Catastrophic Decline in Women Ownership of Firms in India: 2014-2022

Rozi Kumari and Rupayan Pal



Catastrophic Decline in Women Ownership of Firms in India: 2014-2022

Rozi Kumari and Rupayan Pal

Email(corresponding author): rupayan@igidr.ac.in

Abstract

Level playing field for women to participate in decision making and leadership positions is key to progress of a nation. Analysing widely used nationally representative datasets from the World Bank Enterprise Survey (WBES), we document that women ownership and participation in top management of registered private firms in India has drastically decreased, from low to a very meagre level, during the period from 2014 to 2022, despite sustained GDP growth and launch of several government programs to promote entrepreneurship. The pattern of decline is consistent across sectors (manufacturing and services) and size-groups (small, medium, and large) of firms, barring some variations. This is true regardless of the measure of women ownership considered and is not due to entry and exit of firms.

Keywords: Firm ownership, Women, Private registered firms, Decision rights, Leadership, Entrepreneur

JEL Code: O10, G32, J54, L26, B54

Acknowledgements:

Rozi Kumari acknowledges the support from the Visiting Scholars' Program of IGIDR. Usual disclaimer applies.

Catastrophic Decline in Women Ownership of Firms in India: 2014-2022

Rozi Kumari* and Rupayan Pal[#]

*Guru Gobind Singh Indraprastha University, New Delhi, India

[#]Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India

Abstract

Level playing field for women to participate in decision making and leadership positions is key to progress of a nation. Analysing widely used nationally representative datasets from the World Bank Enterprise Survey (WBES), we document that women ownership and participation in top management of registered private firms in India has drastically decreased, from low to a very meagre level, during the period from 2014 to 2022, despite sustained GDP growth and launch of several government programs to promote entrepreneurship. The pattern of decline is consistent across sectors (manufacturing and services) and size-groups (small, medium, and large) of firms, barring some variations. This is true regardless of the measure of women ownership considered and is not due to entry and exit of firms.

Keywords: Firm ownership, Women, Private registered firms, Decision rights, Leadership, Entrepreneur

Corresponding Author and Address

Rupayan Pal, Indira Gandhi Institute of Development Research (IGIDR), Film City Road, Santosh Nagar, Goregaon (E), Mumbai 400065, India. Phone: +91-22-69096545.

E-mails: (Pal) rupayan@igidr.ac.in, rupayanpal@gmail.com; (Kumari) rozijha1997@gmail.com

Acknowledgement: Rozi Kumari acknowledges the support from the Visiting Scholars' Program of IGIDR. Usual disclaimer applies.

1. Introduction

Indian women are hailed as "Nari Shakti". Elections after elections, politicians across the parties invoke this "shakti" to fulfil their political motives and rise to power. But do the Indian naris (women) have substantial shakti (power)? Do they possess the power to make decisions and lead their nation, organisation or household? These are big questions. A quick glance at the data suggests that Indian women are not in powerful positions – neither in absolute terms, nor in comparison to their male counterparts.

India has experienced only two instances of women being the head of the Nation and only once the head of government. Currently, women have only 15.1% and 13.8% representation in the lower and upper houses of national parliament, respectively, compared to 61.3% women in lower house in Rwanda and 56.6% women in upper house of Australian parliament (UN Women, 2023). The proportion of women in senior and middle management positions in India is only 16% as of 2022, whereas in countries like Botswana and Dominican Republic, it is as high as 59% (World Bank, 2024). Within household, decision making power of women is also far from being equal in India. For instance, only 17.5% of households are headed by women (World Bank, 2024). Women's decision-making power related to household expenses, healthcare and mobility is lower than those of men and is also lower among married women than unmarried women (Chakrabarti, 2019). Though working women have higher autonomy than non-working women, their powers are mostly limited to decisions related to cooking rather than finances, budgets and large purchases (Maxwell & Vaishnay, 2021).

The current poor state of participation of women in decision making and leadership can, however, be a consequence of history, patriarchal setup and persistent pre-medieval norms that dictate how women should be positioned in the society, which changes over time rather slowly. However, democratic countries like India, which is committed to "... secure to all its citizen: ...; equality of status and of opportunity; ..." and grants equal rights to vote in electoral process to all its citizen², is expected to experience significant improvement in participation of women in decision making processes and leadership positions over time. This is particularly expected to be the case during periods of high economic growth. Following a rapid and sustained path of economic growth, despite the disruptive Covid-19 pandemic in between, India has now moved up to become the 5th largest economy of the world (IMF, 2024), from the 10th position ten years ago, and is aspiring to be an economic superpower. The question is, has India

_

¹Source: The Constitution of India, Preamble.

²Source: Article 326 of the Constitution of India

experienced corresponding progress towards achieving gender-equity in decision-rights and leadership positions?

