



Outsourced Trading vs. Insourced Trading: A Comprehensive Examination

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Executive Summary

Receiving trading services for variable commission dollars is not a new concept—outsourced trading firms have roots dating back as far as hedge funds. However, over the last five years, there has been a dramatic shift in both the levels of service offered by outsourced trading firms and the types of clients they now serve. Due to the pressure on fees and other trends such as MiFID II, outsourced trading is one of the most talked about and fastest growing components in the alternative and traditional asset management industries.

This paper seeks to evaluate two main topics:

- What are the different levels of service available via outsourced trading and how do they compare from a cost and functionality standpoint?
- What are the most important elements and associated costs of an internal trading desk?

Levels of Outsourced Trading

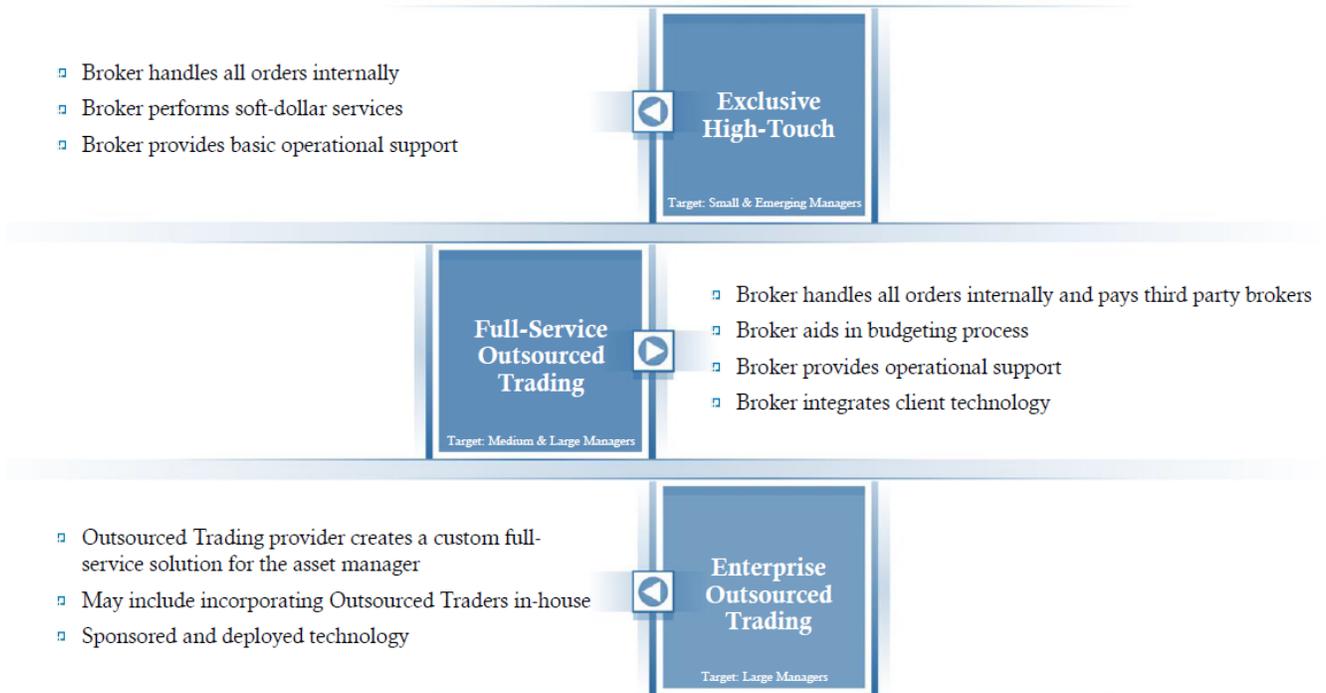
There is no standardized approach or one-size-fits-all model for outsourced trading. JonesTrading breaks outsourced trading into three separate categories: **Exclusive High-Touch Trading**, **Full-Service Outsourced Trading**, and **Enterprise Outsourced Trading**. Each category is explored in further detail below.

Exclusive High-Touch Trading is the simplest and longest running model of outsourced trading, whereby a portfolio manager faces a single high-touch broker for all execution needs. While this model can be applied to larger managers, it generally is in place to provide cost effective outsourced trading solutions to smaller managers. The high-touch broker trades all shares internally (e.g. does not direct outside the firm to third party brokers) and soft dollars may be accrued for research and eligible expenses. The broker may also provide general portfolio monitoring, news, market color, and limited research. Order Management System (OMS) Technology may be involved to simplify workflows, however, it is generally not required. The majority of firms participating in this offering use a basic and similar workflow.

