

# The Role of Anchoring Bias in Corporate Financial Forecasting and Budgeting in Indonesia

Loso Judijanto  
IPOSS Jakarta

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## Article Info

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## ABSTRACT

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Anchoring bias is a significant cognitive bias that affects decision-making processes, particularly in financial forecasting and budgeting. This study investigates the role of anchoring bias in forecasting and financial budgeting among companies in Indonesia using a quantitative approach. A sample of 45 financial professionals from diverse industries participated, with data collected through a structured questionnaire utilizing a 5-point Likert scale. The findings indicate a moderate to high prevalence of anchoring bias, which significantly correlates with forecasting inaccuracies. Regression analysis further reveals that anchoring bias explains 34% of the variance in financial planning errors. These results underscore the critical impact of cognitive biases on financial decision-making, emphasizing the need for targeted strategies to mitigate anchoring bias in corporate settings. Recommendations include training programs, structured decision-making frameworks, and technological support to improve financial accuracy and strategic planning.

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## Corresponding Author:

Name: Loso Judijanto  
Institution: IPOSS Jakarta  
Email: [losojudijantobumn@gmail.com](mailto:losojudijantobumn@gmail.com)

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## 1. INTRODUCTION

Anchoring bias is a significant cognitive bias affecting financial forecasting and budgeting, where initial information or estimates disproportionately influence subsequent judgments, often leading to suboptimal financial decisions as individuals may not adequately adjust their forecasts based on new data. This bias is well-documented in various fields, including accounting and investment decision-making, where it can distort judgment and lead to strategic errors. In accounting, initial estimates can skew subsequent evaluations and decisions, resulting in adverse consequences for businesses and organizations [1]. In business decision-

making, anchoring bias, along with other cognitive biases, can reduce decision efficiency and lead to strategic mistakes and resource wastage, but addressing these biases through psychological interventions can improve decision-making outcomes [2]. Although enhancing financial literacy can reduce susceptibility to certain cognitive biases, it may not directly address anchoring bias, making it essential for financial education programs to incorporate strategies to recognize and counteract anchoring effects [3]. Furthermore, in public budgeting, understanding individual judgment behavior and integrating insights from psychology and economics can help develop strategies to mitigate cognitive biases, including anchoring

bias [4]. Understanding and mitigating this bias is crucial for improving the accuracy of financial planning and decision-making processes.

Anchoring bias significantly impacts financial forecasting and budgeting, particularly in dynamic economies like Indonesia, as it leads decision-makers to rely heavily on initial data or estimates, which can skew financial predictions and resource allocations. In Indonesia, where diverse organizational structures and cultural influences prevail, this bias can exacerbate the challenges of financial planning, affecting investment decisions, pricing, and risk management, thereby necessitating strategies to mitigate its effects. Anchoring bias can lead to inaccurate financial forecasts by causing overreliance on historical data or initial estimates that may not reflect current market conditions [3], [5]. In investment decisions, this bias can result in suboptimal risk assessments, as investors may fail to adjust their evaluations based on new [3], [6]. The bias also affects pricing and valuation decisions, where initial price points or valuations can unduly influence subsequent judgments [7], [8]. Indonesia's diverse corporate landscape, with varying levels of financial sophistication, can amplify the effects of anchoring bias, as different organizations may interpret and react to initial data differently [9]. Additionally, cultural influences, such as hierarchical decision-making and respect for authority, may further entrench anchoring bias, as initial estimates from senior figures may be less likely to be questioned [9]. Strategies to mitigate anchoring bias include increasing awareness and reflection among financial professionals [7], encouraging diverse perspectives and independent analysis to provide a broader view that counteracts the narrow focus induced by anchoring [7], and utilizing decision-making tools while considering multiple anchors to help adjust initial estimates to better reflect current realities [7].

Despite the critical role of financial forecasting and budgeting in organizational success, limited empirical research has been

conducted to examine the influence of cognitive biases, particularly anchoring bias, on these processes within Indonesian companies. Previous studies in behavioral finance have largely focused on developed economies, leaving a significant gap in understanding the implications of such biases in emerging markets like Indonesia.

Anchoring bias can have far-reaching consequences for Indonesian companies, where market volatility and limited access to advanced financial tools often necessitate reliance on heuristic-based decision-making. Without a clear understanding of how anchoring bias affects financial planning, organizations risk perpetuating errors that undermine their competitiveness and long-term sustainability.

