

Sheconomics in Action: An Analysis of Investment Decisions in Indian Startups

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Abstract

Purpose: The main aim of this study is to examine how gender influences investment decisions in the Indian startup ecosystem, by focusing on investors and entrepreneur gender on investment decisions.

Methodology: Data have been collected from an Indian TV reality show (s.tank), Using Chi-square, Binomial Logistic Regression, and Mann-Whitney U test for hypothesis testing.

Findings: This paper explores 3 major findings, a huge gap of 46% in women-led startups and men-led startups, but there is no significant sign of homophily, i.e. no association found between investor's gender and entrepreneur's gender. However, a significant difference was observed in the valuation of startups, favouring male-led startups.

Research Limitations: One of the key limitations is data collected from a TV show, which may involve unique procedures and potential discrepancies compared to the Indian startup ecosystem. Second, solely on gender dynamics, excluding other potential influencing factors. Practical Implications: Government institutions, Policymakers and private investors should continue supporting women entrepreneurs. Investors and entrepreneurs should be aware of these biases.

Originality: To the best of the researcher's knowledge, this is the first attempt to examine investment decisions of the Indian startup ecosystem, using data from a TV show. It also challenges prevailing notions of gender bias in investment decisions and provides empirical insights into gender dynamics.

Keywords: Sheconomics, Gender dynamics, Investment decisions, Gender bias, homophily

1. Introduction

"It is impossible to think about the welfare of the world unless the condition of women is improved. It is impossible for a bird to fly on only one wing." - Swami Vivekananda
Sheconomics or women in economics generally considered a key factor that led to the rise of female entrepreneurs in India and represents a significant participation in the growth of the Indian economy (Mazhar, 2023; Singh & Dubey, 2022). Sheconomics, defined as female economics (She+Economics), includes women in employment, finance, and consumer trends. It mainly focuses on the improvements in women's socioeconomic status and also increases participation in the workforce (Liu, 2022). Further, it also demonstrates how inclusive policies can improve the economic status of rural as well as urban areas through women's initiatives (Liu, 2022; Mallikarjuna, 2022; Mazhar, 2023).

Despite the various achievements accomplished by Sheconomics, a substantial financial deficit remains for women entrepreneurs in India (Fegade et al., 2023). Statistics reflect the actual position of Indian female entrepreneurs. According to Jaitly & Thangallapally (2022) report, women just hold about 20% of MSMEs, or 12.6 million out of 63 million. Further, another report published by INC42, shows that total investments in Indian startups were more than \$10 billion in 2023, while businesses led by female entrepreneurs raised only about \$480 million accounting for less than 5% of total funding (Indian Tech Startup Funding Report 2023, 2023). The disparity in finances significantly limits the full potential of Sheconomics and the economic benefits of women-led firms (Fegade et al., 2023; Mazhar, 2023).

Gender discrepancies occur in almost all fields from medicine to the labour market (Aleks et al., 2021; Totadri et al., 2022). Entrepreneurship is also not escaped by these gender discrepancies (Lizunova & Mindruta, 2022), with women entrepreneurs experiencing numerous



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problems in financing their ventures, low rates for venture creation, and difficulties in scaling up their businesses. Not only in India, but female entrepreneurs in the rest of the world also oftenstruggle to acquire capital for their venture or business ideas(Bosma & Kelley, 2018). While increased recognition of women and women-led enterprises in promoting economic growth, women entrepreneurscontinue to face a considerable number of problems in financing their ventures(Liu, 2022; Lizunova&Mindruta, 2022; Mallikarjuna, 2022; Mazhar, 2023). Various studies have shown the presence of gender bias in investment decisions throughout the world, but the situation in India may be changing. However, more research into the gender dynamics of investment decisions in India is required.

The Government of India (G.o.I) have taken several initiatives and set up different programs to help and empower women entrepreneurs. Dena Shakti Scheme, Bharatiya Mahila Bank Business Loan, Stand-Up India, and many more schemes aim to give financial support to women-owned businesses. While these schemes from the government of India have helped a lot of women entrepreneurs, still there are some criteria limitations for these schemes. This underlines the significance of further research into the investment patterns of private investors.

