

Traders and the whims of market fortune

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Though traders' behavior may seem mysterious to outsiders, the truth is that a major factor in forming expectations is public information.

Playing the stock market is a game, though how you play it depends a great deal on how you treat public information, which can wield strong influence over asset prices. Traders rely on public information, and the decisions traders make regarding buying and selling are what affect prices.

However, the cycle is complex, and competing theories - particularly those of Keynes and Hayek - attempt to clarify the relationship between expectations and asset prices. In "[Dynamic Trading and Asset Prices: Keynes vs. Hayek](#)," Prof. Giovanni Cespa and [Xavier Vives](#), IESE's Abertis Chair of Regulation, Competition and Public Policy, weigh up these two theories and offer explanations for how public information affects the stock market.

Keynes describes stock markets as "beauty contests where investors try to guess not the fundamental value of an asset but the average opinion of other investors." The result is that investors "end up chasing the crowd" and the market is "dominated by herding, behavioral biases, fads, booms and crashes."

By contrast, Hayek claims that "prices reflect, perhaps noisily, the collective information that each trader has about the fundamental value of the asset" and provide a reliable signal about assets' liquidation values."

Whether a market is dynamic or static, and whether its traders are short-term or long-term, can impact the interaction of prices and expectations.

However, for a "dynamic market with risk-averse, short-term traders, differential information and an independent stock of noisy supply across periods...prices are always farther away from fundamentals than traders' average expectations and display overreliance on public information."

This would support Keynes' theory, since "in a dynamic market, when traders try to predict their peers' actions, the price heavily weights public information, more than what the optimal statistical weight prescribes to assess the fundamentals."

Which begs certain questions: Is this always the case? Is public information always relied on too much?

The truth is that traders' short-term speculations can influence price bias as well as the extent of reliance on public information. Whether the market is static or dynamic makes a big difference.

In a static market, speculations focus on the discrepancy between price and liquidation value; prices generally match expectations about the value, and traders value public information to a reasonable extent, giving it "optimal statistical weight."

In a dynamic market, both long- and short-term traders speculate on the price/value difference, resulting in a discrepancy between prices and expectations, which leads to an unhealthy degree of reliance on public information. Short-term speculations, in both cases, determine how public information is employed in the investing process.

The static benchmark

Among these ideas, one important point stands out: the "static benchmark." The static benchmark suggests that "the asset price places the optimal statistical weight on public information and is just a noisy version of investors' average expectations." All things being equal, then, "the price is given by the sum of traders' average expectations and noise."

Long-term traders utilize public information differently. In their case, "correlation across noise trade increments helps predicting future noise trade shocks, and tilts traders towards accommodating order imbalances."

They, too, must speculate about future liquidation value, which "enhances the hedging properties of future positions" and intensifies speculation on short-run price differences.

When noise trade increments have strong correlations, traders either under- or overrely on public information. Residual uncertainty regarding liquidation value can affect expectations and increase or decrease reliance on public information in this case.

When there is no correlation, traders use public information wisely. A multitude of factors can affect speculative behavior regarding liquidation value, especially the effect of residual noise.

Why important?

In a dynamic model in which traders focus exclusively on short-run investments, "the bias of prices and average expectations" do not coincide. Reasons for this include the absence of residual uncertainty regarding liquidation value.

Asset pricing can be determined by considering "the market average expectation of the market average expected liquidation value and the risk associated with holding a position in the asset."

Why is this subject important? It contributes a new line of thought to three main bodies of literature: that which "analyzes the effect of higher-order expectations in asset pricing models where traders have different information, but agree on a common prior over the liquidation value"; that which emphasizes "the effect of noise traders' risk in asset pricing"; and that which focuses on "the consequences of traders' reaction to the aggregate flow of orders."

The bottom line is that the role of public information changes depending on whether investors are in the market for the short- or long-term. If short-run price differences are of primary importance, public information plays a more active role, and asset prices may be more or less biased. If investors have their eyes only on the asset's liquidation price, public information becomes less dramatic a consideration. In either case, investors should not underestimate the role public information plays in the whims of market fortune.

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