



Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 25

MEETING DATE: April 21, 2021

SUBJECT: Education: Transaction Costs

SUBMITTED FOR: ___ Consent ___ Deliberation and Action X Receive and File

RECOMMENDATION

Staff recommends that the Board receive and file the education presentation provided covering transaction costs.

PURPOSE

This item supports the 2020 Investment Year in Review and 2021 Annual Investment Plan to provide education to Board members.

BACKGROUND

SCERS first established a Directed Brokerage and Commission Recapture Policy in October 1996. The Policy is designed to provide explicit guidance to SCERS' public equity managers, emphasizing the requirement to achieve best execution on trading and to direct trades through directed brokers to reduce SCERS' overall commission costs. The Policy was re-affirmed in 2018 and provides guidance on Board reporting requirements.

In 2010, SCERS began utilizing the services of Elkins/McSherry, a subsidiary of SCERS' custodian bank State Street, to analyze SCERS' public equity and fixed income transaction costs. The transaction cost analysis performed by Elkins/McSherry was incorporated into quarterly reporting provided to SCERS' Board, along with reporting on the commission recapture program per SCERS' Policy. Over time, recognizing that transaction costs have greater impact on overall trading costs and performance, the reporting evolved to focus predominately on transaction cost analysis.

TRANSACTION COST ANALYSIS EDUCATION

The goal of the education session is to provide the Board an update on the basics of transaction cost analysis (TCA). The timing of the education session was driven by several considerations:

- Feedback provided by the Board that the current quarterly reporting should be streamlined. Quarterly reports provided by Elkins/McSherry, which include domestic and

global reports for public equity and fixed income, now exceed 150 pages. The updated quarterly reporting will be condensed to key information, with more detailed reports available.

- Review of SCERS' Directed Brokerage Transactions and Commission Recapture Policy. Staff has a goal of reviewing policies every three years. The Directed Brokerage and Commission Recapture Policy was last reviewed in 2018. The education session will provide background on future policy changes and considerations, including potentially changing the policy to formally include transaction cost analysis.
- Review of TCA service providers. State Street is updating its TCA service to a new provider, replacing Elkins/McSherry with BestX, a London-based TCA service recently acquired by State Street. With the change to BestX, which will require a new service agreement, it is an opportune time to review TCA and evaluate other service providers.

The education session will review key components of transaction costs, as well as differentiate between TCA for equity and fixed income markets. Some of the key terminology includes:

- Best Execution: Federally regulated requirement that requires brokers to exercise reasonable care to obtain the most advantageous terms when exercising trades on behalf of clients. Requirements include providing monthly reports on execution quality and quarterly reports on customer order routing.
- Volume-Weighted Average Price (VWAP): Typically calculated as the sum of total dollar value of benchmark trades divided by quantity of those trades. VWAP is popular because it is easy to interpret – it compares the execution price of your trade to all trades executed that day (or during the time the trade was executed).
- Implementation Shortfall: Post-trade metric that measures the execution price versus a pre-determined price and incorporates all explicit and implicit costs. Calculated as the net amount received from a trade (after costs), compared to the initial price at the time a decision was made to trade.

Finally, the education session also includes an update on SCERS' Commission Recapture program, policy considerations, and Board reporting. With changing market dynamics regarding commission recapture and transaction cost analysis, there are several potential changes that could be made to SCERS' existing policy. No formal policy changes are being proposed at this time, but the education session will provide an overview of potential future policy changes. SCERS' is also considering changes to Board reporting, to streamline quarterly reporting to focus on key considerations and make it more understandable and efficient for Board members to review.

ATTACHMENTS

- Education Presentation: Transaction Costs

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/S/

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SCERS
CELEBRATING **80** YEARS

Education: Transaction Costs

April 21, 2021

SACRAMENTO COUNTY EMPLOYEES' RETIREMENT SYSTEM

Agenda

I. Objective – Education and Overview of Transaction Costs

- Why an update on Transaction Costs is needed

II. The Basics of Transaction Cost Analysis (TCA)

- Terminology
- Trading – Equity and Fixed Income
- Service Providers

III. Directed Brokerage and Commission Recapture

- SCERS' Policy and Program Update

IV. Policy Considerations

- Current Policy and Reporting Considerations

V. Board Reporting

- Sample Reports

I. Transaction Costs – Why Now

- Feedback that quarterly reports are extensive and need to be updated
- Review of SCERS' *Directed Brokerage Transactions and Commission Recapture Policy*
- Upcoming changes to State Street's Transaction Cost Analysis service