It is important that women are a part of India's rise and that they rise with the country. Besides on the grounds of equality of opportunity and representation, women leadership is important for several reasons. Women are behaviourally different than men and their preferences and priorities for societal, household and organisational development are different and complementary. As social and political leaders, women tend to increase educational outcomes (Clots-Figueras, 2012; Priyanka, 2022) and social welfare expenditures (Chen; 2013; Dziedzic, 2015). Women leaders also lead to prioritisation of policies that are relevant for women (Chattopadhyay & Duflo, 2004). At the household level, women tend to prefer education and human capital investment ((Duflo, 2003), (Rink & Barros, 2021)) and gender equality among children (Saleemi & Kofol, 2022). In firms, women in leadership positions cultivate womenfriendly cultures (Tate & Yang, 2015). Women led firms are associated with lower firm risk taking (Vo et al, 2023), lower chances of bankruptcy (Gracia & Herrero, 2021) and better firm performance which increases with rise in women workers (Flabbi et al, 2019). Moreover, women in senior positions can have spillover effects on lower ranking women by providing access to better mentors, role models and professional networking (Kunze & Miller, 2017).

Women entrepreneurship not only indicates their leadership and decision-making power in firms, but is intertwined with household as well as societal empowerment of women. Emancipation may be far stretched but entrepreneurship is one of the strongest ways to empower women. It brings agency, autonomy and financial independence to women which can challenge existing social order while also providing role models for further positive changes (Ojediran & Anderson, 2020). Moreover, by promoting women entrepreneurship, India can add 30 million more women owned enterprises and can potentially create 150 to 170 million jobs (MSC, 2022). Given this backdrop, this paper makes a modest attempt to assess the state of women ownership of firms in India, and the changes occurred during the last decade, using nationally representative enterprise survey datasets from the World Bank.

We find that the state of decisions making power of women and their participation in leadership positions in registered private firms in India has been considerably low, and the situation has further worsened to a very large extent during 2014 to 2022. In 2014, women had no say in major decision making of more than 93% of registered private firms, and they didn't have significant control rights in more than 95% firms. In only 2.39% of firms, women had full

control. In contrast, male had full control over more than 89% firms. The largest stake holder of a firm was woman in only 4.84% firms. Further, only 8.91% firms had woman as the top manager, and in less than 2% firms women could occupy the position of the largest stake holder as well as the top manager. This sorry state of affairs has further worsened in 2022. The percentage of firms with at least one woman-owner has fallen by 63%. The proportion of firms with woman as largest owner has been halved. The percentage of firms in which women has some say in major decisions and management of the company and to block special resolutions has reduced by 50% as well. There has been 44% decrease in the proportion of firms in which women can exercise significant control over the management. The share of firms fully owned by women and the share of firms that are both owned and managed by women has also declined by large extents. We also document that this pattern of catastrophic decline is not a sectorspecific phenomenon – women have experienced the same in both manufacturing and services sectors. Extending the analysis for small, medium and large firms separately we find the following. During the period 2014-2022, the proportion of large firms in which women are in the top management has reduced by 50%. Similar pattern is also observed for the proportion of firms of which at least one owner is woman. Across different size groups of firms, the ownership of women has significantly reduced in 2022 compared to that in 2014, regardless of the measure of female ownership considered, barring a few cases of exceptions. Women could maintain their ownership status in only those firms which are fully owned by them, and which are not small. Findings of this paper are robust to possible bias due to entry and exit of firms.

The rest of the paper is organized as follows. The next section describes the data and variables used in the analysis. Section 3 reports the findings. Section 4 concludes.

2. Data and Variables

We use data from two rounds of the World Bank Enterprise Survey (WBES) for the purpose of this analysis. Notably, WBES is the only reliable source of nationally representative datasets that provides relevant information on ownership and management of registered³ private enterprises having five or more number of employees in the manufacturing and services sectors

_

³ In India, the registration can be under any of the following: Shops and Commercial Establishments Act; Companies Act, 1956; Factories Act, 1948; Central Excise/Sales Tax Act; Societies Registration Act; Co-operative Societies Act; Directorate of Industries; KVIC/KVIB/DC: Handloom/Handicrafts; Registered with other relevant agencies.

of India. The WBES samples are selected by using suitable stratified random sampling methods, which enables us to obtain sector wise as well as size-group wise unbiased estimates of the variables of interest.

The two rounds of the WBES data are for the years 2014, which was collected during June 2013 and December 2014, and 2022, which was collected during December 2021 and October 2022. The dataset for the year 2014 contains information of 9281 firms, while information of 9376 firms is included the dataset for the year 2022. Further, the information of 4066 firms is available for each of these two years, i.e., the database provides a two-year balanced panel of 4066 firms, which enables us to assess changes in the same set of firms over time.

2.1 Variables

Under the Companies Act (1956), (i) a stake of at least 26% entitles to have a say in major decisions and management of the company and to block special resolutions, and (ii) a stake of more than 50% in a company grants significant control over the management and influence within the organization. Accordingly, we assess (a) whether women ownership in a firm is at least 26% or not, and (b) whether women ownership in a firm is at least 50% or not. We also assess, (a) whether there is at least one woman owner or not, and (b) whether a firm is fully (100%) owned by woman or not, to gauge the extent of woman ownership in firms in two possible extreme cases. Complementarily, we also assess (a) whether a firm's top manager is a woman or not, as top managers of firm are often delegated to take important decisions for the firm, and (b) in case the largest owner of a firm is also the top manager, whether that largest owner is a woman or not. Measures of women ownership and management used in this study, along with their descriptions, are listed in Table 1.

