Using a unique database from the Tel Aviv Stock Exchange that includes trader identification, we are able to identify trades that originate from liquidity needs. Specifically, we define liquidity selling as the sale of a stock that has been held for more than a year without making any purchase concurrently with the sale. We measure the execution costs of these transactions using closing prices as benchmarks. We find that the average execution costs are lower than the effective spread measures. In a cross-section analysis, we find that the stocks' execution costs are explained more accurately by bid-ask spread measures and less accurately by annual volume. The price impact measures based on intra-day data are less accurate and measures based on daily returns do not explain execution costs. In a time-series analysis, Amihud's (2002) ILLIQ is a good explanatory measure and it adds to the explanatory power of the bid-ask spread measures.