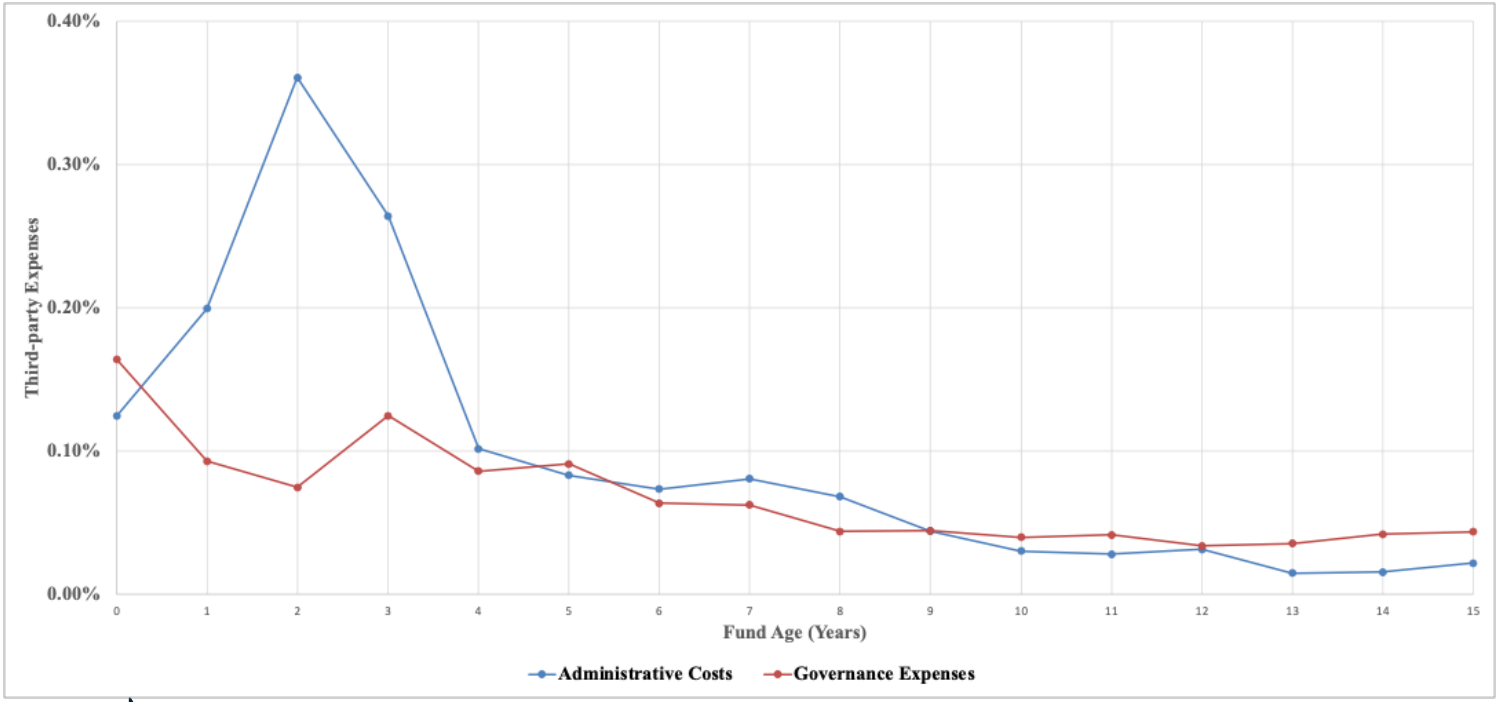
Fund Age	Count	Transaction Cost Charged	Transaction Fees	Underwriting Fees	Monitoring Fees	Directors' Fees	Other Fees	Not Offset	Full Offset
0	56	11	3	0	5	0	5	2	9
1	105	26	14	0	7	1	9	15	11
2	138	37	16	0	6	12	15	13	24
3	94	22	8	0	7	7	8	5	17
4	90	32	10	0	12	11	9	10	22
5	84	33	11	0	13	9	8	6	27
6	98	34	14	0	11	10	7	13	21
7	81	28	8	0	12	10	3	7	21
8	74	21	6	0	7	8	2	7	14
9	80	18	6	0	6	6	4	7	11
10	70	11	0	0	3	3	6	6	5
11	83	19	4	0	4	5	11	6	13
12	82	20	5	0	1	2	15	4	16
13	98	20	0	0	1	2	17	5	15
14	89	14	0	1	0	3	12	2	12
15	64	0	0	0	0	0	0	0	0
16	39	0	0	0	0	0	0	0	0
17	18	1	0	0	0	0	1	1	0
18	11	0	0	0	0	0	0	0	0
19	4	0	0	0	0	0	0	0	0
20	3	0	0	0	0	0	0	0	0
Median	n/a	0.02%	0.11%	0.03%	0.12%	0.01%	0.03%	109	238

