



How to address heuristics and cognitive biases in tax decision-making: A systematic literature review

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ABSTRACT

Heuristic and cognitive biases in Indonesia have caused tax compliance issues, as public prejudice leads to tax avoidance, and overconfidence among authorities results in less effective tax policies. This study aims to investigate the use of heuristics and cognitive biases in tax decision-making by individuals and businesses. It examined tax decision-making using heuristics and cognitive biases in tax decision-making, selecting 25 recent research articles from scientific journals. The research shows that using heuristics can lead to biases and errors among individual taxpayers and professionals. To mitigate this issue, adopting a comprehensive approach that includes educational initiatives, integration of advanced technology, establishment of structured decision-making processes, promotion of interdisciplinary collaboration, and fostering a culture of critical analysis within tax-related organizations is important. Therefore, addressing biases driven by heuristics in tax decision-making requires a combination of educational efforts, technological advancements, and cooperative and interdisciplinary efforts to enhance the accuracy and efficiency of decision-making.

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INTRODUCTION

Tax decision-making is a crucial aspect that directly impacts the finances and well-being of individuals and business entities. This process encompasses the obligation to pay taxes and the strategies for planning, reporting, and optimizing tax burdens within the existing regulatory framework (Curi, 2019; Tsindeliani et al., 2019). In this context, psychological factors such as heuristics and cognitive biases play a significant role (Acciarini et al., 2020; Ishfaq et al., 2020). Heuristics facilitate quick decision-making based on practical rules (Brown & Salmon, 2019; Niittymies, 2020), whereas cognitive biases can distort information processing, potentially leading to

suboptimal tax decisions (Espinosa et al., 2022; Khan et al., 2023). For example, confirmation bias and overconfidence can result in less optimal tax decisions, where individuals and businesses might take excessive risks based on a misunderstanding of tax regulations (Dhami et al., 2019; Haufler & Nishimura, 2023). Furthermore, an individual's ethical perception influences their tax decisions, with those holding higher ethical standards paying closer attention to tax rules and regulations, unlike those with lower ethical standards, which might tend to evade tax obligations (Lokanan, 2023). External factors such as market pressures and tax regulations can moderate the effects of heuristics and cognitive biases, indicating a

complex interaction between internal and external factors in tax decision-making (Nuijten et al., 2020). This highlights the importance of understanding these dynamics to make more informed and strategic tax decisions.

In Indonesia, issues arising from the influence of heuristics and cognitive biases in tax decision-making include a gap between expected tax compliance and reality. For instance, confirmation bias, the tendency to seek, interpret, prioritize, and recall information that confirms one's beliefs or values, can lead to tax avoidance due to the belief that their tax burden is too high or the tax system is unfair (Korteling et al., 2023). Moreover, tax authorities are affected by overconfidence bias, meaning excessive confidence in their judgments about tax compliance, which can result in less effective policies or actions in enhancing tax compliance (Subandi & Tjaraka, 2023). This situation demands more innovative and evidence-based strategies in designing and implementing tax policies to mitigate the negative impacts of heuristics and cognitive biases.

This research shares similarities with Yamini's (2021) study in examining the influence of biases and heuristics in decision-making, although with a different focus. Both use literature reviews to explore the psychological impacts of business decision-making. With Sudirman et al. (2023), the similarity lies in exploring how cognitive biases affect decisions and employing quantitative methods (SEM-PLS) for analysis. Misuraca et al. (2021) and this research consider susceptibility to bias in decision-making, albeit in different contexts. Lastly, the similarity with Nuijten et al. (2020) includes a focus on the influence of cognitive biases in small and medium-sized enterprise (SME) decision-making, with this research extending the context to tax decisions. The main difference between this study and Yamini's (2021) lies in the application context; this study emphasizes tax decisions, while Yamini's (2021) focuses on inventory decisions. Sudirman et al. (2023) focus on investment decision-making using SEM-PLS. In contrast, this study is broader in examining the influence of heuristics and biases on tax decisions, not limited to any specific quantitative method. Misuraca et al. (2021) investigate bias tendencies in individuals with optimal decisions, whereas this study takes a broader perspective on tax decision-making by individuals and business entities. Nuijten et al. (2020) focus on external accountants' perspectives toward bias in SME

decisions, while this study encompasses a broader review of tax decision-making.

The novelty of this research lies in the conceptual integration of heuristic and cognitive bias theories in the context of tax decision-making by individuals and business entities. Through a literature review method, this study aims to fill the knowledge gap by comprehensively mapping how various heuristics and cognitive biases affect the tax decision process, which has not been thoroughly explored in the existing literature. Therefore, this study aims to investigate the use of heuristics and cognitive biases in tax decision-making by individuals and business entities. The contribution of this research primarily lies in developing a deep understanding of the role of heuristics and cognitive biases in tax decision-making by individuals and business entities. Through a literature review approach, this study successfully identifies and maps how various types of heuristics and cognitive biases affect tax decisions, filling the knowledge gap in the existing literature. Thus, this research provides new and comprehensive insights into the psychological dynamics in tax decision-making, laying the groundwork for further theoretical development and practical application in designing more effective tax policies and compliance strategies tailored to the cognitive behavior of taxpayers.