By considering these factors, and the research gap highlighted by Hohl et al. (2021), our research aims to explore the current dynamics of investment decisions in the Indian startup eco-space, as well as to investigate the influence of gender bias on Investment decisions. By analysing the data from anIndian entrepreneur TV reality show (S. Tank, India) in which entrepreneurs pitch their ventures to the investors present out there, we want to investigate whether "Sheconomics" translates into a practical reality for Indian women entrepreneurs or not. Through this study, we aim to provide empirical insights focusing on the following research question:

- Does Gender Homophily Occur in the Indian Startup Ecosystem?
- Does Gender Bias Occur in Investment Decisions in the Indian Startup Ecosystem?

2. Literature Rreview and Hypothesis Development

Entrepreneurial financeis considered a very important decision for entrepreneurs as well as forinvestors, that's why various factors need to be considered before any investment decision, such as the type of investor(s) or type of entrepreneur(s), policies for funding, the interest of both the parties, future directions, etc. For an entrepreneur, investors can play a significant role beyond providing capital, guidance for future strategy, networking, facilitating human resources and also helping in the resolution of internal conflicts (Lafarre&Schoonbrood, 2023). Further Hervé et al. (2019), examined the determinants of investment behaviour and explained gender differences in risk aversion and the Influence of sociality. Both investment and financing decisions are interdependent considering various factors including gender before investing.

Gender homophily& discrimination both greatly impact entrepreneurial finance investment decisions. According to Poczter&Shapsis (2018), startups led by males will receive better treatment, receive more funds, and have a higher valuation than their female counterparts. Further (Ewens et al., 2018), also support this bias in their study that male investors show less interest in the ventures led by female entrepreneurs, indicating that male investors have a strong preference towards male-led startups. On the other hand, Oranburg& Geiger (2019) also found that female investors are more likely to prefer female-led startups.

Snellman & Solal, (2023), Explained in their study that female entrepreneurs who are backed by female investors may face obstacles in securing further funding because of the perceptions influenced by gender homophily, regardless of the entrepreneur's competence (Qin et al., 2022). Suggesting that gender-related support may exist, it may unintentionally be promoting biased views which are restricting women entrepreneurs from further funding. But Balachandra (2020), found in their study that gender disparity in entrepreneurial finance is not solely due to the inherent biases against women, rather it is influenced by feminine-stereotyped behaviours exhibited by entrepreneurs, regardless of gender.

Collectively the literature reviewed in this study provides strong evidence that gender biases and gender homophily influence entrepreneurial finance investment decisions, with

men-led startups receiving more favour than their counterpart from male investors, while female-led startups benefited from female investors. Therefore, we hypothesise

Hypothesis 1: There is a statistically significant association between the gender of the investor and the gender of the entrepreneur.

Hypothesis 2: There is a statistically significant difference in investment decisions based on the gender of the entrepreneur.

Hypothesis 3: There is a statistically significant difference in the investment valuation offered to male-led startups compared to female-led.

Hypothesis 1 addresses the concept of gender homophily and hypotheses 2 & 3 focus on the broader aspects and explores a potential overall gender bias in investment decisions and investment valuation.

3. Research Methodology

To bridge this gap in the Indian environment, using hypothesis testing non-experimental design, by employing Chi-square, Binomial Logistic Regression, and Mann-Whitney U test, we have collected data and examined the investment decision gap in the Entrepreneurial Finance TV reality show S.tank, India in which Indian entrepreneurs pitch their ventures to a panel of investors. Every entrepreneur systematically presents their ventures, and this show offers a great platform for entrepreneurs as well as researchers to use the data for addressing various research questions. For instance: (Hohl et al., 2021), conducted gender diversity effects in the US, ethnicity-based discrimination (Smith & Viceisza, 2018), and products of show and branding (Baumann & Rohn, 2016).

By analysing the investment decisions made by the investor's panel on the show, we want to acquire insights into how investor and entrepreneur gender interact and may affect financing results.

The sample contains 136 aired episodes from the 3 seasons (until March 15, 2024) which comprises a total of 6 regular investors, out of which 2 were female (33%), encompassing 410 venture investment decisions (Table. 1). Therefore, for hypothesis testing, we gathered data on investor gender, entrepreneur gender, investment decision, and valuation and applied statistical analysis using Jamovi software.

4. Results

Descriptive analysis

	Only male	Male led	Equal	Female-led	Only female
Total firm	221	32	90	9	58
Firm Wegithage	54%	8%	22%	2%	14%
Investments offered to the firm	153	22	68	7	44
Total Valuation Asked by all entrepreneurs (value in Lakh)	720050.2	133730.7	254663.143	9750	102400
Total Valuation Provided by all investors (value in Lakh)	348218.4	56411	97598.0258	2846.153	63252.6367
Funded by male investors	191 (56%)	34 (10%)	68 (20%)	4 (1%)	45 (13%)
Funded by female investors	81 (52%)	14 (9%)	37 (24%)	3 (2%)	19 (12%)
Source: Authors creation.					

