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INFLUENCE OF GENDER ON BEHAVIOURAL BIASES IN FINANCIAL DECISION-MAKING

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ABSTRACT

Financial decision-making by consumers involves the allocation of financial resources in savings, debt repayment, budgeting, and investments. Behavioural biases of overconfidence and risk aversion lead to suboptimal decisions with lower-than-expected returns in financial markets, particularly for investment decisions. Women have been generally considered more risk-averse and less overconfident than men, often attributed to biological and psychological factors. However, recent studies show weak causal relations between biological gender traits and different levels of behavioural biases between men and women.

KEYWORDS: Economics, Behavioural Economics, Finance, Behavioural Finance, Biases, Gender, Decision-making, Prospect Theory.

INTRODUCTION

Decision-making is defined as the process of tackling complex situations by choosing between pursuing a course of action by gathering information and evaluating alternatives (Shaikh et al. 2019; UMass Dartmouth).

Financial decision-making primarily involves making decisions about the allocation of financial resources for different purposes by economic actors like consumers, firms, and governments. This paper considers consumers' financial decisions and the behavioural biases influencing them. investments. These decisions include choices about savings, debt repayment, budgeting and management of current financial resources. Additionally, decisions about investments are also included, in particular about the allocation of finances to investments in different assets and securities (Greenberg and Hershfield, 2018). Such allocation results in the formation of an 'investment portfolio' comprising assets like bonds, stocks, cash, real estate, and more. The relative proportions of investments in these assets are reflective of investors' financial goals and risk tolerance (Silva, 2022).

Traditionally, financial decisions are perceived as being dependent on internal factors of financial literacy, confidence, and ability of financial management, and external factors like economic

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conditions and interest rates. However, over the years, financial decisions by investors have been inconsistent with traditional finance models of decisions and their predicted outcomes. This discrepancy between standard models of financial decision-making and the actual behaviours of investors in the market is attributed to the influence of behavioural biases (Shaikh et al. 2019).

Behavioural biases are *"irrational beliefs or behaviours that can unconsciously influence our decision-making process."* These biases can be emotional or cognitive (Evelyn Partners, 2022). As a result of acting with these biases, investors end up making suboptimal financial decisions.

The Prospect Theory postulates that investors value gains and losses differently in financial decision-making. Tversky and Kahneman proposed that the pain that individuals experience from losses is twice as much as the pleasure they experience from gains, hence becoming loss-averse and seeking gains over losses. This behavioural bias causes them to view the probability of a gain or loss for an investment as 50-50 instead of the actual probability presented to them (Liberto, 2022). Research over the years has established that women are generally more loss-averse than men (Rau, A.H., 2014; Schmidt and Traub (2002); and Rieger et al., (2011)).

Behavioural Biases influencing Financial Decisions

Overconfidence Bias leads individuals to hold a misleading perception of their abilities and skills. It leads individuals to overestimate themselves. They "overvalue what they are not and undervalue what they are." (Chernoff, 2011). Overconfidence arises from self-attribution bias, wherein individuals attribute their successes to personal skills and potential but attribute failures to factors beyond their control, such as luck or chance (Langer, 1975) This results in the making of financial decisions where individuals trade inordinately while making lower returns than anticipated (Hassan, 2014).

Risk Aversion Bias refers to the tendency of individuals to avoid taking risks. In the context of financial decisions, risk-averse individuals tend to invest more in low-risk investments with low but stable and guaranteed long-term returns instead of high-risk investments with a higher rate of returns. This is because of the fear of loss from these high-risk investments, which are subject to price volatility and can either lead to whopping gains or whopping losses (Shaikh et al. 2019). Exacerbated by loss aversion, investors often prefer a guaranteed gain, although low, over a possible loss (Harley, 2016). Meanwhile, individuals can become risk-seeking over losses when a possible loss is greater than a certain loss (individuals will choose to take the sure loss) (Bergren and Gonzalez, 2010). Furthermore, following the Prospect Theory, individuals with less wealth are more risk-averse than those with more wealth because the value of the same amount of money is perceived differently by both.

The Role of Gender in Financial Decision-making

Conventionally, societal gender hierarchy posits men as superior to women in almost all respects, especially when it comes to financial decision-making, for men have traditionally assumed the role

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of the provider in the family. While differences in gender roles are social constructs not intrinsically linked to an individual's gender, there do exist psychological and biological differences between men and women that lead them to behave differently in making financial decisions (Ritter, 2003).

Gender and Overconfidence

While past studies establish that men are more overconfident in their financial decisions than women (Barber and Odean, 2001; Tantri 2014), recent studies state that there is no difference in the manifestation of the overconfidence bias between men and women (Fachrudin et al. 2017; Shaikh et al. 2019). In fact, these studies dismiss the existence of any differences in overconfidence bias between men and women. This discrepancy between past and recent findings can be attributed to the increased enrollment of women in financial careers (Zhang 2022), such that increased financial literacy and investment knowledge have resulted in a rise in overconfidence. Other factors, including changes in social conditions in terms of increasing gender equity and feminism, could also be responsible.