RESEARCH METHOD

This systematic literature review aimed to explore the research topic by investigating the use of heuristics and cognitive biases in tax decision-making by individuals and businesses. It involved analyzing, summarizing, and synthesizing the literature (Cabrera et al., 2023). The literature review helped the researchers identify the gaps between theory and practical application based on the research findings (Meiryani et al., 2023). The study addressed the gap between theory and practical application in tax decision-making by evaluating how heuristic theory, cognitive biases, and tax compliance aligned or conflicted with actual practices implemented by decision-makers and tax professionals. In identifying relevant research, a systematic search began in February 2024. The selection of appropriate articles involved several steps, starting with electronic databases such as Springer, Wiley, Emerald, MDPI, ScienceDirect, Sage Journals, Taylor & Francis, Sinta, Frontiers, APSA, EASR, EJST, Dequeb.org, and

Cambridge University Press, all known for their reputable standing. This research tracked various articles using keywords like "heuristics," "cognitive biases," and "tax decision-making." The reviewed articles had to meet specific topic-related criteria. The data from this literature review were analyzed qualitatively to identify emerging patterns and findings and summarize and synthesize the literature. The structured search for relevant studies encompassed a wide range of sources, as listed in Table 1.

Table 1. Selected Sources of Publication

Sources	Study Findings	Selected Studies
Springer	7	1
Wiley	24	3
Emerald	13	2
MDPI	38	4
ScienceDirect	14	2
Sage Journals	5	2
Taylor & Francis	9	3
Sinta	4	1
Frontiers	12	2
APSA	2	1
EASR	2	1
EJST	2	1
Deqepub.org	5	1
Cambridge University Press	3	1
Total	140	25

Table 1 provides an overview of various sources, including their research findings and the number of studies selected. The highest contributors were MDPI, with 38 findings and four selected studies; Wiley, with 24 findings and three selected studies; and Springer, with seven findings and 1 study selected. Overall, there were 140 research findings across all sources, with 25 studies selected for further analysis.

Research Criteria

This stage was conducted to determine whether the data found was eligible for use in the Systematic Literature Review. A study was eligible for selection if it met the following criteria:

1. Inclusion Criteria: This research included studies published from 2019 to 2024. It focused on academic journal articles sourced from reputable electronic databases such as Springer, Wiley, Emerald, MDPI, ScienceDirect, Sage Journals, Taylor & Francis, Sinta, Frontiers, APSA, EASR, EJST, Dequepub.org, and Cambridge University Press. Studies that met the inclusion criteria needed to relate to heuristics, cognitive biases,

and decision-making in taxation, with the note that the study results were not exclusively linked to the Indonesian context.

2. Exclusion Criteria: Studies published more than five years ago should have been considered. Additionally, scholarly works in the form of proceedings, books, theses/dissertations, websites, or news articles were excluded from this study. Research that did not focus on heuristics, cognitive biases, or tax decision-making also did not meet the inclusion criteria.

RESULT AND DISCUSSION

Selected Articles

Figure 1 illustrates selecting and including articles in a systematic review or study. Initially, 1,280 articles were retrieved from electronic databases. After duplicates were removed, the count dropped to 640. Following title and abstract screening, 480 more articles were eliminated, leaving 160 articles for further evaluation. After full-text assessment, an additional 140 articles were excluded because 94 lacked relevant data, and 46 were excluded because the research was not published in scientific journals. The outcome of this process added five articles to the review. The main reason was a continued shortage of articles offering solid evidence supporting findings on heuristics and cognitive biases in tax decisions, resulting in more evidence relevant to the review's main topic. This produced a total of 25 studies included in the review (see Appendix).

Table 2 displays the distribution of publications across various journals from 2020 to 2023, with each journal recording one publication. Various publishers, including Springer, Wiley, Emerald, MDPI, and others, publish these journals.

Heuristics and Tax Decision-Making

The influence of heuristics on tax decision-making is a fascinating and complex topic closely related to human psychology and decision-making behavior. Heuristics are practical rules or approaches for making decisions or assessing problems quickly and efficiently (Hjeij & Vilks, 2023). Although heuristics can help reduce the complexity of decision-making, they can also lead to biases and errors (Schirrmeister et al., 2020).

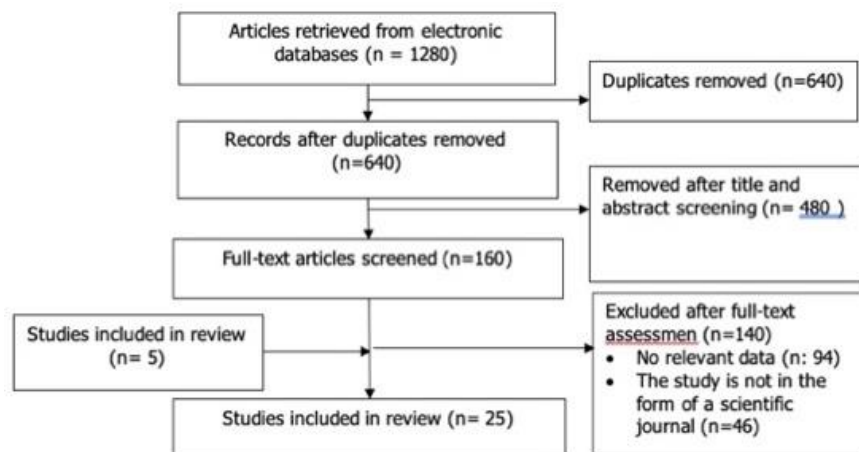


Figure 1. Study selection process

Table 2. Article Distribution of Publications across Various Journals, 2020 to 2023

