

# The Impact of Psychological Factors on Luxury Stock Prices: Empirical Analysis of Paris Market

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**Abstract:** With the luxury market's rapid growth and increasing integration into global financial systems, understanding its stock dynamics has become critical for investors and policymakers. This study focuses on the luxury stock market, examining the impact of psychological factors on luxury stock prices from the perspective of behavioural economics. Based on empirical analysis and qualitative event studies, we analyse data from six luxury companies (e.g., LVMH, Hermès, Dior) listed on the Paris open market from January 2020 to December 2024. The research investigates correlations among market volatility (VIX Index), investor sentiment, and economic policy uncertainty. Key findings reveal a significant negative correlation between market volatility and stock prices of certain brands, a positive influence of investor sentiment on most stock valuations, and heightened irrational price fluctuations due to economic policy uncertainty. These results underscore the importance of psychological factors in luxury stock pricing, provides theoretical support for investment strategies, and advocate for future research integrating social media sentiment data and multi-factor models.

## 1 INTRODUCTION

Contemporarily, with the considerable development of people's living standard, the market of luxury is more and more mature and gradually taking up larger share of consumption. Considering that the luxury industry is having a greater status which leads to the development of the luxury stock market, the researches on the factors influencing the changes of luxury stocks is essential. In the process, researchers have studied the luxury stocks and luxury stock pricing based on the researches about luxury industry before, using methods of market research and quantitative research. They have got several research achievements in related fields that can be used by follow-up further research.

Then, it comes to the process of background investigation. Research on the pricing of luxury goods stocks has yielded several relevant findings

from previous researchers. According to the previous articles, luxury goods can be distinguished from non-luxury goods based on the unique combination of their functionalism, experientialism and symbolic interactionism across these three important dimensions. This theory provides a fundamental theoretical framework and empirical support for research in the field of luxury marketing. Recent years, researches related to relevant topics have also made some progress. Talukdar found that the high volume of tweets from luxury brands can sometimes dilute their excellent image previously established, which can have a negative impact on stock prices (Talukdar, 2020). In contrast, carefully selected and meaningful digital communications can increase consumer engagement and make brand equity better. In 2012, scholars analysed psychological antecedents of luxury consumption, which demonstrates the motivation of consuming luxury and provides more

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information about psychology for relevant topics (Kastanakis & Balabanis, 2012). Other findings from reveal two aspects of psychological factors influencing luxury stock (Wen, 2024). External shocks, including events such as the COVID-19, the Russia-Ukraine war and the China-United States trade war, have introduced significant uncertainties into the luxury market. Similarly, corporate internal decisions also reflect the psychological foundation of investor behaviour. Other articles that may not be so relevant to our topic are also have useful information to our research. Han indicated that the need for brand salience depends on the consumption strategies of different consumer groups (Han et al., 2010). Olorenshaw put forward a theory claiming that the conspicuous consumption reveals the fact that the demand curve for luxury goods is likely to grow as prices rise (Olorenshaw, 2011). Kessous and Valette-Florence pointed out that self-success and symbolic value have great effect on luxury markets (Kessous & Valette-Florence, 2019). Chang et al., used the example of energy to analyse the herd effect of the stock market (Chang et al., 2020). Moreover, Dhaliwal et al. introduced an overview of luxury consumption behaviour (Dhaliwal et al., 2020).

However, the researchers are not enough to cover all the guiding theories about luxury pricing. The factors that have impact on luxury pricing are much more complex in many aspects (Loranger & Roeraas, 2022; Savelli, 2012; Lewis et al., 2025). There are still some research gaps on the psychological factors affecting luxury pricing that should be ascertained to provide more investment information on luxury stocks. In this article, we consider the previous researches and create our own methods to conduct our study. Given that researches on the luxury pricing have research gap, our study analysed the influence of psychological factors on the luxury stock market from the perspective of behavioural economics as supplementary. This paper examines the data from the Paris open market, which contains daily closing prices and returns for several luxury brands, including EPA: MC, EPA: RMS, EPA: CDI, EPA: KER, EPA: SMCP, and EPA: DPT, over a period from January 2020 to December 2024, a period marked by significant market fluctuations due to the COVID-19 pandemic. The analysis will focus on identifying patterns and potential correlations between market returns and psychological factors such as market volatility, investor sentiment, and economic uncertainty.