Full-Service Outsourced Trading is an offering that has evolved to service larger managers who may have the appropriate budget and desire a comprehensive trading function, but determine there is no discernible cost-benefit of employing traders in-house. In order to create a seamless and efficient trading process, firms face a single outsourced trading desk to “manage” all trades, commissions and soft dollars. Within this construct, the outsourced trading desk directs trades outside its own internal execution systems and venues to “credit” third party research brokers, prime brokers and other counterparties. Similar to an internal trading desk, the outsourced trading desk sources research requests, analyst requests, and corporate access requests (amongst others) from the third-party brokers. They will also provide market color, flows and general portfolio monitoring. The outsourced trading desk crafts a workflow around the existing technology infrastructure at the firm. The Full-Service Outsourced Trading service will involve more customization of the offering on a client by client basis.

Enterprise Outsourced Trading is the process of engaging a firm to create a full-service trading, operational support and technology infrastructure. In addition to all aspects included in Full-Service Outsourced Trading, Enterprise Outsourced Trading includes technology (e.g. EMS, OMS, PMS) selection, integration, support and sponsorship as well as the potential for an outsourced trading desk employee to reside inside client offices.

JonesTrading offers varying levels of outsourced trading services catered to fit the need of the individual client



The Evolution of Outsourced Trading

Historically, outsourced trading was a service primarily used by the new launch and emerging manager community. These were clients, who, given their scale, recognized that hiring a trader in-house was not economical. In many cases, the portfolio managers were deciding whether to trade themselves or engage an outsourced trading provider.

The business has evolved and expanded its offerings, creating a more attractive solution for larger, more established managers. In addition, new opportunities have arisen due to the pressure on managers to cut costs, the uncertainty around fixed personnel decisions and other market factors such as MiFID II, which scrutinizes how firms spend their commission dollars. There is still a need for experienced, dedicated internal traders in all sized organizations, depending on the trading services required. However, over the last 10 years, we have observed larger-sized organizations making the decision to outsource an increasing amount of their trading needs.

Primary Functions of a Trading Desk

A trading desk provides access to instantaneous trade execution. Undoubtedly, the primary function of traders is to trade securities and deliver best execution on all orders. However, traders generally have several other responsibilities within their organizations. Traders other duties may include:

- Managing start of day position breaks
- Sourcing borrows and comparing various borrow rates between prime brokers
- Collecting and aggregating daily research, market color, and trading flows
- Managing research budgets at brokers and liaison between each manager and their research broker
- Managing soft dollar budgets
- Monitoring derivative position brokers to effectively manage closeouts
- Monitoring and executing credit, futures, FX, and swap positions
- Managing end of day allocations

(Note: These functions are broadly related to funds trading equities and equity related products. When expanding into other asset classes, such as Interest Rates or FX, there are a number of other functions required.)

Building a Trading Desk

A trading desk is not just a person or group of people who know how to buy and sell securities. While traders are a key component, a trading desk also requires real estate, IT hardware, IT software, IT infrastructure, IT support, personnel HR, corporate HR, and compliance. Having your own trading desk comes with a significant cost from both a time and money perspective.

Expenses are incurred at both the fund level and management company level. Expenses incurred at the fund level typically include an Order Management System (OMS), Bloomberg, market data, and research services. These expenses are generally paid by the fund or through soft dollars. The majority of costs associated with running an internal trading desk are management company expenses. These include IT infrastructure and support, real estate, technical support, HR support, compliance, salary and bonus compensation, health care, and taxes.

Fund Level Expense	Management Company Expense
<ul style="list-style-type: none">• Order management System (OMS)• Bloomberg• Market Data• Research Services	<ul style="list-style-type: none">• IT Infrastructure and IT Support• Real estate• Technical Support• HR Support• Compliance• Salary and Bonus Compensation• Health Care• Taxes

Given fee compression within the industry, fund investors have generally accepted that the outsourcing model moves some items from the management company to the fund in the form of trading commissions.

Budgeting for a Trading Desk

The following section compares the cost of utilizing in-house trading versus outsourced trading across small, mid-sized and large organizations. In quantifying the requirements of building a trading desk in-house, JonesTrading surveyed traders and other staff at buy side firms to develop a trading desk budget at various AUM levels. The general framework for the budget included both fund level expenses and management company expenses. The costs related to office equipment and additional rent may or may not apply to every organization, but reflects an average across all firms starting an internal trading desk. The Internal Trading Desk budget is a conservative estimate. The outsourced trading cost displays annual commissions across varying trading frequencies, utilizing an average share price of \$40. Commission rates step down as higher volumes are achieved.