Only 1 in 4 mandates have any transaction costs, and 69% of those that do are fully rebated

This means only 7% of mandates have a net positive transaction cost cash flow

Given controversy around monitoring fees (Ludovic et al, 2018), our data shows 100% of monitoring fees were rebated

Third-Party Expenses



Third-party Expenses can be high, especially during the investment period

Administration Costs: When Charged

Fund Age	Count	Administration	Investment administration	Custody / depositary fees	Facility fees	Other administration charges	Interest Expense
0	100%	95%	50%	30%	84%	50%	70%
1	100%	96%	72%	39%	77%	50%	66%
2	100%	96%	65%	31%	81%	57%	62%
3	100%	98%	49%	24%	77%	56%	71%
4	100%	88%	49%	26%	81%	43%	58%
5	100%	96%	49%	26%	77%	52%	51%
6	100%	94%	59%	21%	77%	42%	53%
7	100%	95%	58%	20%	72%	49%	52%
8	100%	92%	55%	16%	61%	50%	41%
9	100%	94%	60%	16%	59%	56%	24%
10	100%	94%	54%	34%	46%	63%	10%
11	100%	92%	41%	42%	37%	59%	19%
12	100%	93%	37%	45%	34%	71%	18%
13	100%	87%	35%	45%	31%	62%	15%
14	100%	87%	33%	45%	28%	63%	15%
15	100%	88%	33%	41%	41%	66%	23%
16	100%	79%	46%	28%	44%	62%	8%
17	100%	67%	50%	6%	39%	44%	6%
18	100%	45%	45%	0%	18%	18%	0%
19	100%	100%	75%	0%	50%	50%	25%
20	100%	100%	67%	0%	100%	67%	0%

Fund Age	Count	Administration	Investment administration	Custody / depositary fees	Facility fees	Other administration charges	Interest Expense
0	56	0.13%	0.03%	0.00%	0.00%	0.04%	0.18%
1	105	0.21%	0.02%	0.01%	0.05%	0.03%	0.27%
2	138	0.38%	0.04%	0.01%	0.03%	0.04%	0.35%
3	94	0.29%	0.03%	0.01%	0.01%	0.06%	0.42%
4	90	0.14%	0.04%	0.01%	0.00%	0.04%	0.14%
5	84	0.09%	0.04%	0.01%	0.01%	0.02%	0.08%
6	98	0.08%	0.02%	0.00%	0.00%	0.02%	0.11%
7	81	0.09%	0.03%	0.01%	0.00%	0.02%	0.08%
8	74	0.09%	0.02%	0.01%	0.00%	0.03%	0.06%
9	80	0.05%	0.03%	0.00%	0.00%	0.03%	0.02%
10	70	0.03%	0.02%	0.00%	0.00%	0.02%	0.00%
11	83	0.04%	0.02%	0.00%	0.00%	0.03%	0.00%
12	82	0.04%	0.02%	0.00%	0.00%	0.02%	0.00%
13	98	0.02%	0.01%	0.00%	0.00%	0.01%	0.00%
14	89	0.02%	0.02%	0.00%	0.00%	0.01%	0.00%
15	64	0.02%	0.01%	0.00%	0.00%	0.01%	0.00%
16	39	0.03%	0.01%	0.00%	0.00%	0.06%	0.01%
17	18	0.04%	0.01%	0.00%	0.00%	0.01%	0.00%
18	11	0.01%	0.01%	0.00%	0.00%	0.01%	0.00%
19	4	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%
20	3	0.01%	0.04%	0.00%	0.00%	0.05%	0.00%

Most funds charge interest expenses, and they are considerable when charged

Interest Expense: “Interest charged to the fund related to the financing provided to the fund”

