An Aristotelian Valuation of High-Frequency Trading

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Abstract

High-frequency trading (HFT) is a major financial innovation that has contributed in reshaping the financial markets, and the equity market specifically. Most of the research on this innovation concerns three issues. Financial economists are absorbed in understanding HFT's effects on market's efficiency. Sociologists of finance and regulators look worried about the stability issue, as a result of the events of May 6, 2010, known as the 'Flash Crash'. Business ethicists and management scholars raised questions on justice, both in terms of single strategies pursued by high-frequency traders as well as of the innovation itself.

In carrying out an assessment on the goodness of the HFT, we will join to the ethical debate by asking to what degree HFT contributes in the fulfillment of equity market's purpose. This question is motivated by the urgency to distinguish between a *proper* finance, aimed to serve the real economy, and an *improper* finance, similar to a rent-seeking activity. In pursuing such analysis we will benefit from Aristotle's insights on economy. For his distinction among a natural and an unnatural *chrematistics* (to which finance belongs) draws precisely on the degree to which economical activities serve a purpose or not.

Among the several institutions and practices involved in the equity market we decided to focus on HFT's transformation of i) the stock-exchanges and ii) the market-making activity, given that both have been particularly affected by it.

i. The stock-exchange has been completely transformed over the last 20 years as a consequence of regulation and technology. Shifting from a *non-profit* association to a *for profit* public company has raised several conflicts of interests where HFT firms are strongly engaged and this jeopardizes the original purpose of this institution.

ii. High-frequency traders are often presented as the "new" market-makers. While old market-makers were not devoid of scandals, they provided a social function to contribute to *fair and ordered markets*, granted by their positive and negative obligations. High-frequency traders have substituted them without assuming the same responsibilities. This shift puts at risk the provision of a continuous liquidity and raises doubts about the relevance of HFT's contribution to such a practice.

Both cases are remarkable to show how practices and institutions can be corrupted when purpose is lost.