Table 1.
sample characteristics

From the descriptive analysis (Table 1) we can easily sense the glimpse of previous literature highlights potential gender bias in entrepreneurial finance. Only 16% of the firms in our sample are led by women, with 14% solely led by women and 2% having a mixed-gender composition with women-led founders. This statistic is particularly different from Jaitly et al. (2022), who have reported 20% of women entrepreneurs in the MSME sector of the Indian entrepreneurial population. A large proportion of firms are male-led accounting for 62% (54% led by only males and 8 % male-led founders) receiving more investment decisions,

more funding, and more valuation from both male and female investors. Male investors account for 66% of all investment decisions in male-led entrepreneur firms, while female investors make up 61%. However, female-led firms just receive 14% of financing from both male and female investors, despite 16% participation in the show. These differences in funding and participation presented in the analysis reveal potential gender biases in investment decisions and also align with the findings of previous researchers who have observed preferential treatment toward male-led startups and less interest by male investors in female-led firms.

However, it's important to note that descriptive statistics only provide a summary of data that can't lead to conclusions, to draw broader inferences we further investigate using inferential statistics (Biernat & Piatkowska, 2015; Das et al., 2023).

5. Hypothesis testing

Table 1.
x² Tests

	Value	Df	P
χ^2	0.188	1	0.665
N	390		

Source: Author Creation

For analysing the association between investor gender and entrepreneur gender we employed the Chi-square test statistic (χ^2). For this analysis, we have considered all those firms which are led by either male or female, firms with equal participation have been dropped as we want to focus solely on investor preference for entrepreneur gender, and every investment decision by individual investors is considered as one. Table 2 presents the result for hypothesis 1, with a probability value of 0.665. having a P-value higher than 0.05 indicates that we fail to reject the null hypothesis. It states that there is no statistically significant association between the gender of the investor and the gender of the entrepreneur. Therefore, findings suggest that investor gender alone is not the significant reason for the determination of investment decisions in the context of the Indian startup ecosystem focusing on the S.tank data set.

Table 2.
Binomial Logistic
Regression

Predictor	Estimate	SE	Z	P
Intercept	-0.3759	0.128	-2.938	0.003
Ent gen: Wome n-led – Men led	-0.0796	0.281	-0.283	0.777

Source: Authors own creation.

Previous literature has suggested bias against female-led firms but results from Table 3 do not support hypothesis 2 which examines the relationship between entrepreneur gender (women-led vs. men-led) and funding status (Funded or Not funded). The result of binomial logistic regression analysis finds a p-value (0.777), which is higher than the threshold limit of 0.05. This high p-value indicates that the effect of entrepreneur gender on funding status is not statistically significant. In simple words, based on this analysis of S. Tank India data, there's no evidence to conclude that female-led startups are less likely to be funded compared to male-led startups. The findings of this study are contradictory to previous literature.

		Statistic	P
Valu ation	Mann-Whitney U	2353	0.021
<i>Note.</i> $H_a \mu_{Men\ led} \neq \mu_{Women\ led}$ Source: Authors own creation			

Table 4.
S- Independent amples T-
Test

For analysing the association between investor gender and entrepreneur gender we employed the Independent Samples T-Test (Mann-Whitney U test). Following the same methodology, the result from Table 4 supports hypothesis 3 and reveals a statistically significant difference (p-value = 0.021) in the investment valuation based on the entrepreneur's gender in our sample. Further, we tried to find the difference in both the groups (men-led vs women-led) then it shows a median difference of 500 and a mean difference of 1085 Lakhs. This finding aligns with the findings of some past research, suggesting a potential bias in the investment valuation, favouring man-led startups.

Discussion

Our findings are based on primarily 3 contributions to the existing literature.