## 2 METHODOLOGIES

This research collected the closing prices of six major luxury brands in the Paris public market from 2020 to 2024. These six companies are Moët Hennessy Louis Vuitton Group, Hermès International SCA, Christian Dior SE, Kering Group, SMCP Group, and S.T. Dupont, ranked in descending order of market capitalization. The research methods include descriptive statistics, correlation analysis, CAPM fit test, and multiple linear regression modelling. These methods are chosen to provide a comprehensive understanding of the relationships between the variables.

We begin by calculating basic descriptive statistics (mean, median, standard deviation) for the daily returns of each luxury brand. This provides an initial overview of the data and helps identify any outliers or anomalies. Subsequently, we compute the correlation coefficients between the daily returns of each luxury brand and various psychological factors. These factors include market volatility (measured by the Volatility Index), investor sentiment (proxied by the Google Trends and France Sentiment Index), and economic uncertainty (proxied by the Europe Policy Uncertainty Data – France News Index). Correlation analysis helps identify the strength and direction of the relationships between these variables. The linear relationship between the returns of luxury companies and the Dow Jones France Index has been tested first in the study. A high positive correlation suggests that the company's returns move in tandem with the market, indicating a strong market influence. It is also possible to examine to what extent the CAPM model conforms to the changes in stock prices:

$$E(R_i) = R_f + \beta_i(E(R_m) - R_f) \quad (1)$$

where  $E(R_i)$  is the expected rate of return of asset  $i$ ;  $R_f$  is the risk-free rate of return, usually represented by the yield of government bonds;  $\beta_i$  is the systematic risk coefficient of asset  $i$ , indicating the sensitivity of the rate of return of the asset to changes in the market rate of return;  $E(R_m)$  is the expected rate of return of the market portfolio, that is, the average rate of return of Dow Jones France Index;  $(E(R_m) - R_f)$  is the market risk premium, indicating the portion by which the expected rate of return of the market portfolio exceeds the risk-free rate of return.

To further explore the impact of psychological factors on share prices, we construct multiple regression models. The dependent variable is the monthly return of each luxury brand, while the independent variables include market volatility, investor sentiment, and economic uncertainty. This allows us to quantify the impact of each

psychological factor on share prices, controlling for other factors. The regression model is specified as follows:

Stock Price<sub>i,t</sub> =  $\alpha + \beta_1$  Market Volatility<sub>t</sub> +  $\beta_2$  Investor Sentiment<sub>t</sub> +  $\beta_3$  Macroeconomic Uncertainty<sub>t</sub> +  $\epsilon_{it}$  (2) where Stock Price it is the stock price of the luxury company i at time t; Market Volatility t is measured by the Volatility Index at time t; Investor Sentiment t is measured by France Sentiment Index at time t; Macroeconomic Uncertainty t is measured by the Europe Policy Uncertainty Data – France News Index at time t;  $\alpha$  is the intercept;  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  are the coefficients to be estimated;  $\epsilon_{it}$  is the error term.

### 3 RESULTS AND DISCUSSION

#### 3.1 Descriptive Statistics

The mean daily return for EPA: MC is 0.03%, with a standard deviation of 0.019. This indicates relatively stable returns with occasional fluctuations. EPA: RMS shows a higher mean return of 0.1% and a standard deviation of 0.018, suggesting slightly less volatility. EPA: CDI, EPA: KER, EPA: SMCP and EPA: DPT exhibit similar patterns, with mean returns ranging from 0.02% to -0.08%, and standard deviations between 0.02 and 0.05, indicating a negative relationship: higher volatility is associated with lower returns.