No	Year	Source Type	Journal Name	Database	Number of journal
1	2023	Journal	Humanities and Social Sciences Communications	Springer	1
2	2020	Journal	Futures and Foresight Science	Wiley	1
3	2020	Journal	Management Decision	Emerald	1
4	2023	Journal	Economies	MDPI	1
5	2022	Journal	Frontiers in Psychology	Frontiers	1
6	2022	Journal	European Accounting Review	Taylor & Francis	1
7	2020	Journal	Journal of International Accounting, Auditing and Taxation,	ScienceDirect	1
8	2023	Journal	American Review of Public Administration	Sage Journals	1
9	2021	Journal	Management Decision	Emerald	1
10	2023	Journal	European Review in Accounting and Finance	Deqepub.org	1
11	2023	Journal	Journal of Intelligence	MDPI	1
12	2021	Journal	Journal of Economics, Business, and Government Challenges	Sinta	1
13	2022	Journal	Journal of Risk and Financial Management	MDPI	1
14	2023	Journal	Cogent Business & Management	Taylor & Francis	1
15	2020	Journal	Journal of Behavioral Public Administration	American Political Science Association (APSA)	1
16	2023	Journal	Cogent Economics and Finance	Taylor & Francis	1
17	2020	Journal	Review of Public Personnel Administration	Sage Journals	1
18	2023	Journal	Frontiers in Psychology	Frontiers	1
19	2022	Journal	Sustainability	MDPI	1
20	2021	Journal	Production and Operations Management	Wiley	1
21	2022	Journal	Engineering and Applied Science Research	Engineering and Applied Science Research (EASR)	1
22	2023	Journal	International Journal of Project Management	ScienceDirect	1
23	2022	Journal	European Law Journal	Wiley	1
24	2023	Journal	Perspectives on Politics	Cambridge Univ. Press	1
25	2020	Journal	European Journal of Science and Theology	EJST	1

Heuristics can affect how taxpayers understand and respond to their tax obligations in taxation. For example, the availability heuristic, which is the tendency to estimate the frequency or probability based on how easily examples come to mind, can affect decision-making when taxpayers recall highly publicized tax audit incidents or tax evasion cases,

allowing those incidents to influence their perception of risk regarding tax compliance disproportionately. Research by Ahmad et al. (2020) and Alm et al. (2023) shows how the availability heuristic can influence people's judgments and decisions, which can be applied in the tax context to understand how taxpayers assess audit risk.

The representativeness heuristic, which involves judging probabilities based on how representative or similar an object is to a specific category, can also influence tax decision-making. For instance, taxpayers might assume that because they are small business owners, they are less likely to be audited than large corporations without considering the actual factors tax authorities use to determine audits. Research by Berthet (2022) and Blaufus et al. (2022) on heuristics and biases in decision-making highlights how such assumptions can lead to biased and inaccurate judgments. Anchoring heuristic also plays a role in tax decision-making. Anchoring is the initial information received by an individual, which serves as a reference point for subsequent decisions. In the tax context, anchors can come from information taxpayers receive about tax rates, penalties, or other tax-related information. For example, if taxpayers are initially informed of high tax rates, they are likely to assess all subsequent tax information based on those high rates, even if the actual rates might be lower. Research by Eberhartinger et al. (2020) demonstrates how anchors can influence financial expectations and decisions, including in the tax context.

Furthermore, the influence of heuristics in tax decision-making is not limited to individuals but also impacts how tax professionals, such as accountants and lawyers, advise their clients. Heuristics in their decision-making process affect the advice they provide to taxpayers. Research by Gershgoren & Cohen (2023) explores how tax professionals process information and make decisions, showing they are susceptible to the same biases as taxpayers. In conclusion, heuristics play a significant role in tax decision-making, affecting individual taxpayers and professionals. While heuristics can aid in simplifying the decision-making process, they can also lead to biases and judgment errors that can impact tax compliance and tax management strategies. Therefore, understanding the influence of heuristics is crucial for developing more effective tax strategies and policies and providing better tax education for taxpayers and tax professionals.

Cognitive Bias and Tax Decision-Making

Cognitive bias in tax decision-making is a complex phenomenon that has received widespread attention in the finance and taxation literature. Scientific studies indicate that tax decision-making is not always rational and is often influenced by various cognitive biases

rooted in human psychology. In this context, cognitive bias is a systematic deviation from logic or rationality in judgment, leading to conclusions or decisions that are often inaccurate or inefficient. Heuristics, as rules of thumb used to simplify decision-making, often contribute to forming cognitive biases. Although heuristics enable individuals and business entities to make quick and efficient decisions in the face of tax regulation complexities, they also lead to vulnerabilities and judgment errors. For example, the availability heuristic, which refers to the tendency of individuals to rely on easily remembered or accessible information when making decisions, can lead to confirmation bias. This bias occurs when individuals search for, interpret, or recall information in a way that justifies their prior beliefs or decisions, ignoring contrary evidence. Research by Rauwerda & De Graaf (2021) and Blaufus et al. (2022) has highlighted how heuristics facilitate quick decision-making in complex tax environments but also emphasized the potential risks arising from decisions distorted by cognitive biases. Loss aversion, a concept discussed by Rullah et al. (2023), is another example of cognitive bias where individuals tend to avoid losses more than to acquire gains. In the tax context, this can affect how individuals or businesses respond to potential tax risks and tax-saving opportunities.

