

Table 2: Average terminal P&L and position

	Optimal		Baseline	
	P&L	Position	P&L	Position
AAPL	-1,378.01	-29.0	-1,625.25	-45.6
AMZN	58,331.04	8.4	13,522.2	-34.6
GE	703.12	-49.2	708.48	-38.4
IVV	217.58	-41.8	547.52	-36.8
M	534.04	-46.0	587.09	23.8

Table 3: The mean and standard deviation of profits and position per day

	Optimal Strategy				Baseline Strategy			
	Profits		Position		Profits		Position	
	Mean	Stdev	Mean	Stdev	Mean	Stdev	Mean	Stdev
AAPL	-988.54	289.82	0.86	63.66	-1093.60	357.66	7.53	112.2
AMZN	32,426.72	16,157.0	48.52	438.33	4,889.20	4,202.4	2.96	126.94
GE	245.0	192.92	-2.41	60.92	248.96	191.43	11.97	109.19
IVV	23.14	129.9	-0.49	67.9	152.0	196.6	-1.38	109.59
M	144.26	146.78	-0.83	46.14	192.59	167.24	-3.86	105.93

Figure 3 demonstrates the market and optimal spreads for AAPL and GE on June 12, 2017. Note that the spreads are rounded to the nearest cent. As discussed in section 2, the spread of the optimal pricing model is a linear function of time. At the beginning, the optimal spread is wider than the market spread. Later in the trading day, around 2pm, there is a turning point when the optimal spread becomes narrower than the market spread, meaning that more orders are likely to be filled. This aggressiveness helps unwind the accumulated position before the market closes and boost our profits if spreads are large enough.

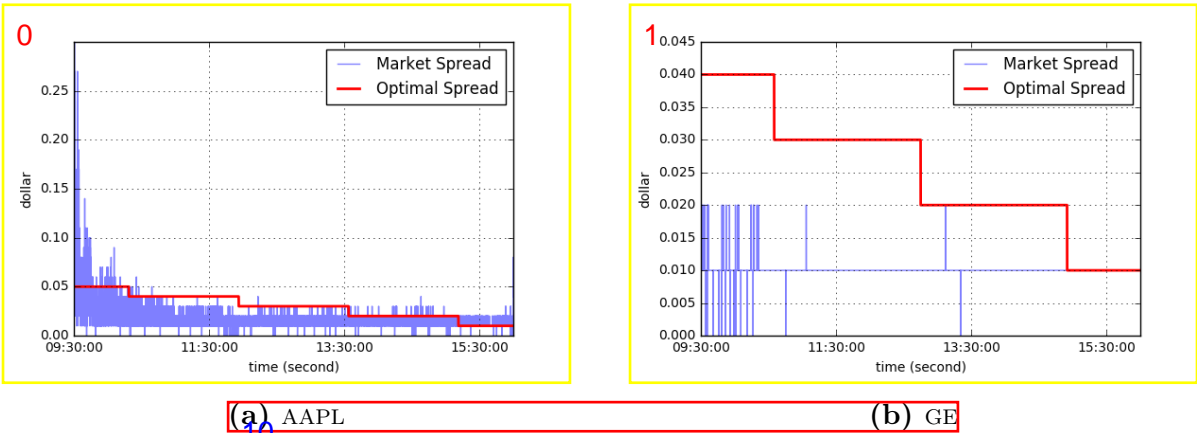


Figure 3: Market and optimal spreads