Table 1 shows that after calculating the average return, due to the external shocks such as the COVID-19 pandemic and geopolitical conflicts during this period, the economy gradually recovered from 2020 to 2024, and the investment in the stocks of luxury companies do not all brought positive returns. However, there is no positive correlation between volatility and return rate, but a positive correlation with market capitalization.

Table 1: Descriptive Statistics.

|                                  | EPA: MC | EPA: RMS | EPA: CDI | EPA: KER | EPA: SMCP | EPA: DPT |
|----------------------------------|---------|----------|----------|----------|-----------|----------|
| Expected return (daily)          | 0.03%   | 0.01%    | 0.02%    | -0.07%   | -0.08%    | -0.02%   |
| Expected return (annualized)     | 7.93%   | 24.22%   | 5.01%    | -18.05%  | -19.97%   | -4.46%   |
| Expected volatility (daily)      | 1.88%   | 1.78%    | 2.00%    | 2.12%    | 3.64%     | 5.15%    |
| Expected volatility (annualized) | 29.74%  | 28.12%   | 31.62%   | 33.49%   | 57.53%    | 81.39%   |

Table 2: Correlation Analysis.

| Correlation Coefficient               | EPA:MC  | EPA: RMS | EPA: CDI | EPA: KER | EPA: SMCP | EPA: DPT |
|---------------------------------------|---------|----------|----------|----------|-----------|----------|
| France Consumer confidence index      | -0.1367 | -0.1599  | -0.1037  | 0.4423   | 0.0303    | -0.2714  |
| France Sentiment index                | 0.3340  | 0.1057   | 0.3736   | 0.4256   | 0.3375    | 0.3299   |
| France Economy Uncertain Policy Index | -0.1244 | 0.1227   | -0.1498  | -0.391   | -0.2284   | -0.0057  |
| VIX Volatility Index                  | -0.6138 | -0.6138  | -0.6116  | 0.0867   | 0.0069    | 0.0439   |
| Google Trends                         | 0.3680  | 0.7829   | 0.1865   | -0.2826  | 0.2625    | -0.1077  |

#### 3.2 Correlation Analysis

Table 2 calculates the correlation coefficients between stock prices and five indicators. It is found that the VIX index is strongly correlated with the stock prices of three brands - EPA: MC, EPA: RMS and EPA: CDI. This indicates that higher uncertainty is associated with higher returns, likely due to risk-seeking behaviour during uncertain times. Google

Trends is only strongly correlated with the stock price of RMS ( $r = 0.78$ ), and as the only company among the six with an annualized investment return exceeding 20%, it indicates that digital communication may have a significant impact on investor decisions, and further research should be conducted in combination with social media data analysis tools.

### 3.3 Regression Modelling

Table 3 tests the fit of CAPM in actual financial data, using the Dow Jones France Index as the market expected return for regression. It shows that CAPM can be used to predict the value of company stocks to a certain extent, especially with a higher fit with large-cap companies, with an  $R^2$  of about 0.5, reflecting market efficiency. However, the fit with small-cap companies is poor. The following regression model includes independent variables of market volatility (measured by independent variable 3: VIX Volatility Index), investor sentiment (measured by independent variable 2: France Sentiment index) and economic uncertainty (measured by independent variable 1: Economy Uncertain Policy Index)  $TINV(0.05, 56) = 2.003240719$ . Table 4 selects three variables for multiple linear regression, and the results show that the French Investor Sentiment Index and the French Economic Policy Uncertainty Index have significant t-values in most companies, indicating that these variables statistically have an impact on the stock prices of companies.