Table 1: Variable description

Description					
If a firm responds yes to the question "Among the owners of the					
firm, are there any females?"					
Among the firms with female owners, if the percentage of firm					
owned by females is greater than or equal to 26 percent					
Among the firms with female owners, if the percentage of firm					
owned by females is greater than or equal to 50 percent					
Among the firms with female owners, if the percentage of firm					
owned by females is equal to 100 percent					
If the percentage of firm held by female(s) is greater than or					
equal to the percentage of the firm held by the largest owner of					
the firm					
If a firm responds yes to the question "Is the top manager					
female?"					

3. Results

We find that the state of decision-making power of women and their participation in leadership positions in private registered firms in India has been very poor.⁴ In 2014, there were only 10.58% firms in India which had one or more woman owners. In even lower proportion of firms, women had significant ownership. Women had at least 26% stake, which allows them to have any say in major decisions, in only 6.08% firms. This percentage goes down further to 4.36% and 2.39%, respectively, if we consider at least 50% and 100% women ownership. Implying that in 2014, women had no say in major decision making of more than 93% firms, they didn't have significant control rights in more than 95% firms. In only 2.39% of firms, women had full control. In contrast, male had full control over more than 89% firms. The largest stake holder of a firm was woman in only 4.84% firms. Further, only 8.91% firms had woman as the top manager, and in less than 2% cases women could occupy the position of the largest stake holder as well as the top manager. Overall, it follows that in 2014 Indian firms were primarily owned and managed by men, whereas women had either no ownership or no significant decision-making power except in negligible number of cases. Surprisingly, despite significant economic growth in the post 2014 era, this scenario has further worsened in 2022.

-

⁴ To obtain unbiased in estimates for the population, we have used suitable probability weights for estimation purposes while using the full sample.

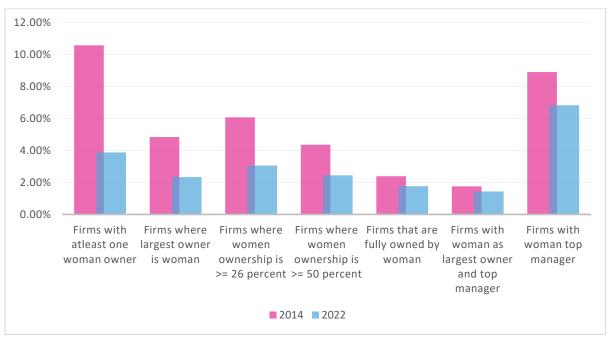


Figure 1: Women ownership and participation in management - 2014 and 2022

Comparison of estimates of women ownership variables for the year 2022 with those for 2014, suggests that women ownership has decreased drastically in the post 2014 period. Figure 1 depicts that the percentage of firms with at least one woman owner has fallen by 63% from 10.58% in 2014 to 3.88% in 2022. The proportion of firms with woman as largest owner has halved from 4.84% to 2.34% during the same period. Firms with women share in ownership greater than or equal to 26% has come down by 50% as well. There has been 44% decline in share of firms where women ownership is greater than or equal to 50%. There has also been significant decline in the share of firms fully owned by women and the firms which are both owned and managed by women. The consistent pattern of decline in women ownership indicates that women have lost their autonomy by a large extent between 2014 and 2022, from whatever little they had. This argument is further reinforced by the fact that there has been considerable decline in the proportion of firms in which women are in top level managerial positions. The share of firms with woman as top managers has come down by 23% from 8.91% in 2014 to 6.84% in 2022. Each of the above-mentioned differences are significant at 1% level (see Table 2). Dismissal of women form ownership and managerial positions in private registered firms to such an extent seems to imply significant deterioration in socio-economic position of women as well. The catastrophic decline in proportion of firms having women participants in ownership and/or management highlights serious limitations of India's growth strategy in recent years.

While the differences are stark and significant in the overall sample, one may argue that this is due to entry of new firms and exit of old firms, since more than 50% of the sample in 2022 consists of new firms that were not present in the earlier sample. Although the full-sample data of each year is representative for the respective year, as a robustness check we carry out the analysis by considering the 2-year balanced panel dataset. As mentioned before, this balanced panel dataset provides information of 4066 distinct firms for each of the years, 2014 and 2022. It enables us to assess change in women ownership in the same set of firms, and these estimates are free from possible bias due to entry and exit of firms from the full sample. We report these results in Table 2. It shows that the decrease in women ownership in panel firms is consistent with the overall declining trend. This suggests that the decline is not driven by entry-exit or possible sampling-bias. The result of loss of women agency in registered private firms in India is robust.