Small Firm Trading Budget (\$50mm)

The small firm trading budget analysis would generally be applicable for firms with \$0-100 million in AUM. The \$50mm AUM level is essentially the entry level budget to support an internal trading function. This budget represents a cost-conscious trading operation that may also utilize some form of outsourced trading for overnight or coverage gaps due to vacations, sick days, or business travel. At this AUM level, certain decisions, such as implementing an OMS, may be delayed for a later date. The budget assumes a single trader, desk, support and office/equipment. The main factors for a firm with a single trader to consider are vacations, unplanned absences and overnight trading. According to our analysis, the small firm trading budget is \$375k in the first year and \$357k annually thereafter.

Comparatively, we analyzed the cost for a \$50mm firm to outsource its trading function. The analysis shows the cost across three tiers of trading frequencies—low turnover (2x/year), medium turnover (6x/year), and high turnover (12x/year). Under these assumptions, the cost to outsource trading ranges from \$25k at the low turnover level up to \$150k at the high turnover level. The analysis shows it is substantially more cost effective to outsource trading at the small firm level, even at the high turnover level.

\$50mm Fund - Internal Trading Desk Budget		
Description	Annual Budget	Initial Setup
Management Company Expenses		
Compensation and Benefits		
Salary and Bonus		
Senior		
Mid	\$ 225,000	
Junior		
Payroll Expenses	\$ 13,000	
Health Benefits (firm portion)	\$ 24,000	
Total Compensation and Benefits	\$ 262,000	
Facilities and Technology		
Work Station / Monitors / Other		\$ 4,500
Office Furniture		\$ 2,500
Office Space (150 sq feet)	\$ 10,000	
Cloud Support (annual per user)	\$ 5,000	
Total Compensation and Benefits	\$ 15,000	\$ 7,000
Total Management Company Expenses	\$ 277,000	\$ 7,000
Fund or Soft Dollar Expenses		
OMS, Hosting, Support	\$ 36,000	\$ 10,000
Bloomberg	\$ 24,000	
Market Data (US only)	\$ 3,000	
Total Fund Expenses	\$ 63,000	\$ 10,000
Slippage 5%	\$ 17,000	\$ 850
Total Year 1 Budget	\$ 357,000	\$ 17,850

\$50mm Fund - Outsourced Trading	
AUM	\$50,000,000
Dollar Turnover	
Low Turnover (2x)	\$100,000,000
Medium Turnover (6x)	\$300,000,000
High Turnover (12x)	\$600,000,000
Average Share Price	\$40
Shares Traded	
Low Turnover (2x)	2,500,000
Medium Turnover (6x)	7,500,000
High Turnover (12x)	15,000,000
Commission Rate	\$0.01
Annual Commission	
Low Turnover (2x)	\$25,000
Medium Turnover (6x)	\$75,000
High Turnover (12x)	\$150,000

Mid-Size Firm Trading Budget (\$250mm)

The mid-size firm trading budget is appropriate for funds with assets between \$100 million and \$1 billion. This budget generally represents a scaled trading desk with 24/6 trading coverage and scaled to have internal coverage for out-of-office situations by different members of the trading team. According to our analysis for a \$250mm firm, the trading budget is \$615k for the first year and \$590k annually thereafter.

Comparatively, we analyzed the cost for a \$250mm firm to outsource its trading function. Again, the analysis shows the cost across three tiers of trading frequencies—low turnover, medium turnover, and high turnover. Under these assumptions, the cost to outsource trading ranges from \$62.5k at the low turnover level up to \$375k at the high turnover level. Once again, the outsourced trading model shows a significant savings to mid-size firms over the internal trading desk, even at the high turnover level. At this level, clients may be engaging in any of the 3 outsourced offerings and be benefiting from the tremendous network effect of the outsourced trading desk’s research coverage network.