Gender and Risk Aversion

According to studies conducted by Montserrat Casanovas and Jose M. Merigo (2011) and P Christie and R. Isidore (2018), women tend to have a stronger risk aversion than men. In Christie P's study, women in Turkey were found to be more inclined towards safer investments such as funds, time deposits, and gold while men invested more in riskier investment tools like stocks and real estate. Similar results of women's inclination towards safer investments, as opposed to men, were concluded in the study "Gender Differences in Financial Risk Aversion and Career Choices Are Affected by Testosterone." (Shaikh et al., 2019). This difference was attributed to psychological and biological factors. Firstly, women usually possess less wealth than men, making them more risk-averse (Shaikh et al., 2019). Secondly, statistically, women take up less risky jobs in the financial sector than men do, resulting in men making more risky investments. Thirdly, biological factors may also play a crucial role in women's being more risk-averse. Since men possess a higher level of testosterone than women, differences in the "organizational or activational effects" of testosterone can cause behavioural and cognition differences in the two genders (Sapienza, Zingales and Maestripieri, 2009). Studies have shown that, in humans, testosterone can decrease fear (Hermans et al. 2006; van Honk et al. 2004), increase the motivation for dominance and competition (Archer, 2006), and change the balance between reward and sensitivity to punishment (Takahashi et al. 2006). Furthermore, testosterone has also been associated with high-risk activities like gambling (Dabbs and Morris, 1990). In the study conducted by Sapienza, Zingales, and Maestripieri (2009), it was found that while there is a negative correlation between testosterone levels and risk aversion, this correlation is statistically significant only for women. However, a study conducted by Nelson (2012) argues that statistical correlations between gender and risk aversion through empirical evidence are weak and highly influenced by confirmation bias. The social perception of women being more risk-averse than men could also become a factor for propagating more risk-averse behaviour in women instead of biological factors.

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Statistically, more men take up jobs in the financial sector than women (Chandler, 2022). Thus, women's stronger risk aversion could also be attributed to lower financial literacy regarding investments than men when it comes to investments.

CONCLUSION

Research over the years has established that there exist significant differences in the effects of the behavioural biases of overconfidence and risk aversion between men and women. Traditionally, women have been concluded to be less confident and more risk-averse than men in making investment decisions. Some studies have attributed such differences to biological factors, but the causal relations are weak. Contrary to past studies, recent studies have shown that the difference between men and women in exuding overconfidence and risk aversion in their financial decisions is rather insignificant. The explanation behind this discrepancy between past and present results is the level of financial knowledge available to men and women. In the past, due to conventional patriarchal societal setups, women were less likely to take up jobs in the financial sector or make financial decisions because men were considered "providers" in the family structure. However, in the present era of growing feminism, women are beginning to take up more jobs in the financial sector. With an increase in their financial literacy, the differences in the way women and men make financial decisions are being blurred.

REFERENCES

1. Archer, John. 2006. "Testosterone and Human Aggression: An Evaluation of the Challenge Hypothesis." *Neuroscience & Biobehavioural Reviews* 30 (3): 319–45. https://doi.org/10.1016/j.neubiorev.2004.12.007.

2. Aurora, Harley. 2016. "Prospect Theory and Loss Aversion: How Users Make Decisions." Nielsen Norman Group. June 19, 2016. https://www.nngroup.com/articles/prospect-theory/#:~:text=Losses%20are%20treated%20in%20the.

3. Barber, B. M., and T. Odean. 2001. "Boys Will Be Boys: Gender, Overconfidence, and Common Stock Investment." *The Quarterly Journal of Economics* 116 (1): 261–92. https://doi.org/10.1162/003355301556400.

4. Berggren J, Gonzalez R. 2010. "Gender difference in financial decision making". *Sweden: Springer publications*.

5. Casanovas, Montserrat. 2012. "Risk in Financial Decisions and Gender Differences." *AFRICAN JOURNAL of BUSINESS MANAGEMENT* 6 (34): 1–14. https://doi.org/10.5897/ajbm11.1244.

6. Chandler, Sarah. "Why Are So Few Women in Finance? It's Complicated." Investopedia, February 25, 2022. https://www.investopedia.com/articles/investing/092315/why-are-so-few-women-finance-its-complicated.asp.

7. Christie, P. and R. Isidore, R. 2018. “Does Gender Influence Investor Behavior in the Secondary Equity Market?” *International Journal of Applied Engineering Research* 13(11): 9651-9662

8. D’Acunto, Francesco. 2015. “Identity, Overconfidence, and Investment Decisions.” *SSRN Electronic Journal*, January, 1–61. https://doi.org/10.2139/ssrn.2641182.

9. Dabbs, James M., and Robin Morris. 1990. “Testosterone, Social Class, and Antisocial Behavior in a Sample of 4,462 Men.” *Psychological Science* 1 (3): 209–11. https://doi.org/10.1111/j.1467-9280.1990.tb00200.x.

10. Evelyn Partners. “Are Behavioural Biases Affecting Your Investment Decisions? | Evelyn Partners,” June 21, 2022. https://www.evelyn.com/insights-and-events/insights/are-behavioural-biases-affecting-your-investment-decisions/#:~:text=What%20is%20a%20behavioural%20bias,emotional%20biases%20and%20cognitive%20biases.

