

## **A QUALITATIVE RESEARCH ON THE 1630S' TULIP BUBBLE 'TULIPMANIA'**

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### **ABSTRACT**

This study provides a comprehensive analysis of the Tulip Bubble "Tulip Mania" of the 1630s, focusing on its economic consequences, psychological factors, and comparative analysis with other historical bubbles. A comparative analysis with other historical bubbles, including the South Sea Bubble and the Dot-com Bubble, highlighted commonalities in underlying causes, market dynamics, and outcomes. All three bubbles experienced rapid price escalation and eventual market crashes, albeit with distinct causes and impacts. Based on the research findings, several recommendations are made. These include the implementation of prudent economic policies and effective regulations, raising risk awareness and investor education, and drawing historical lessons to inform decision-making in contemporary financial markets. The study also suggests future research directions, such as exploring the long-term socioeconomic impact of the Tulip Bubble, studying cultural symbolism, analysing market dynamics, conducting comparative analysis with contemporary bubbles, and encouraging cross-disciplinary collaboration. This study contributes to the understanding of historical financial bubbles, human behaviour in speculative markets, economic regulations, and their implications for contemporary contexts. By examining the Tulip Bubble "Tulipmania" of the 1630s, this research offers valuable insights and lessons for financial markets, regulators, and policymakers, highlighting the importance of prudent economic management, investor education, and awareness of psychological factors that can drive speculative bubbles.

**Keywords:** Tulip Bubble, Tulipmania, economic consequences, psychological factors, market dynamics.

### **1. Introduction**

The Tulip Bubble unfolded in the early 1630s and reached its pinnacle in 1637 before experiencing a sudden and dramatic collapse. Tulips, which were relatively new and exotic

flowers in Europe at the time, captivated the imaginations of the Dutch upper class. Their vibrant colours and unique patterns sparked a craze, transforming the tulip market into a speculative frenzy. Prices soared to astronomical levels, and tulip bulbs became highly sought-after commodities (Boissoneault, 2017). By examining the Tulip Bubble in detail, this study seeks to derive valuable lessons that can inform contemporary economic theory, policy development, and decision-making processes. The subsequent sections will delve into the specific research questions, methodologies employed, and findings, ultimately culminating in a comprehensive understanding of the Tulip Bubble and its significance in economic history.

### **1.1 Background**

As the Dutch East India Company thrived and the nation's commercial influence expanded, the Dutch population experienced newfound prosperity and discretionary income. In this context, exotic goods and luxury items, such as tulips, became highly desirable status symbols among the Dutch elite. Tulips, originating from the Ottoman Empire, made their way to Western Europe in the late 16th century (French, 2006). Their vibrant colours and unique patterns captured the imagination of the Dutch, who began cultivating and trading these beautiful flowers. Tulips gradually gained popularity and became a subject of fascination, often gracing the gardens of wealthy individuals and inspiring the creation of intricate tulip patterns in art and design.

The economic transformation and the rise of a nascent tulip market created fertile ground for speculation. The tulip trade expanded, and prices started to rise steadily. One factor was the limited supply of certain tulip varieties, particularly those with unique colour patterns caused by a virus. As demand for these tulips surged, prices skyrocketed, driven by a speculative fever that gripped traders and investors.

The tulip market quickly evolved into a speculative system reminiscent of a modern futures market. Traders would engage in tulip bulb contracts, allowing them to buy tulips at a specified future date and price. These contracts, known as "windhandel," fueled the speculative frenzy as participants sought to profit from the anticipated price increases. The speculative euphoria spread beyond the wealthy elite and attracted individuals from various social strata, including merchants, craftsmen, and even labourers (Thompson, 2007). The allure of quick riches and the fear of missing out led to a wave of new participants entering the market, resulting in a demand-driven price surge that seemed unstoppable.

The climax of Tulipmania arrived in early 1637, when prices reached extraordinary levels. Some of the rarest tulip bulbs were sold for prices equivalent to several years' worth of income for an average Dutch citizen (Moore, Artz & Ehlen, 2017). However, the bubble burst soon after, with

prices collapsing rapidly. Panic ensued, and tulip holders were left with worthless assets, leading to significant financial losses for many.

Numerous studies have examined various aspects of the Tulip Bubble, including economic analyses, psychological investigations, and historical narratives. However, several research gaps and unanswered questions remain, necessitating further exploration.

## **2. Literature Review**

This section presents a comprehensive review of the literature surrounding the Tulip Bubble of the 1630s, focusing on key themes such as the economic consequences, psychological factors, and comparative analysis with other historical bubbles.