Overconfidence, studied by Mata (2023) and Yulianis & Sulistyowati (2021), is another cognitive bias that plays a significant role in tax decision-making. Overconfident individuals tend to overestimate their knowledge or abilities, disregarding the risks or complexities associated with tax decisions, leading to poor tax compliance or ineffective tax planning decisions. The preference for fairness, as explored in the research by Rahamneh et al. (2022) and Khozen & Setyowati (2023), also shows how psychological factors influence tax perceptions and decisions. Individuals with differing views on what constitutes a fair tax system might adopt different approaches to compliance and tax planning, with some seeking ways to reduce their tax burden through legal loopholes or tax incentives. In contrast, others may prefer to comply with their tax obligations fully. Berthet (2022) presents evidence that heuristics are often accompanied by confirmation bias and overconfidence, impacting tax decisions. This indicates the need for a more careful and critical approach in tax decision-making, recognizing and addressing potential cognitive biases. The concept of Nudge

theory, as discussed by Vainre et al. (2020), provides a useful perspective in understanding how cognitive biases can be manipulated or diverted to encourage more responsible tax behavior without stripping freedom of choice. Through carefully designed interventions, it may be possible to 'nudge' individuals and businesses towards more optimal tax decisions. In conclusion, tax decision-making is a multifaceted process that is governed not only by economic and legal considerations but is also heavily influenced by various cognitive biases. Recent studies emphasize the importance of understanding and addressing these biases to improve the accuracy and effectiveness of tax decision-making. Therefore, a deep understanding of heuristics and cognitive biases, and applying strategies such as the Nudge theory becomes crucial in formulating efficient tax policies and facilitating higher tax compliance among taxpayers.

Strategies for Overcoming Heuristics and Cognitive Bias in Tax Decision Making

To address heuristics and cognitive biases in tax decision-making, the strategy that can be implemented includes a multidisciplinary approach integrating psychology, economics, and tax law. First, comprehensive education and training for policymakers and tax practitioners are necessary to enhance awareness of the existence and impact of heuristics and cognitive biases (Almansour et al., 2023; Cantarelli et al., 2020; Korteling et al., 2023). This could include training sessions focused on identifying cognitive biases, such as confirmation bias, availability heuristic, overconfidence, and anchoring effect, and how to recognize and overcome them in a tax context. Second, objective data-driven decision systems can reduce reliance on often biased subjective intuition (Geva & Tsechansky, 2021; Žigienė et al., 2022). The application of information technology, such as data-based decision support systems and advanced analytical tools, can assist in accurately processing tax data and providing objective recommendations for decision-making. Third, implementing structured and standardized decision-making procedures can minimize the space for cognitive biases (Lawani et al., 2023; Ponhan & Sureeyatanapas, 2022). These procedures should include steps for fact verification, systematic alternative assessment, and periodic decision evaluation to ensure that decisions are based on thorough and objective analysis. Fourth, collaboration and consultation with experts from

various disciplines can help provide diverse perspectives and reduce potential cognitive biases (Rangone, 2022; Soest, 2023). Policymakers can gain broader and more objective insights through discussions and idea exchanges with experts in economics, psychology, tax law, and other fields. Policymakers can gain broader and more objective insights. Fifth, promoting a critical and reflective culture within the tax organization can foster an openness to evaluation and criticism, thereby reducing cognitive biases (Petranova & Rysová, 2020; Rangone, 2022). Establishing a dedicated team or unit tasked with regularly reviewing and evaluating the tax decision-making process can provide a control mechanism to ensure decisions are free from irrational biases. In conclusion, the strategy to overcome heuristics and cognitive biases in tax decision-making requires a comprehensive and integrated approach involving awareness enhancement, technology application, structured procedure setting, multidisciplinary collaboration, and developing a critical and reflective organizational culture.

Research Implication

This study has significant implications for the socio-economic order. As technology and globalization advance, the tax system becomes increasingly complex, making understanding psychological factors in tax decision-making crucial for governments, society, and industry. The study's findings suggest that heuristics and cognitive biases play a significant role in tax decision-making, ultimately affecting the quality of public policy and public perception of the tax system's fairness. A key implication of this research is the need for a more inclusive and open approach to formulating tax policies. Confirmation bias occurs when policymakers overly rely on a single perspective, leading to a narrow interpretation of data and tax-related information (Alfandia, 2024; Eberhartinger & Zieser, 2021). If policymakers disregard data that contradict their beliefs, unbalanced tax policies harm certain groups.

A collaborative approach involving diverse stakeholders, such as economists, psychologists, and the broader public, is needed to address this issue. Such an approach can offer a wider view, increase the legitimacy of tax policy, and reduce bias in decision-making. The findings offer new insights into how individuals and tax professionals process information and make critical decisions in designing a more

effective and fair tax system. By understanding the role of heuristics like availability, representativeness, and anchoring, as well as cognitive biases like confirmation and overconfidence, policymakers can develop more accurate strategies to educate and guide taxpayers, reduce judgment errors, and improve tax compliance (Chalissery et al., 2023; Dadashi et al., 2023). Additionally, the study indicates that tax education for the public and the government plays an important role in reducing cognitive biases in tax decision-making. Many misunderstandings about the tax system occur, leading to tax avoidance behavior. Education and increased tax awareness can help people understand the importance of tax compliance and reduce the tendency to avoid taxes (Gangl & Torgler, 2020; Oats & Tuck, 2019). Integrating tax education into school curricula and training programs for tax professionals could be an effective first step (Kurniawan, 2020). Moreover, social awareness programs encouraging community involvement in tax decision-making can help build public trust and participation in the tax system.

This research underscores the importance of utilizing information technology in tax decision-making processes to reduce dependence on subjective intuition, which is prone to bias. By implementing data-driven decision support systems and advanced analytical tools, tax data can be processed more accurately, allowing for more objective recommendations and better decisions. Tax authorities must invest in technology infrastructure that enables fast and accurate data analysis, thereby improving efficiency and accuracy in tax enforcement processes (Okunogbe & Santoro, 2023). This ultimately can have a positive impact on government revenue. Another implication of this research is developing effective strategies to address heuristics and cognitive biases in tax decision-making. A collaborative approach between the government and industry and the use of innovation can provide effective solutions (Abbas et al., 2019). For example, well-designed incentive programs can encourage more responsible behavior among taxpayers. Using the nudge theory can also be an effective strategy, where tax behavior can be positively steered without restricting freedom of choice (Espinosa et al., 2022).

