

A Study of Major Economic Groups on Tesla Stock Based on Psychological Accounts

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Abstract. Since going public in 2010, Tesla has become one of the world's most watched stocks on the stock market. By 2025, its market capitalization had grown to over \$13 trillion, turning it into a phenomenon-level company. Tesla has attracted all kinds of economic groups worldwide through technological leadership, product innovation, its own vertical integration model and corporate culture. In this paper, "mental accounting" from behavioral finance is used as the theory of the analysis, and Tesla investors are divided into institutional investors, high net worth individuals, and ordinary investors. By looking at past changes in stock prices, the paper tries to figure out the mental accounting reasons behind investment choices among different groups of people. The research shows that different investor groups display different behaviors because of differences in the characteristics of the capital, risk tolerance, and mental accounting categories. Then it can find the different investor groups with this study and hope that every person won't be tricked into making bad choices through taking shortcuts in the head and have good investment strategy.

Keywords: Psychological account, behavioral finance, tesla stock, investment decision, economic group

1. Introduction

The traditional financial theory based on "the rational man" and efficient market hypothesis holds that investors will maximize their own benefit according to full information. But many oddities of the real world markets resist simple answers. Behavioral finance blends psychology and the finance framework. And it highlights how investor decision-making processes contain some bias caused by cognition, as well as emotion. A key insight, mental accounting, by Nobel winner Richard Thaler. This theory indicates that people do not treat money as homogeneous but psychologically categorize, code, account, and evaluate funds through different mental accounts. Each account has its own rules for consumption or investment, which cannot be substituted. Mental accounting's key features are: 1) Non-substitutability-Funds from various sources or purposes cannot be completely exchanged psychologically. 2) Categorized assessment-Investors subjectively categorize investment targets and allocate different risk tolerances. 3) Decision framing-The perception of gains and losses is greatly affected by the way information is presented. 4) Emotional connection-Mental accounting procedures are accompanied by strong emotions that influence future choices. And these features can have a great impact on how people make decisions to invest money. Since this study focuses on

the Tesla stock market investor behavior, these features form a good theoretical base to understand different decision making patterns of different investor groups by their mental accounting system [1].

Tesla stock is a fine case of study for psychological account [2]. Its stock price is volatile, has a strong story, and is about many things like electric cars, self-driving cars, going to space, and making smart computers. investor base is complex and includes both ardent fans of Tesla that believes Tesla is changing the world and hedge funds trying to make a short-term arbitrage play [3]. There is plenty of stock price data available, there are public comments made about the market, and there is a large amount of media attention given to the markets, providing ample material for behavioral research. This paper is intended to investigate how different groups of investors decide whether to invest in Tesla according to their internal psychological accounts during the volatility of Tesla's stock price, and provides targeted investment advice based on the psychological accounts [4].

2. Case description

Table 1 lists the Tesla stock trends and major event nodes since its listing to visually demonstrate the relationship between Tesla's stock prices and investor behavior.

Table 1. Tesla stock price trend and key events (2010-2025)

| a particular year | Stock price range (American dollar) | key event | Market stage |
|-------------------|--|---|--|
| 2010-2019 | 20 - 90 | Going public, Model S deliveries, and ongoing losses | Long-term skepticism and short selling |
| 2020-2021 | 100 - 1200 | Consistently profitable, S&P 500 inclusion, stock split | Epic rise |
| 2022 | 1200 - 600 | Macro rate hikes and growth concerns | Deep correction |
| 2023-2025 | 600 - 900 | New model launch, AI breakthrough | Recovery |

Tesla's stock price is experiencing huge changes, some of its important steps include: for a long time, people did not believe it and short selling until 2020, it had a great rise in 2020-2021, it was severely corrected in 2022, and then recovered violently. During these different market stages, the motivations of large economic groups are quite different [5].

Hedge funds, mutual funds, pension funds, these institutional investors have a lot of money and people often regard them as leaders in the market. In Tesla's early days, a lot of institutions were shorting Tesla because of their constant losses and production capacity. But when Tesla is profitable and it was added to Standard & Poor's (S&P) 500 in 2020, passive index funds must buy Tesla as it's part of index while active funds flip short to long position and send the stock price soaring. In 2022 when there were high interest rates in the macroeconomic and fears of the lack of growth of Tesla some big institutions greatly reduced their holdings and this worsened the decline of the stock [6].

