

## Beyond Size: How ESG Factors Shape Bank Value in India & China

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### Abstract

*Objective:* This study examines the impact of ESG (environmental, social, and governance) factors on the market capitalization of banks in India and China. Specifically, it analyses the relationship between total assets, female board representation, social and environmental disclosures, and market capitalization.

*Methods:* A comparative analysis of leading banks in India and China is conducted using 10 year (2013–2023) data using structural equation modelling (SEM) on market capitalization, total assets, ESG disclosures, and female board representation.

*Results:* A positive and significant relationship is found between total assets and market capitalization in both India and China, indicating that investors value larger banks. In India, female board representation doesn't significantly impact market capitalization, while in China, a higher proportion may lead to lower market capitalization, requiring further research. A positive and significant relationship is found between social and environmental disclosures and market capitalization in both countries. However, the effect is stronger in India, indicating that Indian investors place greater value on banks with robust sustainability practices.

*Conclusions:* This study highlights the growing importance of ESG factors in the banking sector, with varying degrees of emphasis depending on the country. While both Indian and Chinese investors value larger banks, Indian investors seem to place more weight on female board representation and social-environmental disclosures, while Chinese investors appear to prioritize other factors. Further research is needed to explore the underlying reasons for these differences and the complex interplay between various ESG factors and market performance.

**Keywords:** ESG, market capitalization, banking, India, China, sustainability, ethical practices, social responsibility, corporate governance.

### 1. Introduction

Environmental, social and governance (ESG) factors have become significantly more important in the banking industry as a measure of sustainable and responsible business practices. The banking sector, once solely defined by financial metrics, is undergoing a

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metamorphosis. Environmental, Social, and Governance (ESG) factors are no longer mere buzzwords, but increasingly potent forces shaping investor decisions and influencing market performance (Haque et al., 2021; Demirguc-Kunt et al., 2018). This paradigm shift necessitates a deeper understanding of how ESG interacts with traditional financial indicators, particularly in emerging markets like India and China. This comparative study aims to analyse and compare the ESG factors of Indian and Chinese banks to understand their commitment to sustainability and ethical practices. Market capitalization is a major contributor to assessing the overall valuation and stability of banks, playing a critical role in the maintenance of investor confidence and market perception (Chen et al., 2019). It is a key performance indicator that reflects their ability to manage risk, create liquidity, and contribute to financial stability. Total assets, as one of the most important factors for evaluating a bank's operational capacity, have emerged as powerful platforms for influencing market capitalization (Berger et al., 1999). Moreover, social and environmental disclosures in these banking sectors are essential for a wide range of ethical considerations, addressing the issue of sustainable and responsible business practices (Gupta et al., 2019). Evidence suggests that women onboarding in corporate boards is among the most important factors for enhancing diversity in corporate governance, playing a pivotal role in regulating and fostering inclusive decision-making processes (Adams & Ferreira, 2009). The banking sectors of India and China, two economic powerhouses, play pivotal roles in shaping the financial landscape of their respective regions (World Bank, 2021). In recent years, as global financial markets have evolved, there has been a paradigm shift in how investors and stakeholders perceive and evaluate the performance of banks (Demirguc-Kunt et al., 2018). Beyond traditional financial metrics, factors such as sustainability practices, social responsibility, and diversity in corporate governance have come to the forefront (Waddock & Lozano, 2013; Adams et al., 2016). Indian banks increase by 14% their ESG values, Chinese banks by 10% and Russian banks by about 8%. Brazilian and South African banks do not seem to be significantly affected by sovereign regulation (Claudia, & Stefano., 2022). ESG elements have become crucial in the banking sector as a gauge of sustainable and ethical business operations. This comparative study intends to investigate and compare the ESG aspects of Indian banks and Chinese banks to assess their dedication to sustainability and ethical standards. This study explores the impact of total assets, social and environmental disclosures, and women onboarding on market capitalization in the banking sectors of India and China through a comparative analysis. In the new global economy, the integration of these factors into the banking sector has become a central issue for shaping investor preferences and ensuring long-term sustainability (Haque et al., 2021). This research study recognizes the importance of a comprehensive comparative analysis, drawing from the growing body of literature that highlights the significance of these multifaceted elements in determining the market capitalization and overall success of banks in India and China. The research gap is the lack of comprehensive knowledge on how several criteria such as ESG, total assets, and women's representation work together to impact the market value of top banks in certain economic environments like India and China. This research addresses a critical gap in understanding how diverse ESG factors interact and influence bank value across different market contexts. Building upon prior studies that highlight the significance of ESG in shaping bank performance (Waddock & Lozano, 2013; Adams et al., 2016), we offer a comprehensive analysis that sheds light on the unique choices and challenges faced by investors in India and China. Additional research is required to investigate the complex interaction among many economic sectors over extended time periods rather than just at a single moment. The purpose of the comparative study is to analyse the impact of ESG values on the performance and competitiveness of banks in different countries. Understanding how these factors influence banking practices can provide valuable insights for policymakers, investors, and stakeholders in the financial industry.