Transaction Costs Defined

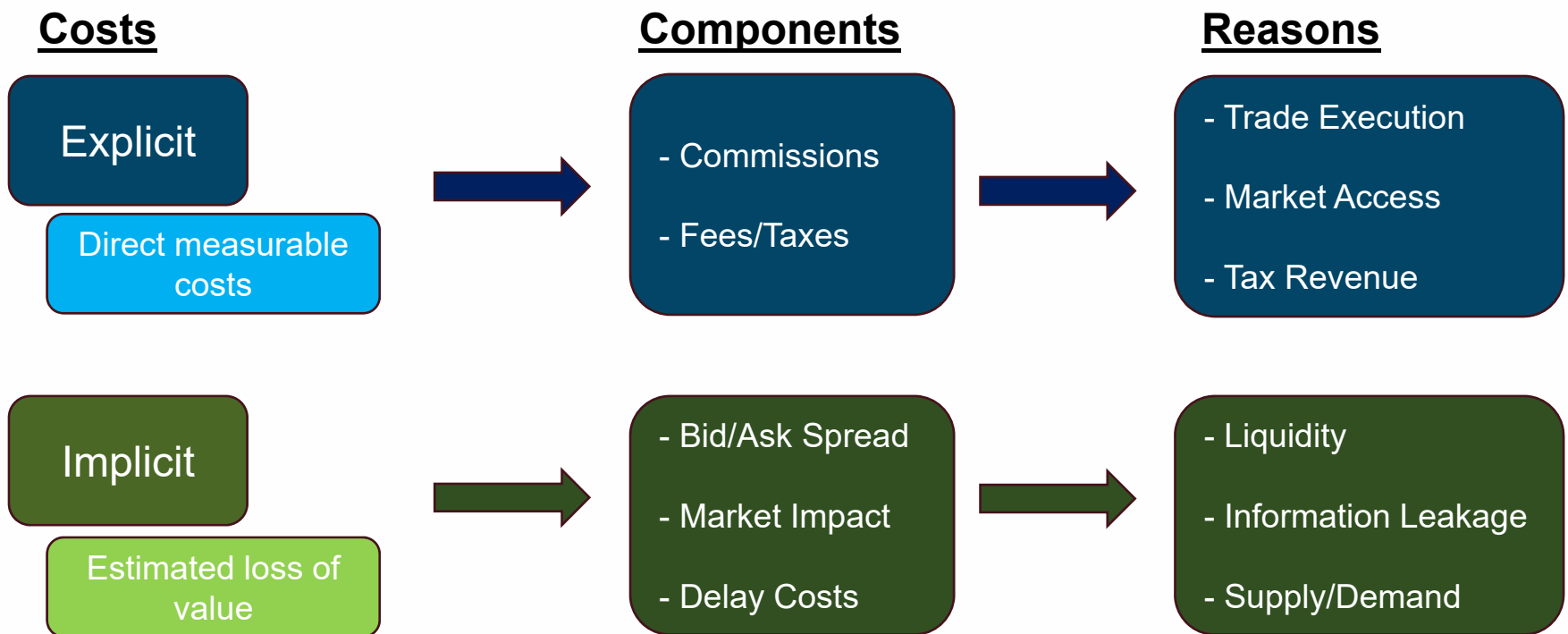
- Transaction Costs are an inherent and critical aspect of implementing any investment strategy
- Transaction costs include both Explicit and Implicit Costs
- Transaction costs can have a meaningful impact on the net returns earned by investors
 - Depending on asset class and market, transaction costs can range from 10-20 basis points up to 100-200 basis points
 - Measurement of transaction costs include Explicit and Implicit Costs and can vary based on how these are measured
- Changing market dynamics have led to changes in Transaction Cost Analysis (TCA)

Monitoring Transaction Costs

- Review of transaction costs helps ensure SCERS' managers are meeting Fiduciary Duty to obtain best execution
- Lower transaction costs helps SCERS earn greater net return on investments
- Review of transaction costs is included in overall assessment of public equity and fixed income managers
- **Board vs. Staff Roles**
 - Staff reviews detailed reports provided by third party service provider (Elkins/McSherry) and communicates to Board
 - Board receives quarterly reports summarizing review by Staff and any additional action that may be needed

