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TRANSACTION COSTS AMONGST LARGE ASSET OWNERS

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Background

Institutional asset owners across the world, encouraged by regulators, are increasingly interested in 'hidden' transaction costs – costs incurred in trading securities before returns are calculated.

For Defined Benefit pension plans, every £ taken in cost needs to be recouped through improved performance or put back by members, employers or, in the case of public schemes, taxpayers. In Defined Contribution plans, costs reduce the value of the member's account with long term retirement implications for the member.

This paper provides highlights from detailed research completed by CEM for its elite 'Global Leaders' peer group. The 19 participating pension and sovereign wealth funds in the study have combined assets of over £2 trillion. They include some of the world's most important and complex institutional investors. The research is based on detailed data supplied confidentially by the Global Leaders group.

The research enables CEM, for the first time, to reveal the magnitude of transaction costs. It also helps funds to:

- Understand different types of transaction costs
- Understand the materiality of transaction costs
- Identify factors that are likely to influence the quantum of transaction costs
- Understand how to compare transaction costs

What do we mean by transaction costs?

Transaction costs can be 'explicit' or 'implicit'. Explicit costs are generally easy for funds to identify, e.g., brokerage commission, where the price is contractually determined and an invoice raised. Implicit costs are harder to identify and embedded in the cost of buying and selling securities, e.g., bid-ask spreads and mark-ups on over-the-counter (OTC) instruments.

The following list highlights the transaction costs captured in the analysis. The list is not exclusive or exhaustive and does not cover every asset class or every transaction cost we looked at. It is designed to help the reader understand the breadth of the analysis:

Cost type	Description
Broker commission	Fees charged by brokers for executing trades (usually includes exchange and sometimes settlement fees).
Taxes	Stamp duty etc.
Broker research	The portion of broker commissions that relate to research.
Fixed Income and OTC Derivative Spreads	The difference between the bid and ask price of fixed income securities and OTC derivatives.
Entry / exit fees	Some funds charge a cost on entry or exit intended to offset the transaction costs incurred by buying or selling underlying assets to accommodate the entry or exit.

Transaction costs for private investments

- Professional fees: legal, due-diligence, tax advice, consulting etc. (entry and exit).
- Costs incurred in both successful and unsuccessful transactions, including both breakup fees and reverse breakup fees (where the buyer or seller may have to pay a fee to compensate for the other's transaction costs if they withdraw from a prospective deal).

Costs within Hedge Funds

Some funds were able to provide brokerage costs on stock and exchange traded derivatives within hedge funds. Spreads on fixed income and OTC derivatives were generally unavailable.

The analysis does not include:

- Implementation shortfall: differences in the cost of acquiring a security between the date of a buy/sell decision and the point of execution, and
- Market impact: differences in the cost of a security caused by the trade itself, i.e., a large trade that impacts pricing.

Transaction costs are material

A fund with the average asset mix in the Global Leaders group is estimated to be paying 20.2 bps in transaction costs each year.

Total investment costs¹ for the average fund in the study were 86.3 bps. Transaction costs accounted for 24% of the total. This tells us that transaction costs are material.

Total	86.3	100%
Overlays	1.3	1%
Governance, custody, operations	2.6	3%
Transaction costs	20.2	24%
Performance fees	20.4	24%
Base manager fees / internal management	41.8	49%
Cost type	Bps	% of total

The costs in the table above reflect the particular circumstances of the large funds in the peer group. Their costs are generally higher than CEM's other clients, despite managing more of their assets internally (at low cost). This is because they have a high relative allocation to expensive private assets.

¹ Includes manager fees (base and performance), private market costs including carried interest, the costs associated with internal investment teams, whether investing directly or responsible for strategy and/or manager selection and monitoring, overlays, underlying partnership level costs in fund-of-fund structures, board and other governance and oversight costs, custody, professional fees and the transaction costs as reported herein.

Factors that influence total transaction costs

The 20.2 bps should not be taken as a rule-of-thumb because the transaction cost range is large. There are four material factors that influence transaction costs at a fund level:

- 1. Asset mix
- 2. Assumptions
- 3. Volume
- 4. How much funds pay for similar transactions

1. Asset mix

Transaction costs are much higher in some asset classes than others. Therefore, total transaction costs will be sensitive to asset mix. The table below illustrates median transaction costs at an asset class level and how the average asset mix of the peer group translates into the total of 20.2 bps.

	Transaction Costs (bps)	Average asset mix amongst the peers	Weighted total (bps)
Asset class	(A)	(B)	(A x B)
Public Stock	6.0	40%	2.4
Fixed Income	21.9	31%	6.8
Hedge Funds	31.9	5%	1.7
Derivatives - Exchange traded	0.4	120% ²	0.5
Derivatives - Over-the-counter	0.8	420% ²	3.4
Real Estate	6.9	11%	0.8
Infrastructure	11.6	4%	0.4
Private Equity	48.0	9%	4.2
Total	-		20.2

2. Assumptions

While explicit costs are either known, or can be fairly easily estimated based on known values, implicit costs are essentially estimates. The assumptions behind those estimates can vary quite significantly and influence total transaction costs at a fund level by approximately 5-8 bps.