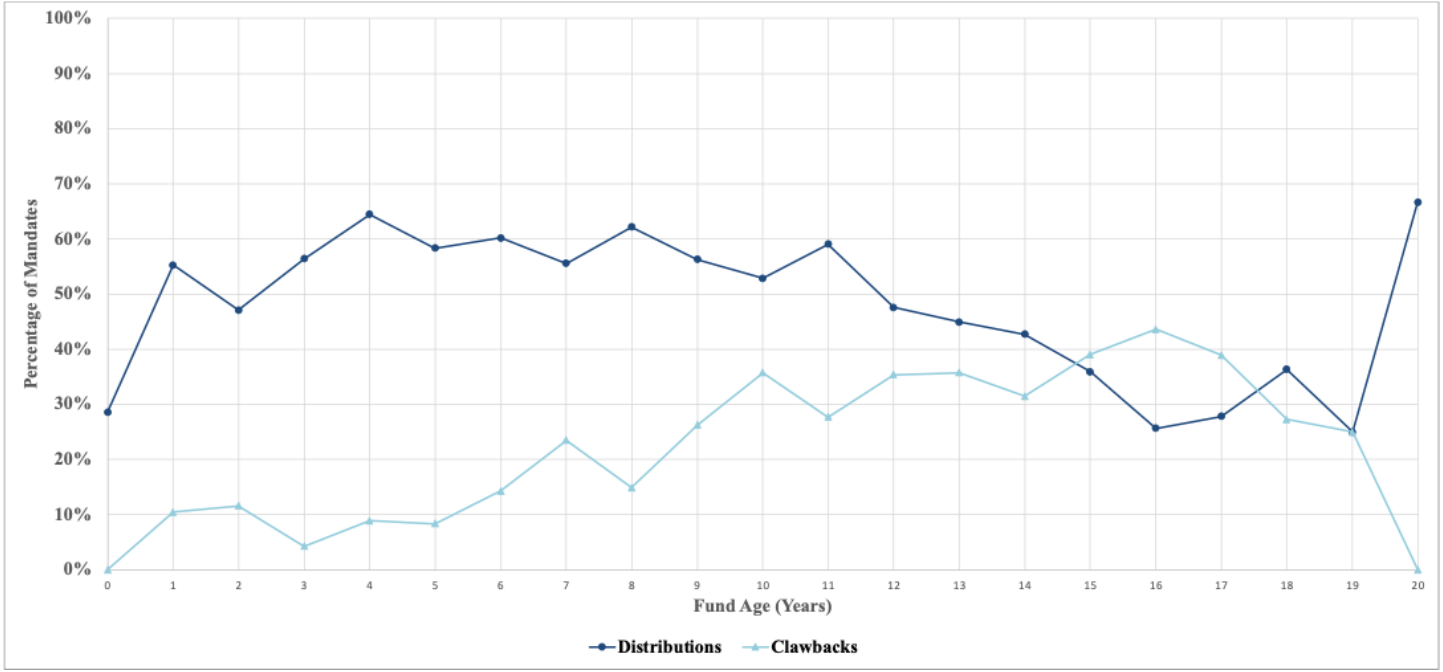
Governance Expenses: When Charged

Fund Age	Count	Governance, regulation and compliance	Audit costs	Legal and professional fees	Tax advice and structuring costs	Other governance and compliance charges	Fund set up costs	Broken deal fees
0	100%	95%	89%	75%	48%	71%	54%	34%
1	100%	98%	92%	82%	37%	70%	43%	53%
2	100%	95%	92%	86%	46%	61%	12%	28%
3	100%	90%	78%	62%	49%	69%	7%	29%
4	100%	90%	87%	74%	48%	56%	14%	30%
5	100%	94%	90%	68%	46%	64%	11%	24%
6	100%	92%	87%	74%	43%	64%	12%	14%
7	100%	88%	84%	70%	54%	56%	12%	19%
8	100%	88%	77%	70%	45%	58%	3%	3%
9	100%	91%	88%	73%	44%	45%	4%	10%
10	100%	93%	91%	71%	40%	40%	4%	7%
11	100%	89%	87%	72%	39%	42%	1%	4%
12	100%	91%	84%	62%	30%	33%	1%	4%
13	100%	94%	88%	73%	33%	38%	2%	2%
14	100%	91%	82%	73%	28%	35%	0%	7%
15	100%	94%	94%	80%	34%	38%	2%	6%
16	100%	92%	90%	77%	21%	26%	0%	5%
17	100%	78%	78%	61%	22%	39%	0%	6%
18	100%	91%	82%	64%	9%	73%	9%	36%
19	100%	100%	50%	75%	50%	25%	25%	0%
20	100%	67%	33%	33%	33%	33%	0%	0%