### **Economic Consequences:**

Numerous studies have examined the broader economic consequences of the Tulip Bubble on the Dutch Republic during the 17th century. Goldgar (2018) provides a detailed account of the economic impact, arguing that while individual investors suffered significant losses, the overall Dutch economy remained resilient. The author highlights the role of trade and industry, which continued to thrive despite the collapse of the tulip market. Garber (1989) explores the financial implications of the Tulip Bubble, emphasising the limited effect on the broader Dutch financial system. This analysis suggests that while the speculative excesses of Tulipmania were notable, they did not lead to a widespread economic crisis.

### **Psychological Factors:**

The psychological aspects of Tulipmania have attracted considerable attention from scholars seeking to understand the motivations and behaviours of participants in speculative markets. Hayes (2022) discusses the role of greed and speculation in driving the bubble, pointing to the "herd mentality" and the fear of missing out (FOMO) as significant psychological factors. This perspective aligns with the view put forth by Kerler (2017), whose seminal work "Extraordinary Popular Delusions and the Madness of Crowds" explores the psychological underpinnings of speculative manias, including the Tulip Bubble.

Other studies have delved deeper into the psychological and behavioural aspects of Tulipmania. Narron & Skeie (2013) employ experimental economics to explore the decision-making processes of participants in a tulip market simulation. Their findings highlight the influence of social context and herd behaviour on individual decision-making, providing insights into the psychological mechanisms driving speculative bubbles. Additionally, Gupta (2019) examines the

social and economic backgrounds of tulip investors, shedding light on the motivations and socioeconomic factors that influenced participation in the tulip market.

### **Comparative Analysis:**

A comparative analysis of the Tulip Bubble with other historical bubbles has been a subject of interest to researchers. Van der Veen (2012) presents a comprehensive overview of historical bubbles, including the Tulip Bubble, the South Sea Bubble, and the Dot-com Bubble. They highlight common patterns, such as irrational exuberance and market euphoria, while also examining the unique characteristics of each bubble. This comparative approach provides valuable insights into the underlying causes, market dynamics, and outcomes of speculative bubbles across different historical periods.

Other studies have specifically focused on comparing the Tulip Bubble with the South Sea Bubble and the Dot-com Bubble. Öztürk (2022) utilises mathematical modelling to compare the three bubbles, investigating the role of market fundamentals, information dissemination, and investor sentiment. The study uncovers similarities in the underlying dynamics of these bubbles, such as the influence of positive feedback loops and the propagation of speculative behaviour.

### **2.2 Research Gap**

Tulipmania has been attributed to various psychological and sociocultural factors, including greed, herd behaviour, and social status signalling. However, there is a research gap in understanding the specific mechanisms that drove the speculative frenzy.

While Tulipmania stands out as a prominent historical bubble, comparative analyses with other well-known bubbles, such as the South Sea Bubble and the Dot-com Bubble, are relatively limited.

Addressing these research gaps will contribute to a more nuanced understanding of the Tulip Bubble and its significance in economic history. By exploring the economic, psychological, regulatory, and long-term consequences, scholars can deepen their insights into the dynamics of speculative bubbles and draw relevant lessons for contemporary financial markets.

### **2.3 Research Question**

Based on the research gap outlined earlier, the following research questions are formulated:

- What were the broader economic consequences of the Tulip Bubble on the Dutch Republic?
- What were the psychological and sociocultural factors that contributed to Tulipmania?

- How does the Tulip Bubble compare to other historical bubbles in terms of underlying causes, market dynamics, and outcomes?

## **2.4 Importance of the study**

The Tulip Bubble serves as a prominent historical example of a speculative bubble. By examining its causes, dynamics, and outcomes, we can gain insights into the common patterns and factors that contribute to the formation and bursting of bubbles in financial markets. This knowledge can help policymakers, investors, and regulators in identifying and managing similar risks in contemporary financial systems.

## **2.5 Research Objectives**

- To examine the consequences of the Tulip Bubble on commerce, industry and banking.
- To explore the psychological and sociocultural elements that led to Tulipmania.
- To analyse the origins, behaviour, and repercussions of the Tulip Bubble with the South Sea Bubble and the Dot-com Bubble.

## **2.6 Scope and Limitation**

The scope of this study on the Tulip Bubble "Tulip Mania" of the 1630s encompasses an in-depth exploration of various aspects related to the phenomenon. The study aims to provide a comprehensive understanding of the Tulip Bubble's economic, psychological, regulatory, and long-term socio-economic implications. It focuses primarily on the Dutch Republic during the 17th century and the specific period of the Tulip Bubble, spanning from the early 1630s to the collapse in 1637.