- Firstly, Our study contributes to the existing literature on gender bias in entrepreneurial literature. Through the literature, we have seen that gender bias is one of the most prominent biases in the whole world including the Indian startup ecosystem, and the findings of our study provide some minute details on it. Contrary to various previous studies, our results show no statistically significant association between the gender of investors and entrepreneur gender, challenging the notion of gender bias and gender homophily in the Indian startup ecosystem. This indicates that Indian females are getting opportunities and have positive outcomes in terms of gender dynamics (Gupta &Etzkowitz, 2021).
- Secondly, despite numerous initiatives taken by the government of India and increasing opportunities for Entrepreneurial financing by private investors, Female participation in Indian entrepreneurship has not shown much growth (Amlathe& Mehrotra, 2017). This indicates a persistent challenge that needs to be addressed for gender equality in the entrepreneurial ecosystem.
- The third and last aspect of our study is that although no significant gender homophily or gender bias was found in investment decisions, it does point out the significant difference in the valuations of these investment decisions. We found a statistically significant difference in valuation between male-led startups and female-led startups, with male-led firms having a significantly higher, despite having no difference between investment decisions count. The findings are consistent with previous research suggesting that investors favour male-led startups. Nevertheless, it raises an important question of whether an entrepreneur's gender does not influence an investor's investment decisions. However, firm valuations are statistically significantly different between women-led firms and men-led firms, with women-led firms receiving lower valuations. Specifically, it highlights the need to resolve biases that impact investment decisions, particularly when it comes to valuing women-led businesses equally with their male counterparts.

While the gap in the valuation of startups between those run by men and women is an area of concern, our results regarding the investment decisions themselves are somewhat encouraging. Specifically, there is no statistically significant evidence of gender bias in terms of the identity of the entrepreneur being funded and the overall decision to fund by the investor. In other words, there is a willingness to fund ventures started by women in the Indian startup ecosystem. Yet, the valuation gap is a critical area for improvement to harness Sheconomics. By ensuring that start-ups are getting a fair valuation, we can encourage more and more qualified women to chase their dreams of starting a new business ultimately leading to a more vibrant Indian startup ecosystem.

6. Conclusion

The findings of this study challenge some common beliefs regarding gender bias, and gender homophily in Indian entrepreneurial financedecisions. While our data does not show any evidence of gender homophily or bias in investment decisions, the significant valuation gap between male-led and female-led startups remains a great concern. Further research is needed to understand the underlying reasons for this disparity. This might involve conducting in-depth interviews with investors to better understand their decision-making processes and try to identify if any unconscious behavioural biases like risk aversion, Familiarity Bias or any other bias might be at play. Additionally, they can also investigate the characteristics of the industry, sector, growth potential, and team experience, which could also provide insights into the valuation difference.

7. Practical Implications

Several practical implications of our findings can be drawn for Indian policymakers, investors, and female entrepreneurs. Most importantly, a need to boost the number of initiatives aimed at encouraging women's entrepreneurship and improving their access to financial assistance. At the same time, potential investors must recognise the risk of biased attitudes and support equal opportunity-based judgements. Female entrepreneurs, on the other hand, should use this as an opportunity to be more aggressive and seek out new ways to meet investors and develop their networking.

8. Limitations of the Study

Although our research offers valuable insights, it is essential to acknowledge its limitations. Firstly, our analysis is based on the data from a TV reality show, which may fail to properly represent the Indian startup ecosystem. Furthermore, our study only focuses on gender dynamics of investment decisions and does not explore other factors that may influence Investment decisions for startups.

References

Aleks, R., Saksida, T., &Kolahgar, S. (2021). Practice What You Preach: The Gender Pay Gap in Aleks, R., Saksida, T., &Kolahgar, S. (2021). Practice what you preach: the gender pay gap in labor union compensation. *Industrial Relations: A Journal of Economy and Society*, 60(4), 403-435. <https://doi.org/10.1111/irel.12291>

Amlathe, S. K., & Mehrotra, R. (2017). Opportunities & challenges of women entrepreneurship: an overview. *IOSR Journal of Business and Management*, 19(03), 99-104. <https://doi.org/10.9790/487X-19030499104>

Balachandra, L. (2020). How gender biases drive venture capital decision-making: exploring the gender funding gap. *Gender in Management*, 35(3), 261-273. <https://doi.org/10.1108/GM-11-2019-0222>

Baumann, S., & Rohn, U. (2016). Meet the Predators. *VIEW journal of european television history and culture*, 5(9), 105. <https://doi.org/10.18146/2213-0969.2016.jethc106>

Biernat, E., & Piłkowska, M. (2015). The usefulness of descriptive statistics in the interpretation of data on occupational physical activity of poles. *MedycynaPracy*. <https://doi.org/10.13075/mp.5893.00085>

Bosma, N., & Kelley, D. (2018). *Global Entrepreneurship Monitor Global Report*.