Fund Age	Count	Governance, regulation and compliance	Audit costs	Legal and professional fees	Tax advice and structuring costs	Other governance and compliance charges	Fund set up costs	Broken deal fees
0	56	0.19%	0.01%	0.03%	0.01%	0.02%	0.04%	0.08%
1	105	0.09%	0.00%	0.01%	0.01%	0.02%	0.04%	0.05%
2	138	0.08%	0.01%	0.02%	0.01%	0.03%	0.00%	0.04%
3	94	0.15%	0.01%	0.01%	0.03%	0.06%	0.03%	0.04%
4	90	0.10%	0.02%	0.01%	0.02%	0.04%	0.03%	0.01%
5	84	0.11%	0.02%	0.01%	0.03%	0.04%	0.00%	0.00%
6	98	0.08%	0.02%	0.01%	0.02%	0.03%	0.01%	0.00%
7	81	0.08%	0.01%	0.01%	0.02%	0.02%	0.00%	0.00%
8	74	0.06%	0.01%	0.01%	0.02%	0.02%	outlier	0.01%
9	80	0.05%	0.01%	0.00%	0.02%	0.02%	0.01%	0.00%
10	70	0.04%	0.01%	0.00%	0.03%	0.01%	0.02%	0.00%
11	83	0.04%	0.02%	0.01%	0.02%	0.01%	0.01%	0.01%
12	82	0.04%	0.02%	0.01%	0.02%	0.02%	0.00%	0.02%
13	98	0.04%	0.02%	0.00%	0.02%	0.01%	0.00%	0.00%
14	89	0.05%	0.02%	0.01%	0.01%	0.01%	0.00%	0.00%
15	64	0.05%	0.01%	0.01%	0.02%	0.01%	0.00%	0.00%
16	39	0.03%	0.01%	0.01%	0.02%	0.02%	0.00%	0.01%
17	18	0.02%	0.01%	0.01%	0.02%	0.01%	0.00%	0.01%
18	11	0.02%	0.01%	0.00%	0.01%	0.01%	0.00%	0.00%
19	4	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
20	3	0.01%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%

Fund set up costs and broken deal fees are common during the investment period of a fund