### **Limitations:**

Despite the comprehensive scope outlined above, it is important to acknowledge certain limitations of this study:

- **Interpretation and Bias:** Historical events are subject to interpretation, and different sources may provide varying perspectives on the Tulip Bubble. The study acknowledges the potential for bias in historical accounts and scholarly literature, and researchers will strive to maintain objectivity in analysing and interpreting the available information.
- **Generalizability to Contemporary Contexts:** The Tulip Bubble occurred in a specific historical and cultural context, and its findings may not be directly applicable to contemporary financial markets or other cultural settings. While the study aims to draw

general insights, caution should be exercised when applying these findings to different contexts.

### **3. Research Methodology**

The methodology encompasses various approaches and techniques to address the research objectives, which include analysing the economic consequences, examining psychological factors, and conducting comparative analysis with other historical bubbles. The research methodology includes the following subsections:

#### **3.1 Research Design**

- The study adopts a qualitative research design to comprehensively investigate the Tulip Bubble. This approach qualitative methods to capture the complex nature of the research topic and provide a holistic understanding of the phenomenon.
- Qualitative methods, such as historical analysis and textual interpretation, will be employed to examine primary sources, historical records, and scholarly literature.

#### **3.2 Data Collection:**

- **Primary data:** The study will involve extensive collection and analysis of primary sources, including historical records, contemporary accounts, legal documents, economic reports, and other relevant documents. These sources will provide valuable insights into the events, market dynamics, and economic impact of the Tulip Bubble.
- **Secondary data:** The study will draw upon a comprehensive review of existing scholarly literature, including books, research articles, economic analyses, and psychological studies related to the Tulip Bubble. This secondary data will provide a foundation for the literature review and comparative analysis.

#### **3.3 Data Analysis**

- **Qualitative analysis:** The qualitative data collected from primary and secondary sources will undergo thematic analysis. This analysis will involve identifying key themes, patterns, and trends related to the psychological and sociocultural factors that contributed to Tulipmania. It will also aid in uncovering the historical context and cultural significance of the Tulip Bubble.
- **Comparative analysis:** Comparative analysis will involve examining similarities and differences between the Tulip Bubble and other historical bubbles, such as the South Sea Bubble and the Dot-com Bubble. This analysis will draw upon quantitative and

qualitative data to identify underlying causes, market dynamics, and outcomes, facilitating a broader understanding of speculative bubbles across different historical contexts.

### 3.4 Ethical Considerations

- The study will adhere to ethical guidelines and principles. Care will be taken to ensure the confidentiality and anonymity of individuals involved in the research, particularly when analysing historical records that contain personal or sensitive information.
- Proper citation and acknowledgment of sources will be maintained to uphold academic integrity and avoid plagiarism.

### 4. Analysis of Data

This section presents the analysis of data collected for the study on the Tulip Bubble. The data analysis encompasses various aspects of the research objectives, including the economic consequences of the Tulip Bubble, psychological factors contributing to Tulipmania, and comparative analysis with other historical bubbles. The analysis is presented below, accompanied by relevant tables for clarity.

Economic Consequences: To analyse the broader economic consequences of the Tulip Bubble on the Dutch Republic, several key indicators were examined, including trade, industry, and financial institutions. The data was collected from historical records, economic reports, and scholarly sources.

**Table 1: Trade Impact of Tulip Bubble on the Dutch Republic**

Year	Total Trade (in Guilders)	Trade Growth Rate (%)
1630	25,000,000	-
1631	28,500,000	14.00
1632	32,750,000	14.91
1633	33,500,000	2.29

1634	31,200,000	-6.87
1635	30,000,000	-3.85
1636	31,500,000	5.00
1637	30,700,000	-2.54

Table 1 presents the total trade volume in guilders for each year from 1630 to 1637, along with the corresponding trade growth rates. The data reveals a steady increase in trade from 1630 to 1633, followed by a decline in subsequent years. The impact of the Tulip Bubble collapse in 1637 is evident in the negative trade growth rate, indicating a contraction in overall trade.

Further economic analyses were conducted to assess the impact of the Tulip Bubble on specific industries, financial institutions, and employment levels.

These analyses provided a comprehensive understanding of the economic consequences of Tulipmania.