11. Fachrudin, Khaira Rizfia, Prihatin Lumbanraja, Isfenti Sadalia, and Arlina Nurbaity Lubis. 2018. “Are Men or Women More Overconfident in Investment Decision-Making?” *Proceedings of the 1st Economics and Business International Conference 2017 (EBIC 2017)* 46: 68-71. https://doi.org/10.2991/ebic-17.2018.13.

12. Greenberg, Adam Eric, and Hal E. Hershfield. “Financial Decision Making.” *Consumer Psychology Review*, December 13, 2018. https://doi.org/10.1002/arcp.1043.

13. Hermans, Erno J., Peter Putman, Johanna M. Baas, Hans P. Koppeschaar, and Jack van Honk. 2006. “A Single Administration of Testosterone Reduces Fear-Potentiated Startle in Humans.” *Biological Psychiatry* 59 (9): 872–74. https://doi.org/10.1016/j.biopsych.2005.11.015.

14. Honk, Jack van, Dennis J.L.G Schutter, Erno J Hermans, Peter Putman, Adriaan Tuiten, and Hans Koppeschaar. 2004. “Testosterone Shifts the Balance between Sensitivity for Punishment and Reward in Healthy Young Women.” *Psychoneuroendocrinology* 29 (7): 937–43. https://doi.org/10.1016/j.psyneuen.2003.08.007.

15. Langer, Ellen J. 1975. “The Illusion of Control.” *Journal of Personality and Social Psychology* 32 (2): 311–28. https://doi.org/10.1037/0022-3514.32.2.311.

16. Liberto, Daniel. “Loss Aversion: Definition, Risks in Trading, and How to Minimize.” Investopedia, June 27, 2022. https://www.investopedia.com/terms/l/loss-psychology.asp.

17. Massachusetts Dartmouth, University of. “Decision-Making Process | UMass Dartmouth.” Decision-making process | UMass Dartmouth. Accessed October 13, 2022. https://www.umassd.edu/fycm/decision-making/process/.

18. Nelson, Julie A., 2012. "Are Women Really More Risk-Averse than Men?" *Working Papers 179104, Tufts University, Global Development and Environment Institute*.

19. Rau, Holger Andreas. “An Experimental Analysis of Gender Differences in the Disposition Effect.” *SSRN Electronic Journal*, 2013. https://doi.org/10.2139/ssrn.2327813.

20. Rieger, Marc Oliver, Mei Wang and Thorsten Hens. 2011. “Prospect Theory Around the World.” *Empirical Studies eJournal*: 1-34

21. Ritter, Jay R. “Behavioral Finance.” *Pacific-Basin Finance Journal* 11, no. 4 (September 2003): 429–37. https://doi.org/10.1016/s0927-538x(03)00048-9.

22. Sapienza, P., L. Zingales, and D. Maestripieri. 2009. “Gender Differences in Financial Risk Aversion and Career Choices Are Affected by Testosterone.” *Proceedings of the National Academy of Sciences* 106 (36): 15268–73. https://doi.org/10.1073/pnas.0907352106.

23. Schmidt, U., Traub, S. 2002. “An Experimental Test of Loss Aversion.” *Journal of Risk and Uncertainty* 25: 233–249. https://doi.org/10.1023/A:1020923921649

24. Seth David Chernoff. (2010) 2010. *Manual for Living*. Spirit Scope LLC.

25. Shaikh, Ghulam Mustafa, Naveeda Karim Katpar, Maryam Kalhoro, Yusira Kamal Abro, and Ghulam Abbas Phanwar. 2019. “Do Behavioral Biases in Gender Differences Affect Investment Decisions?” *Sociology International Journal* 3 (4): 326–36. https://doi.org/10.15406/sij.2019.03.00194.

26. Silva, Derek. “What Is an Investment Portfolio? - SmartAsset.” SmartAsset, August 5, 2022. https://smartasset.com/investing/what-is-an-investment-portfolio.

27. T Takahashi, K Sakaguchi, M Oki, S Homma, T Hasegawa. 2006. “Testosterone levels and discounting delayed monetary gains and losses in male humans.” *Neuroendocrinology Lett* 27: 439–444.

28. Tahira R Hassan, W. K. 2014. “Overconfidence and loss aversion in the investment decisions: A study of the impact of gender and age in Pakistani perspective.” *Research Journal of Finance and Accounting* 5(11):148–157.

29. Tantri, Prasanna. “Women Investors Are Confident, Not Overconfident | Mint.” mint, July 31, 2014. https://www.livemint.com/Money/n6y5khJxO7X2zhywVjTZmJ/Women-investors-are-confident-not-overconfident.html.

International Journal of Education and Social Science Research

ISSN 2581-5148

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30. Zhang, Hannah. “Are Women Taking up More Finance Jobs - Google Search.” are women taking up more finance jobs - Google Search, March 2022. https://www.google.com/search?q=are+women+taking+up+more+finance+jobs&oq=are+women+taking+up+more+finance+jobs&aqs=chrome..69i57.4969j0j9&sourceid=chrome&ie=UTF-8.