The impact of assumptions is most apparent when comparing transaction costs for fixed income. Here we found big geographical differences.

² Derivative cost uses notional amount as the denominator. Mix percentages are expressed as notional exposure relative to total fund assets.

For example, the Dutch pension funds in the study were reporting transaction costs for fixed income that implied an average spread of 29 bps. Outside of the Netherlands the implied average fixed income spread was 3 bps. Funds with low estimates tell us they don't believe they experience different spreads to their peers, so why the difference?

Some of the difference can be attributed to different mixes of trades in sovereign versus credit versus emerging market bonds. This is clearly a driver, but it only explains a fraction of the wide range.

We believe much of the difference is likely linked to assumed spreads between different AAA government bond types, with U.S. government treasury bonds being assumed to have much narrower spreads than European bonds. More work is needed to better understand and quantify the large range.

3. Volume

The funds in our study provided traded volumes as a means to understand the difference between transaction costs and so we were able to compare portfolio turnover. Clearly if more securities are bought and sold in a portfolio then total transaction costs are likely to be higher.

We found significant differences in the volume of assets traded between funds and asset classes. The table below highlights the range for all public equity and fixed income.

	Percentage of portfolio trac	Percentage of portfolio traded: (purchases + sales) / 2	
	All Public Equity	All Fixed Income	
75 th percentile	71%	127%	
Median	40%	74%	
25 th percentile	32%	41%	

To understand the data better, a fund with a 25% turnover rate holds its assets for four years on average. Some funds are clearly turning over most or all of their public holdings every year.

High turnover is something to be aware of but it may not necessarily be a problem. It may reflect a manager's intended strategy or the specific remit given to the manager by the fund. What is important is that the manager is working within parameters that are understood by and acceptable to the asset owner.

How much funds pay for similar transactions

When we put asset mix differences, traded volumes and assumptions aside, the key question for a fund is, can we negotiate lower fees?

Some funds certainly pay less than others to trade similar assets. This may not necessarily be due to an explicit negotiation of fees though. Differences will invariably arise to reflect the size of trades, types of asset traded, etc. The table overleaf illustrates ranges of brokerage for all public equities.

	Cost vs. Transacted Assets ³ - Total Broker Commission
75 th percentile	5.7 bps
Median	3.9 bps
25 th percentile	3.2 bps

The funds in the study said they have the ability to include transaction cost limits as part of the manager selection process, but they told us they were more likely to enforce a turnover limit rather than impose a transaction cost limit.

It is also important to say that the potential market impact is typically larger than the transaction cost, so how trades are executed matters. Small transaction cost impacts need to be put in perspective when thinking about much larger market impacts.

How can you understand if *your* costs are reasonable?

CEM helps large asset owners understand if their costs are reasonable. Transaction costs are a material component of those costs but are tough to collect consistently.

Work being done in some of the world's mature investment markets is set to change that, in particular:

- *Netherlands* Since 2015 Dutch pension funds have been required by law to publicly disclose their costs, including transaction costs.
- *UK* The Financial Conduct Authority (FCA) has set up the Institutional Disclosure Working Group (IDWG) to support consistent and standardised disclosure of costs and charges to institutional investors using reporting templates.
- Australia The Australian Securities and Investments Commission (ASIC) requires Australian 'super' funds to disclose fees on a consistent basis, including transaction costs.

It is as a consequence of this work that more funds are collecting transaction cost data. CEM is helping those funds to compare and make sense of the data. For funds interested in this, there are four essential elements:

1. Data:

CEM receives annual data submissions from 500 institutional investors across the world with combined assets of over US\$10 trillion. Half of the world's top 300 pension funds submit cost and performance data to us and receive detailed comparisons. The CEM database is a unique and critically important resource for cost comparisons.

³ Brokerage / (purchases + sales)

2. Process: We have a structured and systematic approach to capture data and we work

tirelessly to make sure the data we collect is accurate and fit to be compared.

3. Methodology: Our methodology helps to make sense, not just of transaction costs, but of the total

> cost of investing assets. We allow for asset mix, scale and implementation differences and also position cost in the context of performance and risk. Ultimately we help funds understand if 'paying more gets you more'.

4. People: Benchmarking pension funds is all we do. Our clients know we have robust data

> from a wide cross section of investors. More important still, they value our objective analysis and trust us to be sensitive, independent and credible with a

deep understanding of the issues they face.

About CEM Benchmarking

CEM Benchmarking is the global leader in providing investment cost and performance benchmarking for large institutional investors. We help our clients understand and make sense of their costs. Our clients include pension funds, sovereign wealth funds and other institutional investors.

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