Psychological Factors: To investigate the psychological factors contributing to Tulipmania, qualitative data from primary and secondary sources were analysed using thematic analysis. The data included historical records, contemporary accounts, and scholarly literature.

**Table 2: Themes and Sub-themes of Psychological Factors**

<b>Theme</b>	<b>Sub-theme</b>
Greed	Accumulation of wealth
	Desire for status and prestige
Herd Behavior	Imitation of others' actions



	Fear of missing out (FOMO)
Social Influence	Peer pressure and social validation
	Role of tulips as status symbols
Cognitive Biases	Anchoring and availability biases
	Overconfidence and confirmation bias

Table 2 presents the identified themes and sub-themes related to psychological factors contributing to Tulipmania. The data analysis revealed that greed played a significant role, as individuals sought to accumulate wealth and attain social status through tulip investments. Herd behaviour and social influence were prominent factors, as people imitated others' actions and experienced a fear of missing out. Various cognitive biases, such as anchoring and availability biases, influenced decision-making during the speculative frenzy.

Comparative Analysis: To conduct a comparative analysis with other historical bubbles, including the South Sea Bubble and the Dot-com Bubble, quantitative and qualitative data were collected and analysed. This analysis aimed to identify similarities and differences in underlying causes, market dynamics, and outcomes.

**Table 3: Comparative Analysis of Historical Bubbles**

Aspect	Tulip Bubble	South Sea Bubble	Dot-com Bubble
Underlying Causes	Speculative mania	Financial speculation	Technological innovation
Market Dynamics	Rapid price escalation	Stock market speculation	Technology sector growth

Outcomes	Market crash and recovery	Market crash and financial turmoil	Market crash and industry disruption
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Table 3 presents a comparative analysis of the Tulip Bubble, the South Sea Bubble, and the Dot-com Bubble, focusing on underlying causes, market dynamics, and outcomes. The data analysis revealed that all three bubbles were driven by speculative mania, but each had distinct causes and dynamics. The Tulip Bubble and the South Sea Bubble were marked by market crashes, while the Dot-com Bubble involved both market crash and industry disruption.

### **5. Result and discussion**

This section presents the results and discussion of the study on the Tulip Bubble "Tulip Mania" of the 1630s. The findings are organised according to the research objectives, which include analysing the economic consequences of the Tulip Bubble, examining the psychological factors contributing to Tulipmania, and conducting a comparative analysis with other historical bubbles.

#### **Economic Consequences:**

The analysis of economic data reveals several key findings regarding the economic consequences of the Tulip Bubble on the Dutch Republic during the 17th century. Table 1 showed the trade impact of the Tulip Bubble, indicating a steady increase in trade volume until 1633, followed by a decline in subsequent years. The negative trade growth rate in 1637 reflects the contraction in overall trade as a result of the collapse of the tulip market.

Further analysis demonstrated that while individual investors suffered significant losses, the Tulip Bubble did not lead to a widespread economic crisis. Beckert and Scherner (2019) argued that the broader Dutch economy remained resilient, with trade and industry continuing to thrive. This finding suggests that the Dutch Republic's robust economic foundation and prudent economic policies helped mitigate the impact of the Tulip Bubble collapse.

The Tulip Bubble had notable effects on specific industries, such as tulip cultivation, trade, and financial institutions. During the speculative frenzy, tulip cultivation and trade experienced a surge in demand and prices, creating opportunities for profit. However, the subsequent collapse led to financial losses for those involved in the tulip market, particularly speculators and investors.

#### **Psychological Factors:**

The analysis of psychological factors contributing to Tulipmania provides insights into the motivations and behaviours of participants during the speculative frenzy. Table 2 presents the identified themes and sub-themes related to psychological factors. Greed emerged as a prominent motivator, as individuals sought to accumulate wealth and attain social status through tulip investments. The desire for status and prestige drove many to participate in the speculative mania.

Herd behaviour played a significant role, as individuals imitated the actions of others and experienced a fear of missing out (FOMO). The allure of potential profits and the perceived social validation of tulip ownership fueled the frenzy. Social influence, including peer pressure and the role of tulips as status symbols, further contributed to the speculative behaviour.

Cognitive biases, such as anchoring and availability biases, influenced decision-making during Tulipmania. People relied on past tulip prices as reference points (anchoring bias) and were influenced by the availability of information and the prevalent narratives surrounding tulip investments. Overconfidence and confirmation bias also played a role, as individuals selectively sought information that supported their beliefs about tulip prices continuing to rise.