The quantitative analysis reveals the following findings. The VIX index is significantly negatively correlated with the stock prices of Louis Vuitton,

Hermès, and Dior (correlation coefficient of -0.61), which may reflect "risk aversion", that is, reducing investment in stocks when market uncertainty increases. The French Investor Sentiment Index is weakly positively correlated with the stock prices of all companies, and in multiple linear regression, except for RMS, the t-values of its impact on stock prices are significant, verifying the hypothesis of "sentiment-driven valuation". The CAPM model has obvious limitations in simulating the stock prices of relatively small-cap companies, such as SMCP (0.243) and DPT brands, with low  $R^2$  values (0.004), indicating that their stock prices are dominated by non-market factors (such as psychological factors), highlighting the necessity of a "multi-factor model".

The analysis reveals that psychological factors, such as market volatility, investor sentiment, and economic uncertainty, can influence the share prices of luxury companies to some extent. Specifically, higher market volatility and positive investor sentiment are associated with higher prices, while economic uncertainty are associated with lower prices. These findings suggest that luxury companies may benefit from strategies that capitalize on periods of high uncertainty and positive sentiment, while managing risks during gloomy economic conditions.

Table 3: CAPM Model.

|                       | EPA: MC | EPA: RMS | EPA: CDI | EPA: KER | EPA: SMCP | EPA: DPT |
|-----------------------|---------|----------|----------|----------|-----------|----------|
| Daily Expected return | 0.0003  | 0.0010   | 0.0002   | -0.0007  | -0.0008   | -0.0002  |
| Beta                  | 1.1972  | 0.9655   | 1.2872   | 1.2258   | 1.4156    | 0.2481   |
| $R^2$                 | 0.6496  | 0.4722   | 0.6640   | 0.5371   | 0.2426    | 0.0038   |

Table 4: Multivariate Regression.

|                                        | EPA: MC | EPA: RMS | EPA: CDI | EPA: KER | EPA: SMCP | EPA: DPT |
|----------------------------------------|---------|----------|----------|----------|-----------|----------|
| $R^2$                                  | 0.5483  | 0.5414   | 0.5570   | 0.3526   | 0.1736    | 0.1462   |
| t for VIX Volatility Index             | -0.5540 | 1.9907   | -0.8166  | -3.4027  | -1.6965   | 0.1083   |
| t for France Sentiment Index           | 2.5572  | 0.1936   | 3.0273   | 3.8724   | 2.7502    | 2.8687   |
| t for Economy Uncertainty Policy Index | -7.2857 | -7.9100  | -7.1489  | 2.0224   | 1.1871    | 1.5501   |

### 3.4 Analysis and Comparison

For Moët Hennessy Louis Vuitton Group, in 2024, there was a decline in sales, affected by changes in

the macroeconomy and consumer habits. Investors were concerned about its future development, and the stock price fluctuated to a certain extent. Experts believe that the slowdown in industry growth and market competition are very important factors. Similar events are that other luxury giants also face

performance stress during economic downturns. Literature points out that the luxury goods industry is vulnerable to the impact of changes in the macroeconomy and consumption trends. Investors are affected by the herd effect. After seeing the news of the slowdown in industry growth and the company's performance decline, they blindly followed the trend and sold stocks, leading to an excessive decline in the stock price, ignoring the long-term values such as LVMH's powerful brand matrix and market competitiveness.

Regarding to Hermès International SCA. from 2019 to 2023, growth was driven by price increases, and in 2025, the prices of its products were raised globally. This is a tactic for the brand to consolidate its high-end positioning. Investors' reactions were relatively ignored, and the stock price was relatively stable. Experts believe that this reflects the brand's strong pricing power and market position. Similar brands like Chanel also have price increase behaviours. Relevant literature shows that price increases of luxury brands are closely related to brand value and market demand. Investors have an anchoring effect. They rely too much on Hermès' past brand performance and price strategies, have insufficient understanding of the brand's value growth potential after the price increase, and did not adjust their expectations of the stock price in a timely manner, so that the stock price failed to fully reflect the possible value increase brought about by the price increase.