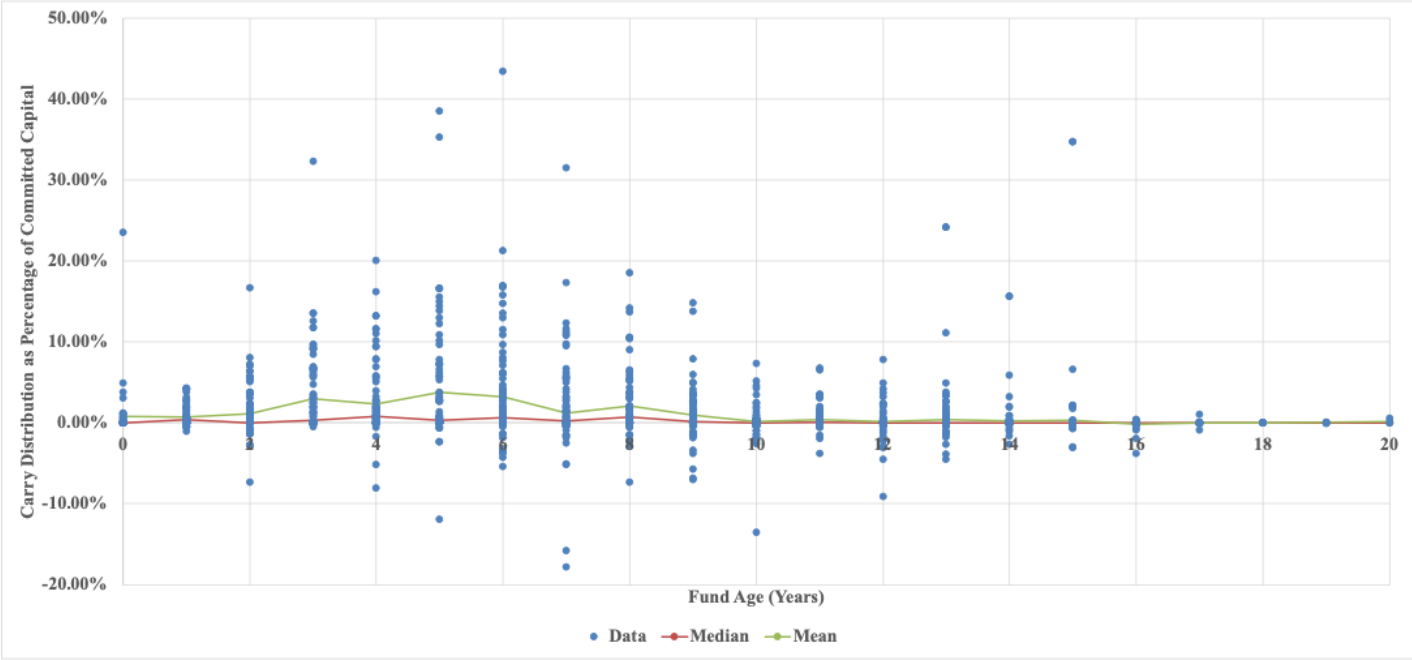
Carried Interest



Funds don’t charge carry consistently throughout the fund lifecycle

Claw-backs steadily rise over the fund lifecycle

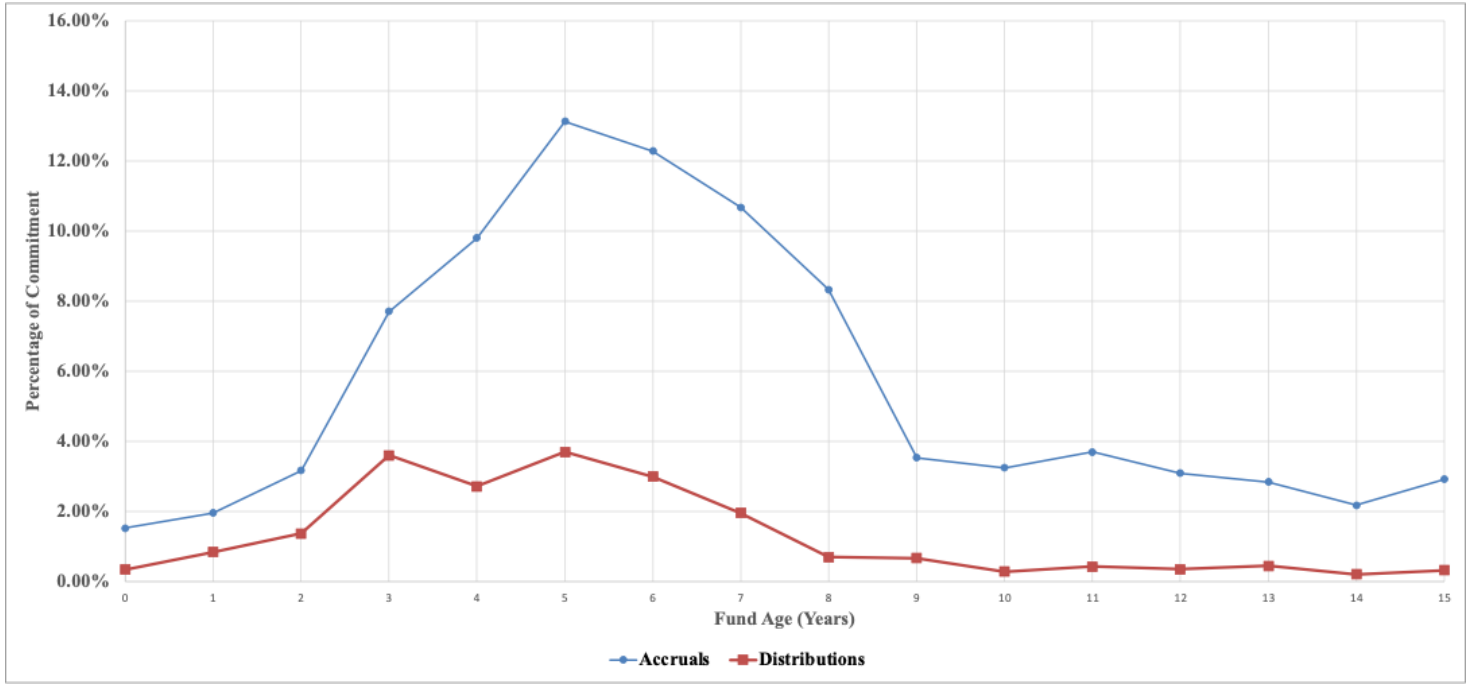
Carried Interest Distributions



Carry Distributions can be spikey, with large payments occurring in single years, and little to no paid in previous or subsequent years