Table 2: Change in women ownership and managerial positions between 2014 and 2022

			Full Sa	ample	Panel					
Women Ownership	2014	2022	Diff.	p-value	% Change	2014	2022	Diff.	p-value	% Change
Firms with at least one woman owner	10.58	3.88	-6.70	0.00	-63.33	16.26	6.35	-9.91	0.00	-60.95
Firms where largest owner is woman	4.84	2.34	-2.50	0.00	-51.65	6.44	2.29	-4.15	0.00	-64.44
Firms where women ownership is >= 26 percent	6.08	3.06	-3.02	0.00	-49.67	8.39	3.74	-4.65	0.00	-55.42
Firms where women ownership is >= 50 percent	4.36	2.45	-1.91	0.00	-43.81	5.56	2.16	-3.40	0.00	-61.15
Firms that are fully owned by woman	2.39	1.77	-0.62	0.00	-25.94	1.48	1.03	-0.45	0.07	-30.41
Firms with woman as largest owner and top manager	1.76	1.44	-0.32	0.08	-18.18	1.60	1.23	-0.37	0.16	-23.13
Firms with woman top manager	8.91	6.84	-2.07	0.00	-23.23	9.49	7.80	-1.69	0.01	-17.81
Number of observations	9281	9376				4066	4066			

3.1 Sectoral trend

We now turn to examine whether the catastrophic decline in women' decision-rights and leadership in registered private firms in India is driven by a particular sector or not. To address this issue, we analyse data from the manufacturing sector and the services sector, which includes both the retail and other services sectors, separately. Table 3 presents results of this

sector wise analysis, both for the full sample of each sector and for the sector specific balanced datasets. We find that the decline in women ownership is not driven by any particular sector, instead it is the common phenomenon in each sector. There has been more than 63% decline in share of firms with at least one woman owner in both manufacturing and service sector. Similarly, the share of fully woman owned firms has been halved in each sector. Similar trend is observed across other measures as well. The only exception is that the share of firms which are both owned and managed by women in the manufacturing sector, that increased from 1.18% to 1.75%, when we consider the full sample. However, this is driven by the entry-exit phenomenon, as the firms in the panel show a 20% decrease of such firms in 2022 from that in 2014. The consistent pattern of decline of woman owners across sectors further reflects that exit of women is not because of industry characteristics or requirements but is rather driven by the loss of agency and decision-making power among the women in general.

Table 3: Sectoral changes in women ownership between 2014 and 2022

			F	ull Sam	ple	Panel					
Ownership	Sector	2014	2022	Diff.	p-value	% Change	2014	2022	Diff.	p-value	% Change
At least one woman owner	Manufacturing	11.25	4.09	-7.16	0.00	-63.64	16.83	5.84	-10.99	0.00	-65.30
	Retail and other services	10.12	3.72	-6.4	0.00	-63.24	14.66	7.62	-7.04	0.00	-48.02
Woman largest owner	Manufacturing	5.05	2.33	-2.72	0.00	-53.86	6.89	2.13	-4.76	0.00	-69.09
	Retail and other services	4.7	2.35	-2.35	0.00	-50.00	5.19	2.68	-2.51	0.00	-48.36
Women	Manufacturing	6.71	3.55	-3.16	0.00	-47.09	8.87	3.61	-5.26	0.00	-59.30
ownership >= 26 percent	Retail and other services	5.64	2.68	-2.96	0.00	-52.48	7.05	4.07	-2.98	0.00	-42.27
Women ownership >= 50 per cent	Manufacturing	4.74	2.82	-1.92	0.00	-40.51	6.26	2.03	-4.23	0.00	-67.57
	Retail and other services	4.1	2.17	-1.93	0.00	-47.07	3.62	2.51	-1.11	0.13	-30.66
Fully woman	Manufacturing	1.41	2.05	0.64	0.01	45.39	1.44	0.93	-0.51	0.07	-35.42
owned	Retail and other services	3.06	1.56	-1.5	0.00	-49.02	1.58	1.3	-0.28	0.58	-17.72
Woman	Manufacturing	1.18	1.75	0.57	0.01	48.31	1.51	1.2	-0.31	0.30	-20.53
largest owner and top manager	Retail and other services	2.16	1.21	-0.95	0.00	-43.98	1.86	1.3	-0.56	0.29	-30.11
Woman top manager	Manufacturing	7.09	6.4	-0.69	0.13	-9.73	8.27	6.08	-2.19	0.00	-26.48
	Retail and other services	10.15	7.18	-2.97	0.00	-29.26	12.89	12.12	-0.77	0.58	-5.97
Number of observations	Manufacturing	7165	5417				2988	2911			
	Retail and other services	2116	3959				1078	1155			

3.2 Size-wise trend

In this subsection we examine the pattern and changes in women ownership of registered private firms across different size groups. Table 4 presents estimates of various measures of women ownership for three different size groups: (1) Small, which includes firms employing 5 or more but less than 20 employees, (2) Medium, which includes firms with 20 or more but less than 100 employees, and (3) Large, which consists of firms having 100 or more number of employees.

First, we observe that in the full sample, the proportions of small firms and of large firms have increased, while that of medium firms decreased, in 2022 compared to those in 2014. The proportion of large firms has also increased in the balanced panel dataset, while both small and medium firms' proportion has decreased, in 2022 from corresponding figures in 2014. It tends to suggest that some firms have grown larger over time, which seems to be consistent with the economic growth during this period.

Second, participation of women in the top management is relatively more in large firms compared to small and medium firms in both the years. However, it has declined significantly, from 18.39% firms in 2014 to 9.06% in 2022 (from 14.55% in 2014 to 10.34% in 2022), i.e. a decrease of more than 50% (about 29%), in the full sample (in the balanced panel). Similar pattern is also observed in case of inclusion of woman as owner ("At least one woman owner").