As for Christian Dior SE, in January 2025, Kim Jones, the men's artistic director of Dior, announced his departure. This is an important personnel change for the brand, which may influence the brand's creativity and development direction. Since it is a brand under LVMH, it affects investors' expectations of LVMH to a certain extent. Experts believe that new creativity is vital for the brand's future development. Other brands also have situations where the departure of a creative director affects performance. Relevant literature emphasizes the value of creative talents to fashion brands. Investors may have an overreaction mentality. They are overly worried about the departure of Kim Jones, magnify the negative impact of this event on the brand's future development, and then affect the investment decision-making regarding LVMH, causing the stock price to fluctuate irrationally.

For Kering Group, in 2024, the revenue of Kering Group reduced by 12% year-on-year. As a core brand, Gucci's performance in 2024 declined by 23% throughout the year. This reflects the challenges the brand faces in terms of market competition and

changes in consumer preferences. Investor confidence was damaged, leading to a stock price decline of more than 40%. Experts believe it is related to Gucci's creative transformation not meeting expectations, intensified market competition, and the macroeconomic environment. Similar events include other brands experiencing performance declines due to creative and market strategy issues. Relevant literature discussions emphasize the importance of brand innovation and adapting to market changes for luxury goods enterprises. Investors have a loss aversion mentality. Seeing Gucci's continuous performance decline, they worried that the group's future performance would deteriorate further and sold stocks one after another, resulting in an excessive decline in the stock price. They did not fully consider the possible positive changes brought about by brand adjustment and transformation.

As for SMCP Group, in 2024, stores were closed in the Chinese market, and performance declined. This is a strategic adjustment by the brand to address market issues. It may lead to a decrease in investors' confidence in its stock price, and the stock price is affected. Experts believe it is related to the previous over-expansion in the Chinese market and changes in the market environment. Other international brands also have situations where they adjust their store strategies in the Chinese market. Literature shows that brand internationalization needs to adapt to different market cultures and demands. Investors have an overly pessimistic sentiment. Just because of the store closures and performance decline in the Chinese market, they are overly worried about the company's future development prospects, ignoring the brand's potential in other markets and the possible improvements after the strategic adjustment, resulting in an irrational decline in the stock price.

For S.T. Dupont, in 2025, the Jet Agile series of casual shoes was launched, and there was a problem of counterfeit lighters in 2023. The launch of new products is a normal business expansion, and the problem of counterfeits affects the brand image. Investors did not show obvious reactions, and the stock price did not fluctuate significantly. Similarly, other brands also have troubles with counterfeits and launches of new products. Literature emphasizes the significance of brand protection and innovation for enterprises. If investors focus too much on the problem of counterfeits and turn a blind eye to positive factors such as the launch of new products, they will make inaccurate judgments about the company's value due to cognitive biases, which may cause the stock price to fluctuate irrationally and fail



to truly reflect the company's actual value and development potential.

## 4 CONCLUSIONS

To sum up, this study validates the significant influence of psychological factors on luxury stock prices: market volatility suppresses valuations through risk-averse behaviour, while investor sentiment drives positive price movements. Economic policy uncertainty exacerbates irrational fluctuations, particularly in small- and mid-cap companies. The research highlights the limited explanatory power of the traditional Capital Asset Pricing Model (CAPM) for small-cap brands, emphasizing the need for multi-factor models (e.g., incorporating social media sentiment or ESG metrics) to enhance predictive accuracy. Future research should differentiate behavioural patterns between retail and institutional investors and integrate real-time social data (e.g., Twitter, Weibo) for deeper insights. These findings provide a strategic framework for the luxury industry to balance market rationality and behavioural biases, offering practical implications for investment decisions and corporate governance.

## AUTHOR CONTRIBUTION

All the authors contributed equally and their names were listed in alphabetical order.

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