High-net-worth individual investors usually have more risk tolerance and information resources. Among them are the hardcore Musk, the ones who see their investment in Tesla not as an investment to manage, but as an extension of their own lives and views and a reflection of their shared worldview. These investors keep long term positions and are not very sensitive to the short term changes. For example, when Tesla declared a "5-for-1 stock split" it valued long-term benefits of lowering the retail investment barrier and liquidity more than short-term arbitrage opportunities [7].

Retail investors are the most psychologically affected group of people by mental accounting. Limited capital and weaker ability to process information make them especially vulnerable to the influence of market sentiment and media narrative. In 2021, a lot of retail investors were swept up by the fear of missing out (FOMO) at the peak of the stock market and poured the money that was meant to be saved or spent on consumption into the market. In 2022 when stock prices fell, it was hard for people to be flexible about cutting their losses and they stayed in "cash out" mental accounting, passively holding onto stocks for a long time and experiencing extreme mental suffering [8].

3. Case analysis

The following Table 2 compares the typical characteristics and behavior patterns of the three types of investors from the perspective of psychological account, which further supports the theoretical views [9].

Table 2. Comparison of psychological account characteristics and behaviors among different investor groups

| Investor type | Primary mental account | Risk-bearing capacity | Typical behavior pattern | Financial Account Performance |
|----------------------------|-----------------------------------|-----------------------|---|---|
| institutional investor | Performance evaluation account | Medium High | Chasing gains and selling on dips benchmark tracking | Avoid deviation from benchmarks and prioritize risk control |
| High-net-worth individuals | Dream Account | high | Hold for the long term and ignore short-term fluctuations | Low substitutability, deep emotional connection |
| Small retail investor | Spending/Savings Mismatch Account | low | The effect of chasing high and selling low is significant | The framing effect is strong and prone to panic selling |

Based on the above cases, it can deeply interpret the decision logic of each group from the perspective of psychological account theory [10].

3.1. Institutional investors 'quantitative framework' and 'performance account'

Although institutional investors strive for rationality, they are still influenced by their unique psychological accounts. Their core accounts are the "performance assessment account" and the "risk budget account". Investment decisions must conform to the risk framework of the fund charter and be compared with the benchmark index.

During the bull market: When Tesla is included in the index, not investing in it means underperformance relative to the benchmark, which is the biggest risk. At this time, the institutional decision framework is 'avoid underperforming the index' rather than simply being bullish on Tesla. Their buying behavior is driven by the psychology of avoiding underperformance, and the capital comes from 'benchmark tracking accounts'.

During downturns: When macroeconomic conditions deteriorate, institutions prioritize managing drawdowns and preserving their year-to-date positive returns. They adhere strictly to stop-loss rules and quickly get rid of losing positions out of "potential profit accounts" to avoid eating away at the gains from other investments. Their sell-offs are risk-controlled actions based on risk budget models, and emotional factors are only second [1]. The "growth outlook concerns" referenced in serve as

rational justifications for portfolio adjustments, fundamentally aimed at balancing the psychological accounts of the entire investment portfolio [2].

3.2. "Dream account" and "capital gains account" for high-net-worth individuals

High-net-worth investors typically open separate "dream allocation accounts" or "high-risk growth accounts" for Tesla. These accounts are defined as "able to take on higher risks for excess returns" or "support innovative ventures".

Non-diversification: The funds in this account are strictly separated from those in the 'safety account' used for daily living. Therefore, even if Tesla's stock price halves, as long as they believe its long-term narrative remains unchanged, they won't use funds from other accounts to cover losses, nor will the plunge affect their basic living standards, allowing them to hold the stock calmly.

Emotional attachment: Their investment in Tesla is often tied to personal values and identity. Closing this 'dream account' (selling shares) means not only financial loss but also the collapse of belief, which has a high psychological cost. Therefore, they show strong stickiness and resilience to volatility.