II. Basics of Transaction Cost Analysis (TCA)

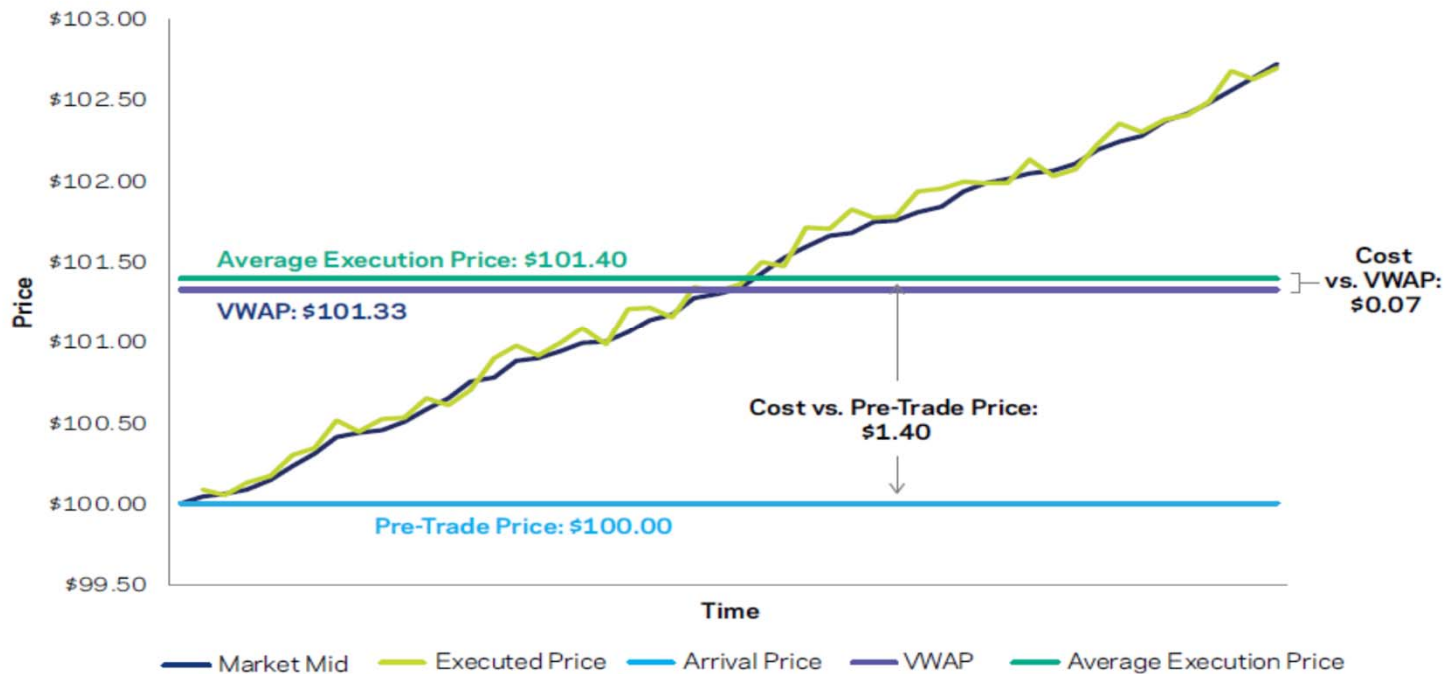
- TCA is the method used by institutional investors and investment managers to evaluate the effectiveness of portfolio transactions
- The analysis involves comparing the actual execution of trades to industry standard benchmarks and evaluate trading costs along several measures of explicit and implicit costs



TCA – Market Impact Costs

- Best Execution
- Volume-Weighted Average Price (VWAP)
- Implementation Shortfall

Measuring Transactions Costs: VWAP vs. Pre-Trade Price



Equity Trading

- Trading predominately executed through market exchanges
- Transparent pricing for explicit costs, such as bid-ask spreads, commission rates, and market fees
- Established and recognized methods for measuring transaction costs – comparable across brokers and managers
- Trading differences between investment strategies and managers