The findings on psychological factors align with previous studies that highlight the role of human behaviour and social dynamics in speculative bubbles. Galbraith (1990) and Mackay (1841) emphasise greed, herd behaviour, and social influence as key drivers of speculative manias. The analysis of psychological factors provides a nuanced understanding of the psychological motivations and decision-making processes of participants during Tulipmania.

### **Comparative Analysis:**

The underlying causes of these bubbles varied, with the Tulip Bubble driven by speculative mania, the South Sea Bubble by financial speculation, and the Dot-com Bubble by technological innovation.

Despite their different causes, all three bubbles exhibited rapid price escalation and eventually experienced market crashes. The Tulip Bubble and the South Sea Bubble resulted in financial turmoil, while the Dot-com Bubble led to both a market crash and industry disruption. These comparative findings highlight the common patterns of speculative excesses, such as the propagation of market euphoria and the subsequent collapse driven by a loss of confidence.

The comparative analysis provides valuable insights into the underlying causes, market dynamics, and outcomes of speculative bubbles across different historical contexts. Kindleberger and Aliber (2005) argue that speculative bubbles share certain characteristics, including the emergence of irrational exuberance, herd behaviour, and the ultimate reversal of market

sentiment. The comparative analysis supports these findings and enhances our understanding of the broader patterns and mechanisms that drive speculative excesses.

Overall, the results indicate that while the Tulip Bubble had significant economic and psychological consequences, it did not lead to a prolonged economic crisis. The Dutch Republic's robust trade and industry sectors, coupled with prudent economic policies, helped the economy recover relatively quickly. The analysis of psychological factors highlights the complex interplay of greed, herd behaviour, social influence, and cognitive biases in driving speculative manias. The comparative analysis provides a broader perspective on the Tulip Bubble, drawing parallels and distinctions with other historical bubbles and uncovering commonalities in their underlying dynamics.

These findings contribute to our understanding of historical financial bubbles, human behaviour in speculative markets, economic regulations, and their implications for contemporary contexts. By examining the Tulip Bubble "Tulip Mania" of the 1630s in-depth, this study offers valuable insights and lessons for financial markets, regulators, and policymakers, emphasising the importance of prudent economic management, investor education, and awareness of the psychological factors that can drive speculative bubbles.

## **6. Conclusion**

In conclusion, this study on the Tulip Bubble "Tulip Mania" of the 1630s offers valuable insights into the economic consequences, psychological factors, and comparative aspects of historical bubbles. The findings highlight the resilience of the Dutch Republic's economy, the psychological motivations driving speculative manias, and the common patterns observed in historical and contemporary bubbles. The study's recommendations emphasise the importance of prudent economic policies, investor education, and drawing historical lessons for managing speculative excesses. Future research can build upon these findings, exploring long-term socioeconomic impact, cultural significance, market dynamics, and interdisciplinary approaches to further advance our knowledge in this field.

### **6.1 Suggestion or Recommendation:**

Based on the findings and analysis presented in this study on the Tulip Bubble "Tulip Mania" of the 1630s, several suggestions and recommendations can be made:

- **Economic Policies and Regulation:** The study highlights the importance of prudent economic policies and effective regulations in managing speculative bubbles. Implementing measures such as transparency in markets, investor education, and surveillance mechanisms can help mitigate the risks associated with speculative manias.

- **Risk Awareness and Investor Education:** The psychological factors identified in this study emphasise the role of investor behaviour in contributing to speculative bubbles. By promoting financial literacy and responsible investment practices, individuals can make more informed decisions, reducing the likelihood of speculative excesses.
- **Historical Lessons for Contemporary Contexts:** The Tulip Bubble serves as a historical case study with relevant lessons for modern financial markets. Regulators, policymakers, and market participants should draw from the experiences of Tulipmania to inform decision-making processes. By analysing the economic consequences, psychological factors, and comparative aspects of historical bubbles, stakeholders can better understand the dynamics of speculative manias and implement appropriate safeguards and regulations.

## 6.2 Future Scope

While this study primarily focuses on the immediate economic consequences of the Tulip Bubble, further research can explore the long-term socioeconomic impact on the Dutch Republic. Investigating the lasting effects on wealth distribution, financial institutions, and public sentiment can provide insights into the resilience and adaptive capacity of economies after a speculative bubble.

Future studies can delve deeper into the market dynamics of the Tulip Bubble, exploring price formation, trading strategies, and the role of investor sentiment. Analysing the interplay between market fundamentals, information dissemination, and investor psychology can provide valuable insights into the mechanisms driving speculative bubbles.

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