With these strategies, policymakers can promote tax compliance and reduce the risk of undesirable biases in decision-making. If biases in tax decision-making can be minimized, the impact could be broad.

It could contribute to a fairer and more efficient tax system, ultimately increasing tax revenues to support socio-economic development programs. From an industry perspective, a better understanding of heuristics and cognitive biases can help companies plan better tax strategies. Tax consultants and financial professionals can also use these research findings to offer better advice to their clients, helping them make more informed and responsible decisions (Anesa et al., 2019). From an academic perspective, this research significantly contributes to understanding how heuristics and cognitive biases affect tax decision-making. It encourages further investigation into how psychology-based and public policy-based interventions can be used to address cognitive biases. For example, experimental studies on the effectiveness of 'nudge' strategies in improving tax compliance or the impact of specific training to reduce overconfidence and confirmation bias can provide valuable empirical evidence to formulate more effective tax policies (Alm et al., 2023).

Additionally, this research has significant benefits for various users. Governments can use these findings to design more effective and fair tax systems, while the public can benefit from increased awareness and tax education. For the industry, especially tax consulting and software companies, these findings can be used to develop tools and services that help clients identify and overcome cognitive biases in tax planning and decision-making. Ultimately, the implications of this research highlight the importance of an interdisciplinary approach to understanding and addressing heuristics and cognitive biases in tax decision-making. This contributes to the academic field and provides practical guidance for policymakers, tax practitioners, and taxpayers in developing fairer, more transparent, and efficient tax strategies. Thus, this research offers significant value in supporting more informed and responsible decision-making, ultimately contributing to inclusive economic and social development.

CONCLUSION AND SUGGESTION

This research reveals that heuristics and cognitive biases play a significant role in tax decision-making by individuals and business entities, influencing how they assess risk, estimate probabilities, and make tax-related decisions. Although heuristics help simplify the decision-making process amidst the tax system's

complexity, tendencies such as availability, representativeness, anchoring, and overconfidence often lead to biased and inaccurate judgments, which can affect tax compliance and tax management strategies. The study also highlights the importance of addressing cognitive biases through comprehensive education and training, applying information technology, structured decision-making procedures, multidisciplinary collaboration, and developing a critical and reflective organizational culture to facilitate more accurate and efficient tax decision-making. Thus, understanding and addressing heuristics and cognitive biases is crucial not only for individuals and business entities in optimizing their tax decisions but also for policymakers in designing effective tax policies and facilitating higher tax compliance. The limitation of this study lies in the potential lack of representation from various global tax contexts, which could affect the generalization of findings. For future research, it is recommended to conduct comparative studies between countries with different tax systems to understand how heuristics and cognitive biases affect tax decision-making in diverse contexts.

REFERENCES

- Abbas, A., Avdic, A., Xiaobao, P., Hasan, M. M., & Ming, W. (2019). University-government collaboration for the generation and commercialization of new knowledge for use in industry. *Journal of Innovation and Knowledge*, 4(1), 23–31. <https://doi.org/10.1016/j.jik.2018.03.002>
- Acciarini, C., Brunetta, F., & Boccardelli, P. (2020). Cognitive biases and decision-making strategies in times of change: a systematic literature review. *Management Decision*, 59(3), 638–652. <https://doi.org/10.1108/MD-07-2019-1006>
- Ahmad, M., Shah, S. Z. A., & Abbass, Y. (2020). The role of heuristic-driven biases in entrepreneurial strategic decision-making: evidence from an emerging economy. *Management Decision*, 59(3), 669–691. <https://doi.org/10.1108/MD-09-2019-1231>
- Alfandia, N. S. (2024). How do countries curb their debt or profit shifting: a systematic literature review. *Cogent Business and Management*, 11(1), 1–18. <https://doi.org/10.1080/23311975.2024.2344032>
- Alm, J., Burgstaller, L., Domi, A., März, A., & Kasper, M. (2023). Nudges, boosts, and sludge: using new behavioral approaches to improve tax compliance. *Economies*, 11(9), 1–22. <https://doi.org/10.3390/economies11090223>
- Almansour, B. Y., Elkrgli, S., & Almansour, A. Y. (2023). Behavioral finance factors and investment decisions: A mediating role of risk perception. *Cogent Economics and Finance*, 11(2), 1–21. <https://doi.org/10.1080/23322039.2023.2239032>
- Anesa, M., Gillespie, N., Spee, A. P., & Sadiq, K. (2019). The legitimization of corporate tax minimization. *Accounting, Organizations and Society*, 75(1), 17–39. <https://doi.org/10.1016/j.aos.2018.10.004>
- Berthet, V. (2022). The impact of cognitive biases on professionals' decision-making: a review of four occupational areas. *Frontiers in Psychology*, 12(1), 1–13. <https://doi.org/10.3389/fpsyg.2021.802439>
- Blaufus, K., Chirvi, M., Huber, H.-P., Maiterth, R., & Sureth-Sloane, C. (2022). Tax misperception and its effects on decision making—literature review and behavioral taxpayer response model. *European Accounting Review*, 31(1), 111–144. <https://doi.org/10.1080/09638180.2020.1852095>
- Brown, S. L., & Salmon, P. (2019). Reconciling the theory and reality of shared decision-making: A “matching” approach to practitioner leadership. *Health Expectations*, 22(3), 275–283. <https://doi.org/10.1111/hex.12853>
- Cabrera, D., Cabrera, L., & Cabrera, E. (2023). The steps to doing a systems literature review (SLR). *Journal of Systems Thinking*, 6(April), 1–28. <https://doi.org/10.54120/jost.pr000019.v1>
- Cantarelli, P., Belle, N., & Belardinelli, P. (2020). Behavioral public HR: Experimental evidence on cognitive biases and debiasing interventions. *Review of Public Personnel Administration*, 40(1), 56–81. <https://doi.org/10.1177/0734371X18778090>
- Chalissery, N., Tabash, M. I., Nishad, T. M., Aburezeq, I. M., & Daniel, L. N. (2023). Does the investor's trading experience reduce susceptibility to heuristic-driven biases? the moderating role of personality traits. *Journal of Risk and Financial Management*, 16(7), 1–21. <https://doi.org/10.3390/jrfm16070325>
- Curi, J. A. A. (2019). Legalism and creativity: tax non-compliance in the eyes of the economic elite. *International Review of Sociology*, 29(1), 58–79. <https://doi.org/10.1080/03906701.2019.1532653>
- Dadashi, M., Pakmaram, A., Rezaei, N., & Abdi, R. (2023). Providing a behavioral model of mental accounting decision-making based on psychological components through data theory