Third, across size groups the ownership of women is found to be much lower in 2022 compared to in 2014, regardless of the measure of female ownership considered, barring a few cases of exceptions. Women could maintain their ownership in only those firms which are fully owned by women and are not small.

Table 4: Size wise distribution and change in women ownership between 2014 and 2022

Ownership				Full San	ıple		Panel					
	Size	2014	2022	Diff.	p- value	% Change	2014	2022	Diff.	p- value	% Change	
At least one	Small	8.63	3.72	-4.91	0.00	-56.89	13.48	4.25	-9.23	0.00	-68.47	
woman owner	Medium	10.15	5.30	-4.85	0.00	-47.78	15.27	5.69	-9.58	0.00	-62.74	
	Large	18.54	6.66	-11.88	0.00	-64.08	20.08	8.60	-11.48	0.00	-57.17	
Woman	Small	5.88	2.34	-3.54	0.00	-60.20	7.09	1.93	-5.16	0.00	-72.78	
largest owner	Medium	3.81	2.48	-1.33	0.00	-34.91	6.14	2.81	-3.33	0.00	-54.23	
	Large	4.41	1.66	-2.75	0.00	-62.36	6.25	1.96	-4.29	0.00	-68.64	
	Small	6.87	3.01	-3.86	0.00	-56.19	9.51	3.57	-5.94	0.00	-62.46	