3.3. The mismatch between the "consumption account" and "savings account" of ordinary retail investors

Retail investors are the most typical embodiment of the psychological account effect, and their behavioral deviation is the most obvious.

The disposition effect is a classic case. Retail investors tend to book tiny gains by offloading their profitable Tesla shares into their 'windfall accounts' and thus miss further market gains. But meanwhile, he is losing his stocks in the 'break even account' and is holding on to them because of the 'no profit no sale' mentality which will later cause him great loss [3]. And this was exactly what happened to retail investors stuck with Shenzhen stocks in 2022.

Misallocation of capital: Retail investors often use money that was supposed to be spent in the short-term or as an emergency savings account to buy stocks. These funds, which should be psychologically safe account, are wrongly invested in risky assets. Stocks experience a double anxiety when the stock prices are falling. They have the loss of investments as well as the psychological threshold of safety that is also at stake. They will panic sell or cut losses near market bottom.

Framing effect: Tesla's stock split is a classic framing case. It really doesn't add any true value for the company, but it gives the appearance of being "cheaper" for the small investor retail shareholder. This prompts them to use the 'piggy bank' money to buy the 'too expensive' stocks, creating another wave of retail capital inflow.

4. Conclusion

This study applies behavioral finance's psychological account theory to investigate various economic groups investing in Tesla stock. From the research find that Institutional investors, high-net-worth investors and retail investors have different decision-making behaviors and models of behavior under Tesla's stock price volatility, which are fundamentally different due to different capital attributes, risk tolerance and psychological account classifications. Institutional investors' decision-making is mainly based on "performance evaluation account" and "risk budget account", and the performance evaluation and risk control are highly procedural, aiming to avoid benchmark

deviation and portfolio drawdown. High-net-worth people set up a separate "dream allocation account," closely matching investment actions to personal values and identity, showing non-replaceable, long-holding preferences, and strong resistance to short-term market changes. But for retail investors, they are most greatly affected by psychological accounts, falling into vicious circles of "buying high and selling low" and "selling losses," because of the disposition effect, misattribution of capital, and framing effect, being the main bearers of market fluctuation. As for this study it know very well the investor's decisions not solely be driven by valuation, mainly by some internal accounts. A successful investor should be good at both judging the targets to invest in, as well as understanding and handling the psychological accounts of his own.

Based on the findings of the above research, the following practical suggestions are given to investors of different financial bases. For those investors with better economic strength, once the stock prices rise, they should build up a mechanism of dynamic profit-taking. It's very important that you are able to make the distinction between profits made off the back of something fundamental, and profits made as a result of people's opinion of the market in general. Part of the unrealized gains should be moved into a safe account for profit realization, while the rest of the capital is used for reinvestment to balance out the dream account and rational account. When stock prices fall, don't follow trends blindly and hold onto positions with emotion. They have to reconsider if their original logic for the investment is still applicable. Logic if changed, cutting losses decisively. Logic is still there, cash flow is good, a method of batch buying under control can be used, but money has to come from an already established "high-risk investment account", for investors who have weaker economic bases, during stock rallies, consider phasing out and securing profits. Have clear profit goals and stick to them. Make money then transfer them to your "saving account" or "consuming account". When the stock price drops, the main rule is to stop losing, don't add more. The investors need to clearly understand that the money for the investments must be idle. Once the stop-loss line is crossed, you must sell to preserve your principal and not rush to make up for the loss but analyze the situation after market hours. Universal recommendation: all investors should actively establish a "mental account" before investing. Specify the nature of every investment amount, anticipated returns, and the highest acceptable losses. Write out a plan and stick to it, to lessen emotions interfering.

Looking to the future, the psychological account theory is ripe for use in investor education and robo-advisors. Future research could explore more how digital tools can aid investors in spotting, displaying, and improving upon their psychological account set-ups, giving really customized investment suggestions and behavior tips. Furthermore, with the development of new fields such as ESG investments, the metaverse, and Artificial Intelligence (AI), there is also a wealth of research on investor behavior in these fields for psychological accounts. Regarding further study, maybe these new types of assets will be studied in a close manner in order to find out more about how people choose where to invest, and also stretch what kind of behavior finance is used to describe the behavior of the market.

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