This study aims to address the research gap by investigating the role of anchoring bias in financial forecasting and budgeting within Indonesian companies, with specific objectives that include assessing the prevalence of anchoring bias among financial professionals in Indonesia, evaluating its impact on forecasting and budgeting accuracy, and identifying strategies for mitigating anchoring bias to improve financial decision-making practices.

## 2. LITERATURE REVIEW

### 2.1 *Anchoring Bias in Decision-Making*

Anchoring bias significantly impacts financial forecasting and budgeting by causing decision-makers to rely heavily on initial information, often leading to suboptimal outcomes. This bias is prevalent in situations of uncertainty or incomplete information, where individuals tend to anchor their estimates to familiar reference points, even if they are irrelevant or inaccurate, introducing systematic errors into forecasting processes, particularly in dynamic environments like financial planning, where adaptability is crucial. Anchoring bias affects investment choices and asset value assessments, leading to suboptimal strategies and misjudgements about market values [7]. In marketing, the price anchoring effect manipulates consumer

perceptions of value, influencing profitability by setting external anchor values (Jin, 2024). Additionally, behavioral biases, including anchoring, shape investment decisions, often resulting in less effective strategies due to reliance on initial information (Jin & Wang, 2024). Understanding anchoring bias is essential for developing strategies to mitigate its negative impacts, such as creating more accurate pricing models and market forecasts [7]. Moreover, integrating behavioral finance principles with strategies to counteract cognitive biases can promote financial resilience and adaptability [10]. Empirical reviews suggest the need for bias mitigation strategies to enhance rational investment decision-making, particularly in volatile markets [11].

## **2.2 Forecasting and Financial Budgeting in Corporate Contexts**

Forecasting and financial budgeting are crucial for corporate decision-making, enabling efficient resource allocation, strategic goal-setting, and performance measurement. However, human judgment remains prone to biases like anchoring, which can distort financial projections and undermine strategic decisions. Integrating advanced forecasting methods, such as machine learning and econometric models, enhances accuracy and mitigates biases. Machine learning techniques, including regression, time series analysis, and neural networks, improve budget forecasting by processing large datasets and identifying patterns missed by traditional methods [12]. Econometric models like ARIMA and VAR incorporate key economic variables, enhancing prediction accuracy and assessing external financial influences [13]. Time series methods, such as exponential smoothing and ARIMA, integrated with business intelligence tools, support dynamic forecasting and financial efficiency [14]. For SMEs, strategic budgeting and revenue management help align financial plans

with business goals, with techniques like zero-based budgeting and rolling budgets providing essential flexibility [15].

## **2.3 Behavioral Factors Influencing Financial Decision-Making**

Behavioral finance examines how psychological factors and cognitive biases, such as anchoring bias, influence financial decision-making. Anchoring bias occurs when individuals rely too heavily on initial information or estimates, leading to suboptimal financial decisions, particularly in budgeting, where managers may anchor to previous budgets without considering new market conditions or technological changes. Other biases, such as risk aversion and loss aversion, can exacerbate anchoring bias, resulting in conservative budgeting practices misaligned with current realities. Anchoring bias leads managers to depend on historical data or initial estimates, potentially overlooking market dynamics and technological advancements [16]. In investment strategies, this bias can reduce returns by 10%, underscoring its significant financial impact [17]. Furthermore, risk aversion and loss aversion intensify anchoring bias, as managers may adopt conservative approaches to avoid perceived risks or losses [11], [16]. Loss aversion, affecting 85% of cases, can contribute to a 5% negative return impact, highlighting its role in reinforcing anchoring bias [17]. To mitigate these effects, behavioral finance suggests debiasing strategies such as scenario analysis and structured decision-making [16]. Additionally, educating investors and managers about cognitive biases can enhance decision-making processes and promote market stability [18].

## **2.4 Mitigating Anchoring Bias in Corporate Practices**

Increasing awareness of anchoring bias and implementing structured decision-making frameworks are effective strategies to mitigate its influence in corporate decision-making. Training programs that enhance

awareness of cognitive biases can empower decision-makers to recognize and counteract these biases, leading to improved organizational performance [19]. Enhancing financial literacy through education further supports informed investment decisions, reducing the impact of anchoring bias [20]. Additionally, structured frameworks like scenario and sensitivity analysis encourage a comprehensive evaluation of multiple data points, minimizing reliance on a single anchor [19]. These frameworks are particularly valuable for companies in Indonesia, where cultural and contextual factors significantly influence financial planning, thereby improving forecasting and budgeting accuracy [21]. Technological tools, such as AI and explainable AI (XAI), play a crucial role in mitigating anchoring bias by providing objective insights and reducing dependence on subjective judgments [22]. Furthermore, financial modeling software and data analytics platforms enhance real-time data analysis, supporting more accurate and reliable decision-making processes [22].