Fixed Income Trading

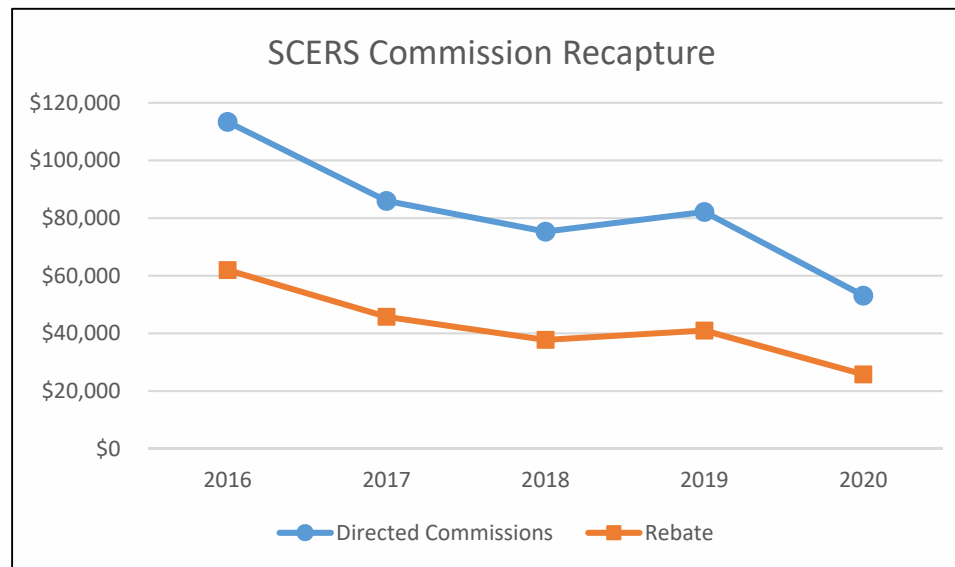
- Majority of bonds are traded over-the-counter (OTC) versus directly through exchanges
 - Unique securities that require individual pricing
 - Most trading is done directly between brokers and investors or from one dealer to another
- Until fairly recently, there was limited price transparency on price
- Trading costs are represented through “mark-ups” or spreads in prices versus explicit commission rates in equity markets

III. Directed Brokerage and Commission Recapture

- Commission recapture programs are designed to help lower SCERS' overall commission costs, by receiving a rebate of the commissions paid to brokers
- SCERS' Commission Recapture program is implemented by State Street Global Markets (SSGM)
- Commission recapture programs work by asking public equity managers to direct a portion of trades to brokers that participate in SSGM's broker network
- SCERS receives a rebate from SSGM for all trades executed through its commission recapture broker network

Commission Recapture

- Changing market dynamics, such as reduced commission rates and electronic trading, have significantly reduced the amount of trading executed through traditional brokers.
- SCERS' has reduced the number of active equity managers and added systematic strategies, which utilize in-house trading, further reducing equity commissions.



IV. Policy Considerations

- SCERS first adopted a *Directed Brokerage Transactions and Commission Recapture Policy* in October 1996
 - Policy was updated and affirmed in April 2018
- SCERS' policy is designed to formalize expectations for public equity managers regarding commission costs and direction of trades to brokers
- The policy focuses on the dual mandates of achieving best execution and controlling commission costs

Policy Considerations

- The policy sets an explicit target for managers to direct trades through SCERS' commission recapture program
- In conjunction with SCERS' *Directed Brokerage Transactions and Commission Recapture Policy*, the Board receives quarterly reports on transaction costs and commission recapture
- An emphasis of the quarterly reporting has been on transaction costs, as they have a more significant impact on returns

Policy Considerations – TCA

- Per the policy, reporting is intended to highlight the “impact of directed trades and commission recapture on trade execution costs”
- Over time, the quarterly reporting has been expanded to review overall trading costs, for SCERS’ domestic and international public equity and fixed income managers
- Given changing dynamics in the equity trading and commission recapture markets, SCERS may consider revising its policy in the future to better align with current practices

V. Board Reporting

- SCERS has utilized the services of Elkins/McSherry(EM), a subsidiary of State Street, since 2010
 - Reports and data from EM are used in quarterly reporting
- State Street recently acquired BestX, a U.K. based company founded in 2016, to improve and enhance their TCA services
- BestX offers a user interface, customized data analysis, and enhanced reporting capabilities
- BestX requires a separate user agreement, which SCERS is currently evaluating

TCA Service Providers

- State Street is in process of transitioning from Elkins/McSherry to BestX for TCA
- SCERS is in the process of evaluating BestX, which includes new reporting options and user interface
- SCERS is also evaluating other service providers as potential alternatives to BestX
- BestX will initially be used for Equity trading only, with Fixed Income analysis expected to be available in 2022