An example would be a Year 6 fund distributing £6mn of carry at once, or 42% of committed capital

Carried Interest: US-waterfall

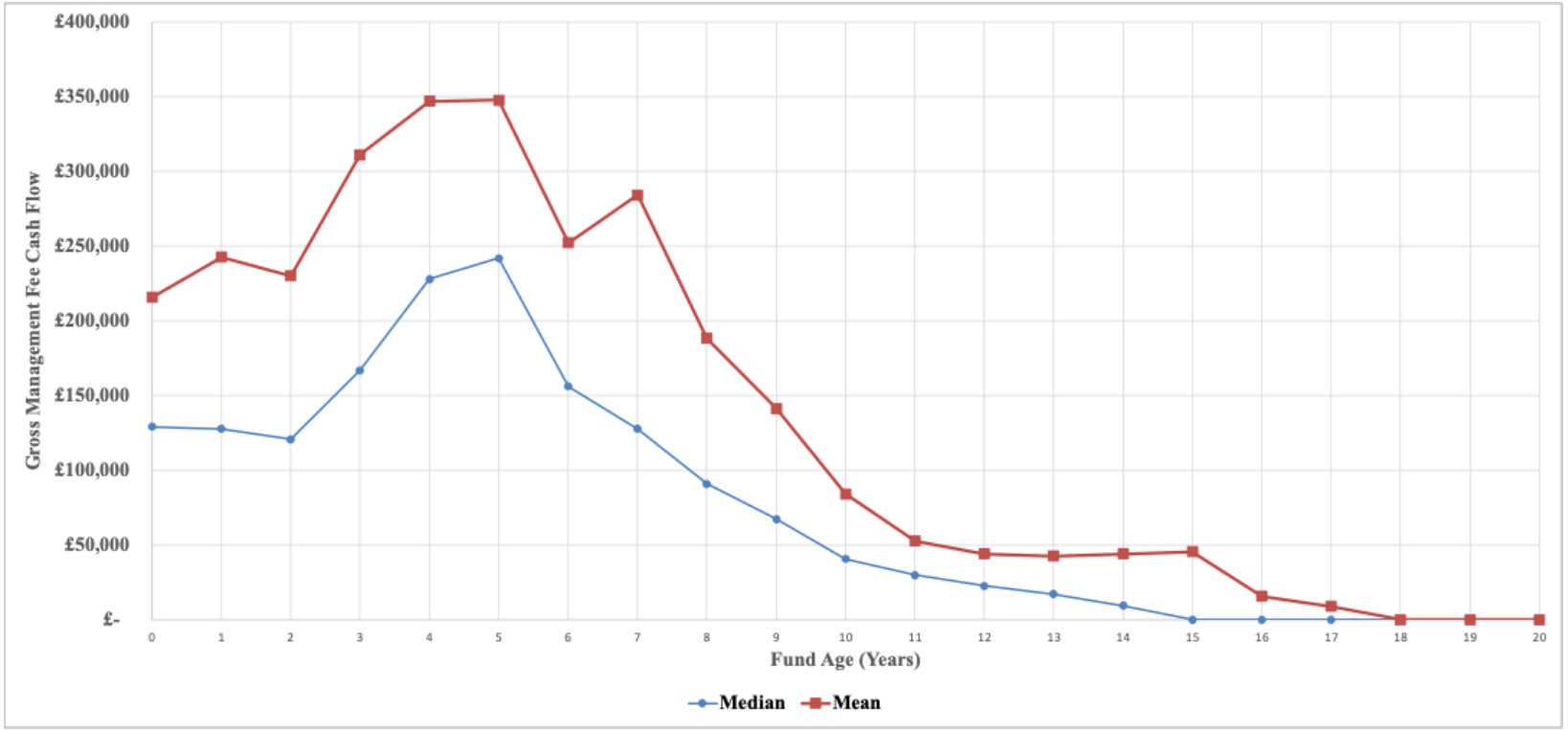


Mean accrual (excluding previous distributions) peaks around 13% of committed capital

Next Steps

- Expand our investigation of carried interest to include European waterfalls

- Investigate the degree to which differential pricing occurs within funds, and whether hard investment factors e.g., scale determine this, or whether there are other factors

- Increase the total management fee variance explained by our baseline model, including checking for significance of past LP-GP relationships

Appendix: Gross Management Fee Cash Flow