Das, B. K., Jha, D. N., Sahu, S. K., Yadav, A. K., Raman, R. K., & Kartikeyan, M. (2023). Descriptive statistics for inland fisheries data. *Concept building in fisheries data analysis* (pp. 41-58). Springer Nature Singapore. https://doi.org/10.1007/978-981-19-4411-6_3

Ewens, M., Townsend, R. R., Babina, T., Bernstein, S., Chari, A., Gonzales-Uribe, J., Howell, S., Korteweg, A., Nanda, R., & Neumark, D. (2018). Are early stage investors biased against women?

Fegade, A. N., Gupta, S. K., & Rai, V. M. (2023). ICT for women entrepreneurs in MSMEs in India (pp. 68-76). <https://doi.org/10.4018/978-1-6684-6118-1.ch005>

Gupta, N., & Etzkowitz, H. (2021). Women founders in a high-tech incubator: negotiating entrepreneurial identity in the Indian socio-cultural context. *International Journal of Gender and Entrepreneurship*, 13(4), 353-372. <https://doi.org/10.1108/IJGE-11-2020-0181>

- Hervé, F., Manthé, E., Sannajust, A., &Schwienbacher, A. (2019). Determinants of individual investment decisions in investment?based crowdfunding. *Journal of Business Finance & Accounting*, 46(5-6), 762-783. <https://doi.org/10.1111/jbfa.12372>
- Hohl, L., Bican, P. M., Guderian, C. C., & Riar, F. J. (2021). Gender diversity effects in investment decisions. *Journal of Entrepreneurship*, 30(1), 134-152. <https://doi.org/10.1177/0971355720974821>
- Jaitly, S., &Thangallapally, L. S. (2022). Decoding government support to women entrepreneurs in India. www.microsave.net
- Lafarre, A., &Schoonbrood, I. (2023). Entrepreneurial finance (pp. 353-380). https://doi.org/10.1007/978-3-031-19554-9_15
- Liu, Z. (2022). Research on women-friendly city construction under she-economics background. <https://doi.org/10.2991/aebmr.k.220404.031>
- Lizunova, E., &Mindruta, D. (2022). When the odds are stacked against you: Female entrepreneurs in male-dominated industries. *Academy of Management Proceedings*, 2022(1). <https://doi.org/10.5465/AMBPP.2022.18236abstract>
- Mallikarjuna, P. S. S. (2022). Role of rural and urban women entrepreneurs at karnataka. *GJRA - Global Journal for Research Analysis*. <https://doi.org/10.36106/gjra>
- Mazhar, S. (2023). Tapping the latent resource (women) as a potential contributor towards increasing GDP. *Mind and Society*, 11(04), 27-31. <https://doi.org/10.56011/mind-mri-114-20223>
- Oranburg, S. C., & Geiger, M. (2019). Do female investors support female entrepreneurs? An empirical analysis of angel investor behavior.
- Poczter, S., &Shapsis, M. (2018). Gender disparity in angel financing. *Small Business Economics* (Vol. 51, Issue 1). <https://www.jstor.org/stable/44697325>
- Qin, F., Mickiewicz, T., & Estrin, S. (2022). Homophily and peer influence in early-stage new venture informal investment. *Small Business Economics*, 59(1), 93-116. <https://doi.org/10.1007/s11187-021-00523-3>
- Singh, A., & Dubey, Dr. A. (2022). Contribution of Indian women to the Indian economy since independence. *International Journal of Advanced Academic Studies*, 4(4), 137-138. <https://doi.org/10.33545/27068919.2022.v4.i4c.879>
- Smith, B., &Viceisza, A. (2018). Bite me! ABC's Shark Tank as a path to entrepreneurship. *Small Business Economics*, Vol. 50, No. 3
- Snellman, K., & Solal, I. (2023). Does investor gender matter for the success of female entrepreneurs? Gender homophily and the stigma of incompetence in entrepreneurial finance. *Organization Science*, 34(2), 680-699. <https://doi.org/10.1287/orsc.2022.1594>
- Totadri, V., Ramesh, V., Sreedharan, A., & Acharya, Samir. K. (2022). 347.9: Gender disparity- A battle ongoing. *Transplantation*, 106(9S), S359-S359. <https://doi.org/10.1097/01.tp.0000887356.88616.e9>