- and meta-composition. *Int. J. Nonlinear Anal. Appl.*, 14(1), 393–408. <http://dx.doi.org/10.1177/2321022219832148>
- Dhami, S., al-Nowaihi, A., & Sunstein, C. R. (2019). Heuristics and public policy: decision-making under bounded rationality. *Studies in Microeconomics*, 7(1), 7–58. <https://doi.org/10.1177/2321022219832148>
- Eberhartinger, E., Genest, N., & Lee, S. (2020). Financial statement users' judgment and disaggregated tax disclosure. *Journal of International Accounting, Auditing and Taxation*, 41(1), 1–38. <https://doi.org/10.1016/j.intaccaudtax.2020.100351>
- Eberhartinger, E., & Zieser, M. (2021). The Effects of Cooperative compliance on firms' tax risk, tax risk management and compliance costs. *Schmalenbach Journal of Business Research*, 73(1), 125–178. <https://doi.org/10.1007/s41471-021-00108-6>
- Espinosa, V. I., Wang, W. H., & Huerta de Soto, J. (2022). Principles of nudging and boosting: steering or empowering decision-making for behavioral development economics. *Sustainability (Switzerland)*, 14(4), 1–18. <https://doi.org/10.3390/su14042145>
- Gangl, K., & Torgler, B. (2020). How to achieve tax compliance by the wealthy: a review of the literature and agenda for policy. *Social Issues and Policy Review*, 14(1), 108–151. <https://doi.org/10.1111/sipr.12065>
- Gershgoren, S., & Cohen, N. (2023). Street-level bias: Examining factors related to street-level bureaucrats' state or citizen favoritism. *American Review of Public Administration*, 53(3–4), 115–133. <https://doi.org/10.1177/02750740231167897>
- Geva, T., & Tsechansky, M. S. (2021). Who is a better decision maker? data-driven expert ranking under unobserved quality. *Production and Operations Management*, 30(1), 127–144. <https://doi.org/10.1111/poms.13260>
- Haufler, A., & Nishimura, Y. (2023). Taxing mobile and overconfident top earners. In *International Tax and Public Finance* (Vol. 30, Issue 4). Springer US. <https://doi.org/10.1007/s10797-022-09730-4>
- Hjeij, M., & Vilks, A. (2023). A brief history of heuristics: how did research on heuristics evolve? *Humanities and Social Sciences Communications*, 10(1), 1–15. <https://doi.org/10.1057/s41599-023-01542-z>
- Ishfaq, M., Nazir, M. S., Qamar, M. A. J., & Usman, M. (2020). Cognitive bias and the extraversion personality shaping the behavior of investors. *Frontiers in Psychology*, 11(1), 1–11. <https://doi.org/10.3389/fpsyg.2020.556506>
- Khan, U., Khalid, U., Zafar, A., & Zahoor, U. (2023). The behavioural finance revolution: bridging the gap between numbers and corporate performance. *Qlantic Journal of Social Sciences and Humanities*, 4(4), 191–202. <https://doi.org/10.55737/qjssh.882102876>
- Khozen, I., & Setyowati, M. S. (2023). Managing taxpayer compliance: Reflections on the drivers of willingness to pay taxes in times of crisis. *Cogent Business and Management*, 10(2), 1–25. <https://doi.org/10.1080/23311975.2023.2218176>
- Korteling, J. E., Paradies, G. L., & Sassen-van Meer, J. P. (2023). Cognitive bias and how to improve sustainable decision making. *Frontiers in Psychology*, 14(1), 1–14. <https://doi.org/10.3389/fpsyg.2023.1129835>
- Kurniawan, D. (2020). the Influence of tax education during higher education on tax knowledge and its effect on personal tax compliance. *Journal of Indonesian Economy and Business*, 35(1), 57–72. <https://doi.org/10.22146/jieb.54292>
- Lawani, A., Flin, R., Ojo-Adedokun, R. F., & Benton, P. (2023). Naturalistic decision making and decision drivers in the front end of complex projects. *International Journal of Project Management*, 41(6), 1–15. <https://doi.org/10.1016/j.ijproman.2023.102502>
- Lokanan, M. (2023). The morality and tax avoidance: A sentiment and position taking analysis. In *PLoS ONE* (Vol. 18, Issue 1). <https://doi.org/10.1371/journal.pone.0287327>
- Mata, A. (2023). Overconfidence in the cognitive reflection test: comparing confidence resolution for reasoning vs. general knowledge. *Journal of Intelligence*, 11(5), 1–18. <https://doi.org/10.3390/jintelligence11050081>
- Meiryani, Daniel, Huang, S. M., Lindawati, A., Wahyuningtias, D., Purnomo, A., Winoto, A., & Fahlevi, M. (2023). Systematic literature review on implementation of whistleblowing system in preventing financial accounting fraud. *Journal of Theoretical and Applied Information Technology*, 101(9), 3305–3315. <https://www.jatit.org/volumes/Vol101No9/7Vol101No9.pdf>
- Misuraca, R., Faraci, P., Ruthruff, E., & Ceresia, F. (2021). Are maximizers more normative decision-makers? An experimental investigation of maximizers' susceptibility to cognitive biases.