\$250mm Fund - Internal Trading Desk Budget			
Description	Annual Budget	Initial Setup	
Management Company Expenses			
Compensation and Benefits			
Salary and Bonus			
Senior			
Mid	\$ 225,000		
Junior	\$ 125,000		
Payroll Expenses	\$ 20,000		
Health Benefits (firm portion)	\$ 48,000		
Total Compensation and Benefits	\$ 418,000		
Facilities and Technology			
Work Station / Monitors / Other		\$ 9,000	
Office Furniture		\$ 5,000	
Office Space (150 sq feet)	\$ 20,000		
Cloud Support (annual per user)	\$ 10,000		
Total Compensation and Benefits	\$ 30,000	\$ 14,000	
Total Management Company Expenses	\$ 448,000	\$ 14,000	
Fund or Soft Dollar Expenses			
OMS, Hosting, Support	\$ 60,000	\$ 10,000	
Bloomberg	\$ 48,000		
Market Data (US only)	\$ 6,000		
Total Fund Expenses	\$ 114,000	\$ 10,000	
Slippage 5%	\$ 28,100	\$ 1,200	
Total Year 1 Budget	\$ 590,100	\$ 25,200	

\$250mm Fund - Outsourced Trading	
AUM	\$250,000,000
Dollar Turnover	
Low Turnover (2x)	\$500,000,000
Medium Turnover (6x)	\$1,500,000,000
High Turnover (12x)	\$3,000,000,000
Average Share Price	\$40
Shares Traded	
Low Turnover (2x)	12,500,000
Medium Turnover (6x)	37,500,000
High Turnover (12x)	75,000,000
Commission Rate	\$0.005
Annual Commission	
Low Turnover (2x)	\$62,500
Medium Turnover (6x)	\$187,500
High Turnover (12x)	\$375,000

Large Firm Trading Budget (\$1 billion)

The large firm budget represents a fully-staffed trading desk with technology and internal around-the-clock coverage. As a result, there is a jump in compensation expense for a senior trader to manage the overall process. At the larger AUM level, there are likely formal broker votes and formal transaction cost analysis occurring across 20+ executing brokers. According to our analysis for a \$1 billion firm, the trading budget is \$1.22m for the first year and \$1.18m annually thereafter.

Comparatively, we analyzed the cost for a \$1b firm to outsource its trading function. Again, the analysis shows the cost across three tiers of trading frequencies. Under these assumptions, the cost to outsource trading ranges

from \$175k at the low turnover level up to \$1.05m at the high turnover level. At this large firm level, only the most active funds see any similarities in the cost to outsource versus insource. However, even with comparable total costs, the benefits listed earlier such as easy expansion/contraction of capacity and the offloading of HR expenses/efforts, there are still compelling reasons for many larger asset managers to outsource their trading desks.

\$1bn Fund - Internal Trading Desk Budget		
Description	Annual Budget	Initial Setup
Management Company Expenses		
Compensation and Benefits		
Salary and Bonus		
Senior	\$ 450,000	
Mid	\$ 225,000	
Junior	\$ 125,000	
Payroll Expenses	\$ 40,000	
Health Benefits (firm portion)	\$ 72,000	
Total Compensation and Benefits	\$ 912,000	
Facilities and Technology		
Work Station / Monitors / Other		\$ 12,000
Office Furniture		\$ 7,500
Office Space (150 sq feet)	\$ 30,000	
Cloud Support (annual per user)	\$ 15,000	
Total Compensation and Benefits	\$ 45,000	\$ 19,500
Total Management Company Expenses	\$ 957,000	\$ 19,500
Fund or Soft Dollar Expenses		
OMS, Hosting, Support	\$ 90,000	\$ 10,000
Bloomberg	\$ 72,000	
Market Data (US only)	\$ 9,000	
Total Fund Expenses	\$ 171,000	\$ 10,000
Slippage 5%	\$ 56,400	\$ 1,475
Total Year 1 Budget	\$ 1,184,400	\$ 30,975

\$1bn Fund - Outsourced Trading	
AUM	\$1,000,000,000
Dollar Turnover	
Low Turnover (2x)	\$2,000,000,000
Medium Turnover (6x)	\$6,000,000,000
High Turnover (12x)	\$12,000,000,000
Average Share Price	\$40
Shares Traded	
Low Turnover (2x)	50,000,000
Medium Turnover (6x)	150,000,000
High Turnover (12x)	300,000,000
Commission Rate	\$0.0035
Annual Commission	
Low Turnover (2x)	\$175,000
Medium Turnover (6x)	\$525,000
High Turnover (12x)	\$1,050,000

Middle/Back Office Benefits

According to Paul Mattessich at Constellation Advisors, the middle/back office operational advantages created by employing an outsourced trading desk run parallel to the advantages created in the front office at all levels of firm AUM, namely a cost effective and scalable operational workflow solution. The outsourced trading desk relationship fosters an environment of collaboration between the outsourced trading desk operations team and in-house or outsourced middle/back office teams leading to increased efficiencies. Specifically, the single point of contact throughout all levels of the relationship, execution, break resolution, and technology allows for the seamless integration of workflows between the outsourced desk and in-house operations team.