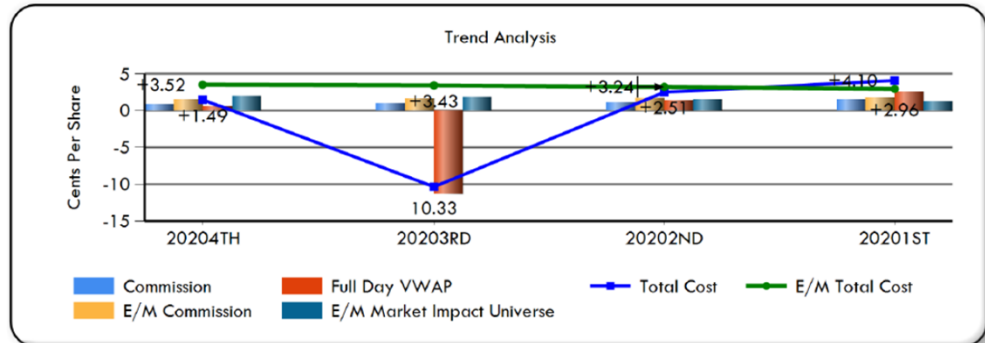
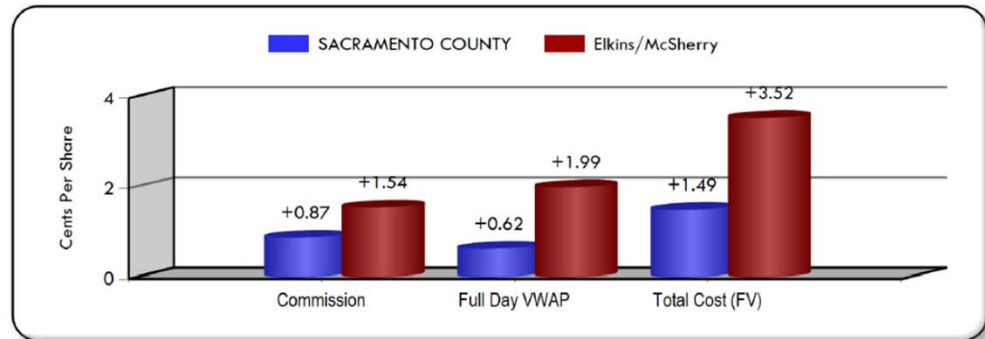
Elkins/McSherry US Equity TCA Reports

(+) = Cost

EXECUTIVE SUMMARY

TOTAL PORTFOLIO COST PERFORMANCE								
Side	COMMISSION			MARKET IMPACT		Total Cost	Total Cost/Savings Vs. Universe	E -Score
	Your Avg. Commission	All Trading Universe	Bundled Universe	Full Day VWAP	Universe Full Day VWAP		Commission+ Full Day VWAP	
	(cps)	(cps)	(cps)	(cps)	(cps)	(cps)	(cps)	
Sells	+0.89	+1.54	+3.81	+0.33	+1.99	+1.22	2.30	0.03
Buys	+0.84	+1.54	+3.81	+0.89	+1.99	+1.73	1.79	0.01
Total	+0.87	+1.54	+3.81	+0.62	+1.99	+1.49	2.04	0.02

TRADING COMPONENTS		
	Buys	Sells
Trade Principal	79,031,437	83,992,268
Shares	1,392,524	1,293,566
Unique Names	246	236
Liquidity (% ADV)	0.05	0.046
Avg. Execution Size	2,196	2,418
Avg. Order Completion Time (min)	N/A	N/A
Total Number of Trades	634	535



BestX US Equity TCA Reports

Executive Summary

Trading Components	Buys	Sells	Total
Trade Principal	79,031,437	83,992,268	163,023,705
Shares	1,392,524	1,293,566	2,686,090
Unique Names	246	236	389
Liquidity (% of Volume)	0.05	0.05	0.10
Avg Order Size (shares)	2,196	2,418	2,298
Average Parent Order Completion Time	6 hrs 30 mins	6 hrs 30 mins	6 hrs 30 mins
Avg Order Execution Time			
Total Number of Trades	634	535	1,169

Cost Composition - Full Day VWAP Bps



Next Steps

- **Evaluate and Confirm Service Provider**
 - BestX versus new provider
 - BestX service level options
- **Policy Considerations**
 - Update Directed Broker and Commission Recapture Policy
 - Policy considerations for TCA
- **Update Quarterly Board Reporting**
 - Condensed summary report with more detailed report available