- Personality and Individual Differences, 183(1), 1–6. <https://doi.org/10.1016/j.paid.2021.111123>
- Niittymies, A. (2020). Heuristic decision-making in firm internationalization: The influence of context-specific experience. *International Business Review*, 29(6), 1–12. <https://doi.org/10.1016/j.ibusrev.2020.101752>
- Nuijten, A., Benschop, N., Rijsenbilt, A., & Wilmink, K. (2020). Cognitive biases in critical decisions facing SME entrepreneurs: An external accountants' perspective. *Administrative Sciences*, 10(4), 1–23. <https://doi.org/10.3390/admsci10040089>
- Oats, L., & Tuck, P. (2019). Corporate tax avoidance: is tax transparency the solution? *Accounting and Business Research*, 49(5), 565–583. <https://doi.org/10.1080/00014788.2019.1611726>
- Okunogbe, O., & Santoro, F. (2023). Increasing tax collection in African countries: the role of information technology. *Journal of African Economies*, 32(2022), 157–183. <https://doi.org/10.1093/jae/ejac036>
- Petranova, D., & Rysová, A. (2020). Behavioural approaches in public policies. *European Journal of Science and Theology*, 16(4), 65–77. http://www.ejst.tuiasi.ro/Files/83/7_Petranova & Rysova.pdf
- Ponhan, K., & Sureeyatanapas, P. (2022). A comparison between subjective and objective weighting approaches for multi-criteria decision making: A case of industrial location selection. *Engineering and Applied Science Research*, 49(6), 763–771. <https://doi.org/10.14456/easr.2022.74>
- Rahamneh, N. M. Al, Mohammad, & Bidin, Z. (2022). The effect of tax fairness, peer influence, and moral obligation on sales tax evasion among Jordanian SMEs. *Journal of Risk and Financial Management*, 15(9), 1–15. <https://doi.org/10.3390/jrfm15090407>
- Rangone, N. (2022). Improving consultation to ensure the European Union's democratic legitimacy: From traditional procedural requirements to behavioural insights. *European Law Journal*, 28(4–6), 154–171. <https://doi.org/10.1111/eulj.12439>
- Rauwerda, K., & De Graaf, F. J. (2021). Heuristics in financial decision-making: the selection of SME financing by advisers in an increasingly diverse market. *Management Decision*, 59(7), 1728–1749. <https://www.emerald.com/insight/content/doi/10.1108/MD-09-2019-1269/full/html>
- Rullah, A. A. Z., Jide, I., & Onuh, E. O. (2023). Behavioural finance: Exploring the psychology and economic aspects of financial decision-making. *European Review in Accounting and Finance*, 7(3), 50–64. <https://eraf.deqepub.org/>
- Schirrmeister, E., Göhring, A. L., & Warnke, P. (2020). Psychological biases and heuristics in the context of foresight and scenario processes. *Futures and Foresight Science*, 2(2), 1–18. <https://doi.org/10.1002/ffo2.31>
- Soest, C. von. (2023). Why do we speak to experts? Reviving the strength of the expert interview method. *Perspectives on Politics*, 21(1), 277–287. <https://doi.org/10.1017/S1537592722001116>
- Subandi, H., & Tjaraka, H. (2023). Tax compliance and tax incentives during a pandemic (COVID-19): evidence from MSMEs in Indonesia. *Jati: Jurnal Akuntansi Terapan Indonesia*, 6(2), 157–172. <https://doi.org/10.18196/jati.v6i2.18945>
- Sudirman, W. F. R., Winario, M., Priyatno, A. M., & Assyifa, Z. (2023). Risk tolerance: heuristic bias towards investment decision making. *jurnal manajemen teori dan terapan. Journal of Theory and Applied Management*, 16(2), 266–279. <https://doi.org/10.20473/jmtt.v16i2.47471>
- Tsindeliani, I., Kot, S., Vasilyeva, E., & Narinyan, L. (2019). Tax system of the Russian Federation: Current state and steps towards financial sustainability. *Sustainability (Switzerland)*, 11(24), 1–18. <https://doi.org/10.3390/su11246994>
- Vainre, M., Aaben, L., Paulus, A., Koppel, H., Tammsaar, H., Telve, K., Koppel, K., Beilmann, K., & Uusberg, A. (2020). Nudging towards tax compliance: A fieldwork-informed randomised controlled trial. *Journal of Behavioral Public Administration*, 3(1), 1–10. <https://doi.org/10.30636/jbpa.31.84>
- Yamini, S. (2021). Behavioral perspective of newsvendor ordering decisions: review, analysis and insights. *Management Decision*, 59(2), 240–257. <https://doi.org/10.1108/MD-07-2019-0975>
- Yulianis, N., & Sulistyowati, E. (2021). The effect of financial literacy, overconfidence, and risk tolerance on investment decision. *Journal of Economics, Business, and Government Challenges*, 4(01), 61–71. <https://ebgc.upnjatim.ac.id/index.php/ebgc/article/view/284>
- Žigienė, G., Rybakovas, E., Vaitkienė, R., & Gaidelys, V. (2022). Setting the grounds for the transition from business analytics to artificial intelligence in solving supply chain risk. *sustainability (Switzerland)*, 14(19), 1–23. <https://doi.org/10.3390/su141911827>

