

## **Cost Estimation of Transition Management Events**

Understanding transition management cost estimates can be challenging. Factors influencing the estimates vary significantly based upon the event type, assets traded, and market conditions.

We believe running a pre-trade with actual holdings is the most optimal way for a client to understand the potential cost range of a particular event. However, that is not always possible.

The following tables provide broad cost assumptions for a liquidation of assets by common equity indices and trade sizes. These cost estimates (in basis points) may guide the possible costs for a transition event.

## Assumptions

- **Event type:** Liquidation (raising cash)
- Commission: 1 cent per share (cps) for US equity; 5 basis points (bps) for International equity;
  1 bps for Foreign Exchange (FX)
- Optimized trade list: top 100 securities (by weight)
- Russell 2000: The \$500M basket required two days of trading based upon our standard 20% daily participation rate.

S&P 500 Index	\$25MM	\$50MM	\$100MM	\$250MM	\$500MM
Wgt Avg Price (\$)	\$149.02	\$149.02	\$149.02	\$149.02	\$149.02
# of Shares	167,766	335,527	671,054	1,677,636	3,355,271
Average % of ADV	0.0%	0.1%	0.1%	0.2%	0.5%
Avg Market Cap	\$820.49	\$820.49	\$820.49	\$820.49	\$820.49
Commissions	-0.7	-0.7	-0.7	-0.7	-0.7
Fees	-0.1	-0.1	-0.1	-0.1	-0.1
Total Explicit	-0.7	-0.7	-0.7	-0.7	-0.7
Bid/ Ask Spread	-0.6	-0.6	-0.6	-0.6	-0.6
Market Impact	-1.1	-1.3	-1.6	-2.1	-2.6
Total Implicit	-1.7	-1.9	-2.2	-2.7	-3.2
Total Costs	-2.5	-2.7	-2.9	-3.4	-3.9



S&P 400 Index	\$25MM	\$50MM	\$100MM	\$250MM	\$500MM
Wgt Avg Price (\$)	\$89.34	\$89.34	\$89.34	\$89.34	\$89.34
# of Shares	279,848	559,688	1,119,380	2,798,446	5,596,897
Average % of ADV	0.5%	0.9%	1.8%	4.5%	9.0%
Avg Market Cap	\$10.74	\$10.74	\$10.74	\$10.74	\$10.74
Commissions	-1.1	-1.1	-1.1	-1.1	-1.1
Fees	-0.1	-0.1	-0.1	-0.1	-0.1
Total Explicit	-1.2	-1.2	-1.2	-1.2	-1.2
Bid/ Ask Spread	-2.7	-2.7	-2.7	-2.7	-2.7
Market Impact	-2.8	-3.7	-5.4	-10.4	-18.3
Total Implicit	-5.4	-6.4	-8.1	-13.0	-21.0
Total Costs	-6.6	-7.6	-9.3	-14.2	-22.1

Russell 2000 Index	\$25MM	\$50MM	\$100MM	\$250MM	\$500MM (2 days)
Wgt Avg Price (\$)	\$65.33	\$65.33	\$65.33	\$65.33	\$65.33
# of Shares	382,689	765,386	1,530,766	3,826,916	7,653,835
Average % of ADV	0.7%	1.4%	2.9%	7.2%	14.4%
Avg Market Cap	\$6.43	\$6.43	\$6.43	\$6.43	\$6.43
Commissions	-1.5	-1.5	-1.5	-1.5	-1.5
Fees	-0.1	-0.1	-0.1	-0.1	-0.1
Total Explicit	-1.6	-1.6	-1.6	-1.6	-1.6
Bid/ Ask Spread	-3.3	-3.3	-3.3	-3.3	-3.3
Market Impact	-3.6	-5.2	-8.1	-16.4	-26.4
Total Implicit	-6.9	-8.4	-11.3	-19.7	-29.6
Total Costs	-8.5	-10.0	-12.9	-21.3	-31.2

MSCI EAFE Index	\$25MM	\$50MM	\$100MM	\$250MM	\$500MM
Wgt Avg Price (\$)	\$24.67	\$24.67	\$24.67	\$24.67	\$24.67
# of Shares	1,013,335	2,026,671	4,053,347	10,133,359	20,266,718
Average % of ADV	0.2%	0.4%	0.8%	1.9%	3.8%
Avg Market Cap	\$129.50	\$129.50	\$129.50	\$129.50	\$129.50
Commissions	-6.0	-6.0	-6.0	-6.0	-6.0
Fees	-0.3	-0.3	-0.3	-0.3	-0.3
Total Explicit	-6.3	-6.3	-6.3	-6.3	-6.3
Bid/ Ask Spread	-1.5	-1.5	-1.5	-1.5	-1.5
Market Impact	-2.0	-2.4	-3.2	-5.2	-8.5
FX	-1.0	-1.0	-1.0	-1.0	-1.0
Total Implicit	-4.5	-5.0	-5.8	-7.8	-11.0
Total Costs	-10.8	-11.3	-12.0	-14.1	-17.3