Medium	4.76	3.72	-1.04	0.03	-21.85	7.91	3.94	-3.97	0.00	-50.19
Large	7.30	2.77	-4.53	0.00	-62.05	7.98	3.63	-4.35	0.00	-54.51
Small	5.60	2.44	-3.16	0.00	-56.43	6.57	2.32	-4.25	0.00	-64.69
Medium	3.26	2.73	-0.53	0.20	-16.26	5.41	2.63	-2.78	0.00	-51.39
Large	3.41	1.59	-1.82	0.00	-53.37	4.82	1.54	-3.28	0.00	-68.05
Small	4.27	1.79	-2.48	0.00	-58.08	2.94	1.45	-1.49	0.02	-50.68
Medium	1.00	1.89	0.89	0.00	89.00	1.46	1.31	-0.15	0.71	-10.27
Large	0.11	0.52	0.41	0.01	372.73	0.16	0.42	0.26	0.22	162.50
Small	2.38	1.50	-0.88	0.01	-36.97	1.64	1.25	-0.39	0.45	-23.78
Medium	0.89	0.88	-0.01	0.96	-1.12	1.34	1.31	-0.03	0.94	-2.24
Large	2.27	0.64	-1.63	0.00	-71.81	1.90	1.12	-0.78	0.09	-41.05
Small	6.40	6.88	0.48	0.44	7.50	5.36	7.14	1.78	0.08	33.21
Medium	8.60	5.74	-2.86	0.00	-33.26	8.52	5.94	-2.58	0.00	-30.28
Large	18.39	9.06	-9.33	0.00	-50.73	14.55	10.34	-4.21	0.00	-28.93
Small	3120	3361				1157	1036			
Medium	4060	3024				1644	1599		·	
Large	2101	2991				1265	1431			
	Small Medium Large Medium Large	Large 7.30 Small 5.60 Medium 3.26 Large 3.41 Small 4.27 Medium 1.00 Large 0.11 Small 2.38 Medium 0.89 Large 2.27 Small 6.40 Medium 8.60 Large 18.39 Small 3120 Medium 4060	Large 7.30 2.77 Small 5.60 2.44 Medium 3.26 2.73 Large 3.41 1.59 Small 4.27 1.79 Medium 1.00 1.89 Large 0.11 0.52 Small 2.38 1.50 Medium 0.89 0.88 Large 2.27 0.64 Small 6.40 6.88 Medium 8.60 5.74 Large 18.39 9.06 Small 3120 3361 Medium 4060 3024	Large 7.30 2.77 -4.53 Small 5.60 2.44 -3.16 Medium 3.26 2.73 -0.53 Large 3.41 1.59 -1.82 Small 4.27 1.79 -2.48 Medium 1.00 1.89 0.89 Large 0.11 0.52 0.41 Small 2.38 1.50 -0.88 Medium 0.89 0.88 -0.01 Large 2.27 0.64 -1.63 Small 6.40 6.88 0.48 Medium 8.60 5.74 -2.86 Large 18.39 9.06 -9.33 Small 3120 3361	Large 7.30 2.77 -4.53 0.00 Small 5.60 2.44 -3.16 0.00 Medium 3.26 2.73 -0.53 0.20 Large 3.41 1.59 -1.82 0.00 Small 4.27 1.79 -2.48 0.00 Medium 1.00 1.89 0.89 0.00 Large 0.11 0.52 0.41 0.01 Small 2.38 1.50 -0.88 0.01 Medium 0.89 0.88 -0.01 0.96 Large 2.27 0.64 -1.63 0.00 Small 6.40 6.88 0.48 0.44 Medium 8.60 5.74 -2.86 0.00 Large 18.39 9.06 -9.33 0.00 Small 3120 3361 Medium 4060 3024	Large 7.30 2.77 -4.53 0.00 -62.05 Small 5.60 2.44 -3.16 0.00 -56.43 Medium 3.26 2.73 -0.53 0.20 -16.26 Large 3.41 1.59 -1.82 0.00 -53.37 Small 4.27 1.79 -2.48 0.00 -58.08 Medium 1.00 1.89 0.89 0.00 89.00 Large 0.11 0.52 0.41 0.01 372.73 Small 2.38 1.50 -0.88 0.01 -36.97 Medium 0.89 0.88 -0.01 0.96 -1.12 Large 2.27 0.64 -1.63 0.00 -71.81 Small 6.40 6.88 0.48 0.44 7.50 Medium 8.60 5.74 -2.86 0.00 -33.26 Large 18.39 9.06 -9.33 0.00 -50.73 Small 3120 3361 Medium 4060 3024 <td>Large 7.30 2.77 -4.53 0.00 -62.05 7.98 Small 5.60 2.44 -3.16 0.00 -56.43 6.57 Medium 3.26 2.73 -0.53 0.20 -16.26 5.41 Large 3.41 1.59 -1.82 0.00 -53.37 4.82 Small 4.27 1.79 -2.48 0.00 -58.08 2.94 Medium 1.00 1.89 0.89 0.00 89.00 1.46 Large 0.11 0.52 0.41 0.01 372.73 0.16 Small 2.38 1.50 -0.88 0.01 -36.97 1.64 Medium 0.89 0.88 -0.01 0.96 -1.12 1.34 Large 2.27 0.64 -1.63 0.00 -71.81 1.90 Small 6.40 6.88 0.48 0.44 7.50 5.36 Medium 8.60 5.74 -2.86 0.00 -33.26 8.52 Large 18.39 9.06</td> <td>Large 7.30 2.77 -4.53 0.00 -62.05 7.98 3.63 Small 5.60 2.44 -3.16 0.00 -56.43 6.57 2.32 Medium 3.26 2.73 -0.53 0.20 -16.26 5.41 2.63 Large 3.41 1.59 -1.82 0.00 -53.37 4.82 1.54 Small 4.27 1.79 -2.48 0.00 -58.08 2.94 1.45 Medium 1.00 1.89 0.89 0.00 89.00 1.46 1.31 Large 0.11 0.52 0.41 0.01 372.73 0.16 0.42 Small 2.38 1.50 -0.88 0.01 -36.97 1.64 1.25 Medium 0.89 0.88 -0.01 0.96 -1.12 1.34 1.31 Large 2.27 0.64 -1.63 0.00 -71.81 1.90 1.12 Small 6.40 6.88 0.48 0.44 7.50 5.36 7.14 Medium</td> <td>Large 7.30 2.77 -4.53 0.00 -62.05 7.98 3.63 -4.35 Small 5.60 2.44 -3.16 0.00 -56.43 6.57 2.32 -4.25 Medium 3.26 2.73 -0.53 0.20 -16.26 5.41 2.63 -2.78 Large 3.41 1.59 -1.82 0.00 -53.37 4.82 1.54 -3.28 Small 4.27 1.79 -2.48 0.00 -58.08 2.94 1.45 -1.49 Medium 1.00 1.89 0.89 0.00 89.00 1.46 1.31 -0.15 Large 0.11 0.52 0.41 0.01 372.73 0.16 0.42 0.26 Small 2.38 1.50 -0.88 0.01 -36.97 1.64 1.25 -0.39 Medium 0.89 0.88 -0.01 0.96 -1.12 1.34 1.31 -0.03 Large 2.27</td> <td>Large 7.30 2.77 -4.53 0.00 -62.05 7.98 3.63 -4.35 0.00 Small 5.60 2.44 -3.16 0.00 -56.43 6.57 2.32 -4.25 0.00 Medium 3.26 2.73 -0.53 0.20 -16.26 5.41 2.63 -2.78 0.00 Large 3.41 1.59 -1.82 0.00 -53.37 4.82 1.54 -3.28 0.00 Small 4.27 1.79 -2.48 0.00 -58.08 2.94 1.45 -1.49 0.02 Medium 1.00 1.89 0.89 0.00 89.00 1.46 1.31 -0.15 0.71 Large 0.11 0.52 0.41 0.01 372.73 0.16 0.42 0.26 0.22 Small 2.38 1.50 -0.88 0.01 -36.97 1.64 1.25 -0.39 0.45 Medium 0.89 0.88 -0.01 0.96 -1.12 1.34 1.31 -0.03 0.94 L</td>	Large 7.30 2.77 -4.53 0.00 -62.05 7.98 Small 5.60 2.44 -3.16 0.00 -56.43 6.57 Medium 3.26 2.73 -0.53 0.20 -16.26 5.41 Large 3.41 1.59 -1.82 0.00 -53.37 4.82 Small 4.27 1.79 -2.48 0.00 -58.08 2.94 Medium 1.00 1.89 0.89 0.00 89.00 1.46 Large 0.11 0.52 0.41 0.01 372.73 0.16 Small 2.38 1.50 -0.88 0.01 -36.97 1.64 Medium 0.89 0.88 -0.01 0.96 -1.12 1.34 Large 2.27 0.64 -1.63 0.00 -71.81 1.90 Small 6.40 6.88 0.48 0.44 7.50 5.36 Medium 8.60 5.74 -2.86 0.00 -33.26 8.52 Large 18.39 9.06	Large 7.30 2.77 -4.53 0.00 -62.05 7.98 3.63 Small 5.60 2.44 -3.16 0.00 -56.43 6.57 2.32 Medium 3.26 2.73 -0.53 0.20 -16.26 5.41 2.63 Large 3.41 1.59 -1.82 0.00 -53.37 4.82 1.54 Small 4.27 1.79 -2.48 0.00 -58.08 2.94 1.45 Medium 1.00 1.89 0.89 0.00 89.00 1.46 1.31 Large 0.11 0.52 0.41 0.01 372.73 0.16 0.42 Small 2.38 1.50 -0.88 0.01 -36.97 1.64 1.25 Medium 0.89 0.88 -0.01 0.96 -1.12 1.34 1.31 Large 2.27 0.64 -1.63 0.00 -71.81 1.90 1.12 Small 6.40 6.88 0.48 0.44 7.50 5.36 7.14 Medium	Large 7.30 2.77 -4.53 0.00 -62.05 7.98 3.63 -4.35 Small 5.60 2.44 -3.16 0.00 -56.43 6.57 2.32 -4.25 Medium 3.26 2.73 -0.53 0.20 -16.26 5.41 2.63 -2.78 Large 3.41 1.59 -1.82 0.00 -53.37 4.82 1.54 -3.28 Small 4.27 1.79 -2.48 0.00 -58.08 2.94 1.45 -1.49 Medium 1.00 1.89 0.89 0.00 89.00 1.46 1.31 -0.15 Large 0.11 0.52 0.41 0.01 372.73 0.16 0.42 0.26 Small 2.38 1.50 -0.88 0.01 -36.97 1.64 1.25 -0.39 Medium 0.89 0.88 -0.01 0.96 -1.12 1.34 1.31 -0.03 Large 2.27	Large 7.30 2.77 -4.53 0.00 -62.05 7.98 3.63 -4.35 0.00 Small 5.60 2.44 -3.16 0.00 -56.43 6.57 2.32 -4.25 0.00 Medium 3.26 2.73 -0.53 0.20 -16.26 5.41 2.63 -2.78 0.00 Large 3.41 1.59 -1.82 0.00 -53.37 4.82 1.54 -3.28 0.00 Small 4.27 1.79 -2.48 0.00 -58.08 2.94 1.45 -1.49 0.02 Medium 1.00 1.89 0.89 0.00 89.00 1.46 1.31 -0.15 0.71 Large 0.11 0.52 0.41 0.01 372.73 0.16 0.42 0.26 0.22 Small 2.38 1.50 -0.88 0.01 -36.97 1.64 1.25 -0.39 0.45 Medium 0.89 0.88 -0.01 0.96 -1.12 1.34 1.31 -0.03 0.94 L