Appendix. Selected Articles Included in Review

No	Author (Year)	Journal Name	Title	Research Focus	Country specific
1.	Hjeij & Vilks (2023)	Humanities and Social Sciences Communications	A Brief History of Heuristics: How Did Research on Heuristics Evolve?	-Heuristics	General
2.	Schirrmeister, Göhring, & Warnke (2020)	Futures and Foresight Science	Psychological Biases and Heuristics in the Context of Foresight and Scenario Processes	-Cognitive biases -Heuristics	General
3.	Ahmad et al. (2020)	Management Decision	The Role of Heuristic-Driven Biases in Entrepreneurial Strategic Decision-Making: Evidence from an Emerging Economy	-Heuristic	Pakistan
4.	Alm et al. (2023)	Economies	Nudges, Boosts, and Sludge: Using New Behavioral Approaches to Improve Tax Compliance.	-Heuristic -Cognitive biases	General
5.	Berthet (2022)	Frontiers in Psychology	The Impact of Cognitive Biases on Professionals' Decision-Making: A Review of Four Occupational Areas."	-Decision-making -Cognitive biases -Heuristics	General
6.	Blaufus et al. (2022)	European Accounting Review	Tax Misperception and Its Effects on Decision Making—Literature Review and Behavioral Taxpayer Response Model.	-Heuristics -Tax decision-making	US; Germany
7.	Eberhartinger et al. (2020)	Journal of International Accounting, Auditing and Taxation	Financial Statement Users' Judgment and Disaggregated Tax Disclosure.	-Heuristics -Tax decision-making	Austria
8.	Gershgoren & Cohen (2023)	American Review of Public Administration	Street-Level Bias: Examining Factors Related to Street-Level Bureaucrats' State or Citizen Favoritism	-Tax decision-making	Israel
9.	Rauwerda & De Graaf (2021)	Management Decision	Heuristics in Financial Decision-Making: The Selection of SME Financing by Advisers in an Increasingly Diverse Market.	-Heuristics	Netherland
10.	Rullah et al., (2023)	European Review in Accounting and Finance	Behavioural Finance: Exploring the Psychology and Economic Aspects of Financial Decision-Making	-Cognitive bias -Heuristics	General
11.	Mata, (2023)	Journal of Intelligence	Overconfidence in the Cognitive Reflection Test: Comparing Confidence Resolution for Reasoning vs. General Knowledge	-Cognitive bias	Portugal
12.	Yulianis & Sulistyowati (2021)	Journal of Economics, Business, and Government Challenges	The Effect Of Financial Literacy, Overconfidence, And Risk Tolerance On Investment Decision	-Cognitive bias	Indonesia
13.	Rahamneh et al. (2022)	Journal of Risk and Financial Management	The Effect of Tax Fairness, Peer Influence, and Moral Obligation on Sales Tax Evasion among Jordanian SMEs.	-Tax Decision-making	Jordanian
14.	Khozen & Setyowati (2023)	Cogent Business & Management	Managing Taxpayer Compliance: Reflections on the Drivers of Willingness to Pay Taxes in Times of Crisis	-Tax Decision-making	Indonesia

No	Author (Year)	Journal Name	Title	Research Focus	Country specific
15.	Vainre et al. (2020)	Journal of Behavioral Public Administration	Nudging towards Tax Compliance: A Fieldwork-Informed Randomised Controlled Trial.	- Tax Decision-making	Estonian
16.	Almansour, Elkrghli, & Almansour (2023)	Cogent Economics and Finance	Behavioral Finance Factors and Investment Decisions: A Mediating Role of Risk Perception	- Heuristics - Tax Decision-making	Saudi Arabia
17.	Cantarelli, Belle, & Belardinelli (2020)	Review of Public Personnel Administration	Behavioral Public HR: Experimental Evidence on Cognitive Biases and Debiasing Interventions.	- Cognitive Biases - Heuristics	Italy
18.	Korteling, Paradies, & Sassen-van Meer (2023)	Frontiers in Psychology	Cognitive Bias and How to Improve Sustainable Decision Making	- Cognitive bias - Tax decision making	General
19.	Žigienė et al. (2022)	Sustainability	Setting the Grounds for the Transition from Business Analytics to Artificial Intelligence in Solving Supply Chain Risk.	- Tax decision making - Heuristic	Lithuania
20.	Geva & Tsechansky (2021)	Production and Operations Management	Who Is a Better Decision Maker? Data-Driven Expert Ranking Under Unobserved Quality	- Tax decision making	General
21.	Ponhan & Sureeyatanapas (2022)	Engineering and Applied Science Research	A Comparison between Subjective and Objective Weighting Approaches for Multi-Criteria Decision Making: A Case of Industrial Location Selection	- Tax decision making	Thailand
22.	Lawani et al. (2023)	International Journal of Project Management	Naturalistic Decision Making and Decision Drivers in the Front End of Complex Projects.	- Tax decision making - Cognitive bias	United Kingdom
23.	Rangone (2022)	European Law Journal	Improving Consultation to Ensure the European Union's Democratic Legitimacy: From Traditional Procedural Requirements to Behavioural Insights.	- Cognitive biases - Heuristics	European
24.	Soest (2023)	Perspectives on Politics	Why Do We Speak to Experts? Reviving the Strength of the Expert Interview Method	- Tax decision making	General
25.	Petranova & Rysová (2020)	European Journal of Science and Theology	Behavioural Approaches in Public Policies.	- Tax decision making - cognitive bias	General