### **2.5 Anchoring Bias in the Indonesian Corporate Context**

The corporate environment in Indonesia, shaped by rapid economic growth and evolving regulations, presents complex financial decision-making challenges. Cognitive biases, especially anchoring, are prevalent among managers who rely on outdated performance metrics and industry benchmarks, reinforced by hierarchical structures and a preference for consensus [23]. These factors amplify the influence of senior decision-makers and discourage critical evaluation of initial estimates. Overconfidence bias further affects investment decisions, leading to excessive risk-taking and reduced returns [24]. Additionally, herding behavior, driven by fear of missing out (FoMO), significantly impacts investment choices [23], [25]. Hierarchical decision-making strengthens cognitive biases, as subordinates rarely

challenge initial anchors set by senior executives [26]. The consensus-driven culture in Indonesian businesses also limits independent scrutiny of financial estimates, exacerbating anchoring bias [27].

### **2.6 Research Gap and Contribution**

While extensive research has explored the impact of cognitive biases on decision-making, there is limited empirical evidence on the specific role of anchoring bias in forecasting and financial budgeting, particularly in the Indonesian corporate context. This study seeks to address this gap by examining the extent to which anchoring bias influences financial planning accuracy in Indonesian companies and identifying effective strategies for mitigating its effects. By integrating insights from behavioral finance and corporate management, this research aims to contribute to the development of more robust financial decision-making practices in Indonesia.

## **3. RESEARCH METHODS**

### **3.1 Research Design**

This study employed a quantitative research design to investigate the role of anchoring bias in forecasting and financial budgeting among companies in Indonesia. The research focused on examining the relationship between the prevalence of anchoring bias and the accuracy of financial planning processes. By leveraging a survey-based methodology, the study collected primary data from respondents who are directly involved in financial decision-making within their organizations.

### **3.2 Population and Sample**

The population for this study comprised corporate professionals in Indonesia responsible for financial forecasting and budgeting processes, including financial managers, accountants, and decision-makers in various industries. A purposive sampling technique was employed to ensure that

respondents had relevant experience and knowledge in financial decision-making.

The sample size consisted of 45 respondents, deemed sufficient for exploring the patterns and relationships in the study's scope. The respondents were selected from diverse industries to enhance the generalizability of findings across different sectors within the Indonesian corporate landscape.

### 3.3 Data Collection

Data were collected through a structured questionnaire designed to capture the extent of anchoring bias and its impact on financial forecasting and budgeting accuracy. The questionnaire included demographic information, such as respondents' roles, years of experience, and industry sectors, as well as items measuring the tendency to rely on initial estimates or historical data in decision-making. Additionally, it assessed forecasting and budgeting accuracy by examining deviations between projected and actual financial outcomes. Responses were quantified using a 5-point Likert scale, ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree"). Prior to distribution, the questionnaire was pilot-tested on a small group of professionals to ensure clarity and reliability.

### 3.4 Data Analysis

The collected data were analyzed using Statistical Package for the Social Sciences (SPSS) version 25, following several key steps. Descriptive statistics were used to summarize respondents' demographic characteristics and provide an overview of the data. Reliability analysis was conducted using Cronbach's alpha to assess the internal consistency of the questionnaire. Correlation analysis explored the relationship between anchoring bias indicators and forecasting/budgeting accuracy, while regression analysis determined the extent to which anchoring bias predicts inaccuracies in financial planning. These statistical methods helped identify patterns and significant relationships,

offering insights into the role of anchoring bias in corporate financial decision-making.

## 4. RESULTS AND DISCUSSION

### 4.1 Results

#### a. Descriptive Statistics

The demographic analysis of the respondents showed that the majority were financial managers (60%), followed by accountants (25%) and senior decision-makers (15%). The majority of the respondents also had over five years of experience in financial planning, which ensured a high level of competency among the participants. The industries represented included manufacturing (30%), retail (25%), services (20%), and other industries (25%).

The response to anchoring bias measures indicated that most of the participants had reliance on initial estimates in their prediction tasks. With a 5-point Likert scale, the mean value for anchoring bias measures was 3.8, indicating a moderate to high level of presence of the bias in financial decision-making.