4. Concluding Remarks

The position of women in a society indicates the state of its development. The importance of women's voice and decision-making power is adequately evident from the existing vast literature on this issue. Yet, the share of women in positions of power is abysmally low. The condition of women representation and power is alarmingly lopsided in India as well, which is a matter of concern and hindrance for the nation's ambition of being an economic superpower.

In this paper, we have assessed the state of women's decision-making power in registered firms in India and its change during 2014 to 2022, using the widely used WBES datasets. We document that woman leadership in terms of firm ownership and management participation has been considerably low, highlighting low agency among women. Moreover, there has been steep decline in women ownership and management participation between 2014 and 2022, despite the fact that India has registered sustained growth in gross domestic product (GDP) in the post 2014 period. Women ownership has declined in the range of 26% to 63%, depending on the measure of ownership, and women participation in top management has declined by about 23%. Similar declining patterns are observed across sectors and firm sizes, and are robust to possible bias due entry and exit of firms in the full sample. The catastrophic decline in women ownership is worrisome, as it highlights a further loss of women's decision making power and social empowerment from an already low position.

We note here that Covid-19 pandemic had disruptive effects, of varying magnitudes, on economies across the globe, and it is well documented that the pandemic had disproportionally stronger adverse effects on economically and socially vulnerable segments of the population. Thus, it is likely to have some adverse effects on women ownership and participation in leadership positions of firms as well. While there is no data available to assess year-on-year change in women ownership and participation in management, which is necessary to gauge the impact of Covid-19, the magnitude of decline in women ownership does not appear to be explainable by Covid-19 alone. While a significant part of the decline in women's participation in ownership of small firms may be attributed to Covid-19, more than 50% decrease in their participation in ownership of large firms with majority stake is perhaps harder to be explained by the pandemic. More pertinent question is, why in a growing economy that is 5th largest in the world in terms of GDP, women's participation in ownership and management of firms, compared to that of their male counterparts, should decline drastically due to the pandemic?