Other Considerations

The goal of this paper is to outline the types of outsourced trading, as well as to evaluate the cost-benefit of outsourcing a firm's trading, at different levels of AUM and portfolio turnover. While analyzing the cost-benefit is the most crucial factors in making the decision to outsource, there are other factors to consider. We have briefly addressed some of these other key factors:

Anonymity

Portfolio managers deeply value anonymity. Portfolio managers feel more secure when they know the contents of their portfolio are not being exposed to the Street or being viewed by too many parties. However, not all outsourced trading operations are structured in a way that anonymity is truly secured and guaranteed. One must be wary about proper barriers being in place. For example, outsourced trading operations, which are part of a larger broker/dealer or bank, must be able to demonstrate that there are no internal dark pools or other avenues which could expose the contents of their client's portfolio.

The Cost of Employment vs Outsourcing

Outsourcing Outsourced trading offers additional optionality. When hiring traders in-house, there is a search cost associated with bringing that person into the firm, as well as a fairly expensive opportunity cost in the event the person hired does not meet the firm's needs. When engaging an outsourced trading desk, the fund manager receives two free, but ultimately valuable options. The first option is on capacity, as any appropriately-staffed outsourced trading desk can grow easily with their clients. If a firm decides to add more markets, sectors, asset classes, portfolio managers, etc., the desk should be able to add additional resources to meet the increased need. Conversely, there is also a put option freely obtained. If you don't like the trader or firm you are working with, you can easily fire them and switch. If your assets or complexity decreases, a firm can easily reduce capacity on the desk, void of HR or legal issues. In general, these are both benefits to outsourcing regardless of the industry; however, these options are of particular benefit with outsourced trading where clients are typically not locked into any long-term contracts with their providers.

Regulatory Concerns

At a minimum there are some clear pressures from MiFID II and other regulations that support the push to outsource. Clients have also voiced that outsourced trading may limit some potential conflicts of interest with respect to entertainment etc. by making the trading more arm's length to the investment process.

The Decision to Outsource Trading

In discussions with clients over the years, they have expressed that making the decision to outsource trading is "as much of an art as a science." In particular, quant strategies with more obvious intellectual property related to their trades or more technologically driven trading processes are less likely to outsource their trading. Broadly speaking, within the equity-related asset management business, the list of services provided by an internal trading desk versus an outsourced desk seem identical on paper. It is therefore a professional and personal decision by the portfolio management function within the firm as to the value of having someone sitting in close proximity.

Conclusions

The case for outsourcing mainly revolves around reducing costs and improving execution quality. Outsourced trading offers clear cost savings over hiring traders directly. With the fee compression trends across the asset management industry, it is not surprising that many firms are either already outsourcing trading in some capacity or evaluating a move in that direction.

In an effort to compete as effectively as possible, sell side firms like JonesTrading are also offering value added services such as consulting, capital introductions and office space, as part of the outsourced trading offering. Also, the offering itself continues to evolve and expand. Firms such as JonesTrading are now also able to place traders in-house at firms with particular requirements and scale. In this model, the outsourced trading client has access to the best of both worlds—in-person touch points plus outsourced capacity, scalability, technology and compliance.

About JonesTrading

JonesTrading Institutional Services LLC is one of the oldest and largest executing equity trading firms in the U.S. and is a worldwide leader in equity block trading. Since 1975, the sole focus of JonesTrading has been creating liquidity for institutional and corporate clients on an unconflicted basis. The ability to provide a secure, trusted platform connecting a diverse group of market players enables the firm to unlock liquidity, providing best-quality execution for larger and more complex trades. JonesTrading Prime Services provides a full service integrated platform with front to back office technology solutions, full-service client coverage and operational support, top-tier custody, business consulting and capital introduction services. Our suite of capabilities offered frees managers' time and energy so they can build their franchises and provide their investors with the institutional grade capabilities that are expected in today's competitive performance environment. JonesTrading Outsourced Trading provides investment managers a cost-effective solution for running their business, while giving them direct access to liquidity and market intelligence. Our priorities focus on client order anonymity, optimization and best execution.

Please contact Jeff LeVeen or Andy Volz for any questions related to JonesTrading or its services.

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