#### b. Reliability Analysis

The Cronbach's alpha reliability test of the questionnaire yielded 0.85, indicating good internal consistency of the items of the survey. This confirms that the questionnaire was effective in measuring the intended constructs.

#### c. Correlation Analysis

The correlation analysis illustrated a strong positive correlation between anchoring bias and forecast errors ( $r = 0.62$ ,  $p < 0.01$ ). This indicates that rising levels of anchoring bias are associated with greater differences between financial forecasts and actual outcomes.

#### d. Regression Analysis

The regression analysis also revealed that anchoring bias was a significant predictor of forecasting and budgeting errors ( $\beta = 0.58$ ,  $p <$

0.01). The finding suggests that anchoring bias explains approximately 34% of the variance in financial planning errors. The results point to the significant role of cognitive biases in corporate decision-making.

#### 4.2 Discussion

##### a. Anchoring Bias in Financial Forecasting

The evidence confirms that anchoring bias is prevalent among financial practitioners in Indonesia and significantly influences the accuracy of forecasting and budgeting processes. The evidence concurs with the previous research of [1,2,3] that demonstrated that anchoring bias is one of the determinants of decision-making under uncertainty.

The moderate to high prevalence of anchoring bias shows that a vast majority of professionals anchor on past data or initial estimates and do not adjust adequately for more recent information. This could be attributed either to unawareness of cognitive biases or the absence of formal decision-making models in financial planning.

This study contributes to the growing body of behavioral finance literature by providing empirical evidence of anchoring bias's role in financial decision-making in the corporate environment of Indonesia. By emphasizing the significant role of cognitive biases on budgeting and forecasting processes, this research underlines the necessity of integrating behavioral elements in financial management practice.

##### b. Implications for Corporate Practices

The strong correlation between anchoring bias and forecast errors validates the imperative of organizations addressing cognitive biases in financial processes. The

findings highlight the need for strategies such as:

- a. Training Programs: Educating financial professionals to identify and minimize anchoring bias.
  - b. Structured Decision Frameworks: Encouraging the use of tools like scenario analysis and sensitivity analysis to foster objective decision-making.
  - c. Technological Support: Leveraging financial modeling software and data analytics packages to reduce reliance on subjective judgements.
  - d. For Indonesian companies, these strategies can enhance the reliability of financial planning, leading to more effective resource allocation and strategic decision-making.
- ##### c. Cultural and Contextual Considerations

The study also offers a glimpse of how cultural factors play a role in financial decision-making processes in Indonesia. The hierarchical organizational structures prevalent in most Indonesian companies can compound the impact of anchoring bias, since the initial estimates established by higher-ups can have an inordinate influence on subsequent decisions.

Also, the consensus culture present in most Indonesian organizations can discourage critical evaluation of initial predictions, further strengthening the effect of anchoring bias. There is a need to tackle these cultural forces to formulate Indonesian business environment-specific interventions.

##### d. Limitations and Future Research Directions

While this study has practical implications, its findings are also beset by some limitations. The sample size of 45 respondents, while sufficient for exploratory analysis, may not capture the diversity of

financial decision-making practices across all industries in Indonesia. Larger and more diverse samples need to be taken into consideration in future research to enhance the generalizability of findings.

Besides, this study relied on self-reported data, which may be liable to social desirability or recall biases. Quantitative methodology used may be supplemented with qualitative methodology, such as interviews or case studies, to obtain a more profound understanding of the role of anchoring bias in financial decision-making.

## 5. CONCLUSION

The study establishes the significant role of anchoring bias in financial forecasting and budgeting mistakes in Indonesian companies. Findings indicate that anchoring bias is moderately to highly pervasive, with a significant effect on the reliability of financial planning. The strong correlation and predictive relationship between anchoring

bias and forecasting errors underscore the importance for organizations to address cognitive biases in decision-making. To thwart these influences, organizations need to focus on training programs to sensitize and equip professionals with techniques to recognize and negate biases, formal decision frameworks such as scenario and sensitivity analyses to reduce reliance on subjective judgments, and technology support, such as advanced financial modeling and data analytics software, to enable injecting greater objectivity into decision-making.

This study contributes to behavioral finance research by revealing empirical evidence of anchoring bias in the corporate environment in Indonesia. Despite limitations with regard to sample size and self-reported data, the findings suggest the importance of future studies with larger, more diverse samples, and mixed-methods approaches. Future research can investigate further cognitive biases and their interplay in financial decision-making to generate a deeper understanding of behavioral finance in emerging markets.

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