We also note here that entrepreneurship is empowering but at the same time, highly resource consuming and risky. This disadvantages women as they suffer more from resource, network and mobility constraints and overburdened with household duties, compared to men. It poses a dilemma wherein only empowered people can enter the space that is empowering. Thus, government assumes an important role in correcting the situation and providing a level playing field for all. Between 2014 and 2022, the Government of India launched several schemes to promote women entrepreneurship. The prominent schemes include Stand-Up India, under which bank loans between Rs. 10 lakhs to 1 crore are facilitated for setting up greenfield enterprise; Mudra Yojana, under which collateral free bank loans up to Rs. 10 lakhs is provided to women entrepreneurs; Trade Related Entrepreneurship Assistance and Development (TREAD), under which assistance is provided up to 30% of total project cost and remaining 70% is financed as loan by the lending agency; Women Entrepreneurship Platform (WEP), which provides relevant information and services to women entrepreneurs, etc. The list is longer and intent is discernible. However, despite having this long list of schemes, women ownership in registered private firms has decreased from low to a very meagre level. Thus, efficacy and adequacy of government policy to secure equal opportunity for women to participate in decision making and leadership positions in firms in India remains questionable.

It is necessary to carefully examine the causes of the catastrophic decline in women ownership in order to design appropriate policy and its effective implementation, which is part of our ongoing research agenda.

References

Chakrabarti, A. (2019). Understanding Female Autonomy in India through Their Family Headship Status. *Journal of Population & Social Studies*, 27(3).

Chattopadhyay, R., & Duflo, E. (2004). Women as policy makers: Evidence from a randomized policy experiment in India. *Econometrica*, 72(5), 1409-1443.

Chen, L. J. (2013). Do female politicians influence public spending? Evidence from Taiwan. *International Journal of Applied Economics*, 10(2), 32-51.

Christiansen, L. E., Lin, H., Pereira, M. J., Topalova, P., & Turk, R. (2016). *Gender diversity in senior positions and firm performance: Evidence from Europe*. International Monetary Fund.

Clots-Figueras, I. (2012). Are female leaders good for education? Evidence from India. *American economic journal: applied economics*, 4(1), 212-244.

Duflo, E. (2003). Grandmothers and granddaughters: old-age pensions and intrahousehold allocation in South Africa. *The World Bank Economic Review*, 17(1), 1-25.

Dziedzic, D. (2015). The effect of female politicians on policy outcomes. *The Xavier Journal of Political Science*, 6(1), 31-45.

Flabbi, L., Macis, M., Moro, A., & Schivardi, F. (2019). Do female executives make a difference? The impact of female leadership on gender gaps and firm performance. *The Economic Journal*, 129(622), 2390-2423.

García, C. J., & Herrero, B. (2021). Female directors, capital structure, and financial distress. *Journal of Business Research*, 136, 592-601.

IMF (2024). *World Economic Outlook Database*, April 2024. <u>International Monetary Fund</u>. Link: https://www.imf.org/en/Publications/WEO/weo-database/2024/April/weo-report. Retrieved on May 05, 2024.

Kunze, A., & Miller, A. R. (2017). Women helping women? Evidence from private sector data on workplace hierarchies. *Review of Economics and Statistics*, 99(5), 769-775.

Maxwell, M., & Vaishnav, M. (2021). Working Women's Decision-Making Power at Home: Evidence from Four North Indian Urban Clusters. *Urbanisation*, 6(1_suppl), S58-S76.

MSC (2022). Decoding government support to women entrepreneurs in India. Link: https://www.niti.gov.in/sites/default/files/2023-03/Decoding-Government-Support-to-Women-Entrepreneurs-in-India.pdf. Retrieved on May 05, 2024.

Ojediran, F., & Anderson, A. (2020). Women's entrepreneurship in the global south: empowering and emancipating?. *Administrative Sciences*, 10(4), 87.

Priyanka, S. (2022). Do Female Politicians Lead to Better Learning Outcomes?. *The BE Journal of Economic Analysis & Policy*, 22(4), 763-800.

Rink, U., & Barros, L. (2021). Spending or saving? Female empowerment and financial decisions in a matrilineal society. *World Development*, 141, 1053

Saleemi, S., & Kofol, C. (2022). Women's participation in household decisions and gender equality in children's education: Evidence from rural households in Pakistan. *World Development Perspectives*, 25, 100395.

Tate, G., & Yang, L. (2015). Female leadership and gender equity: Evidence from plant closure. *Journal of Financial Economics*, 117(1), 77-97.

UN Women (2023). *Women in Politics: 2023*. Link: https://www.unwomen.org/sites/default/files/2023-03/Women-in-politics-2023-en.pdf. Retrieved on May 06, 2024.

Vo, T. A., Nguyen, T. N. T., Henry, D., Toan Nguyen, M., & Joseph, N. L. (2023). Does female leadership matter in firm risk-taking and performance? Evidence from gender equality reforms in an emerging market. *Applied Economics*, 55(60), 7127-7149

World Bank (2024). *Gender Data Portal*. Link: https://genderdata.worldbank.org/en/indicator/sl-emp-smgt-fe-zs?geos=WLD_GIN&view=trend. Retrieved on May 06, 2024.

World Bank (2024). Link: https://data.worldbank.org/indicator/SP.HOU.FEMA.ZS?end=2021&start=2021&view=bar. Retrieved on May 06, 2024.