Our study delves into this crucial gap, conducting a comparative analysis of leading banks in these two economic powerhouses over a decade (2013-2023). We leverage structural equation modelling to untangle the complex relationships between four key factors includes, the total assets measure of bank size and its impact on market value (Berger et al., 1999), the size of women representation examining the potential influence of diversity in corporate governance on market perception (Adams & Ferreira, 2009), and social-environmental factors Investigating the impact of transparency in sustainability practices on investor confidence (Gupta et al., 2019). The market capitalization serving as the primary indicator of bank value and performance (Chen et al., 2019).

By dissecting these factors, we aim to answer critical questions:

1. Do Indian and Chinese investors place increasing value on ESG practices, and if so, how does it differ between the two nations?
2. Do cultural and market specificities influence how these factors are perceived and translated into market valuation?
3. What are the implications for the future of sustainable banking in these regions, considering their unique trajectories?

These research questions serve as the foundation for the objectives of our study.

The study's objectives: -

1. To compare and analyse the impact of women's presence on the board on the value of the firm in Indian and Chinese banks, considering the mediating role of social and environmental factors.
2. Examine how the inclusion of environmental factors influences this relationship differently in each country by examining the relationship between social and environmental disclosure factors and market value of Indian and Chinese banks.
3. To examine the mediating effect of social and environmental factors in the relationship between the total assets of Indian and Chinese banks and their market value, identifying the factors that contribute to the increase in market value in India and the absence of significant effect in China.

By considering above objectives, this study looks at how social and environmental factors affect the value of banks' firms at 10 major Chinese and Indian banks each with sample size of 384 utilising 10 years panel data. The possible mediating effects of social and environmental disclosures are also examined. Additionally, the study intends to analyse the overall effects of total assets, women on board, and environmental-social factors on the market capitalization of the leading banking industries in China and India. This research study found that there is a positive relationship between total assets and market capitalization in both countries. However, in India there is no correlation between market capitalization and female representation, but in China there is. The relationship between social-environmental disclosures and market capitalization is positive in both countries, but the effect is stronger in India. Our findings contribute to a more nuanced understanding of the evolving dynamics of bank valuation in a world increasingly driven by sustainability concerns. It implies that integrating ESG principles can result in banks achieving long-term sustainability and profitability.

## 2. LITERATURE REVIEW

In recent years, academic studies and business practices have paid considerable attention to the relationship between corporate disclosure, corporate governance frameworks, and shareholder value. Focusing on the banking industries in China and India, this literature

review examines the impact of economic and social disclosure, total assets, and female board representation on the value of banking firms.

### 2.1 Environmental disclosures and Firm value

Several studies highlight the significant impact of environmental factors on bank market capitalization in both India and China. (Pooja et al.,2023) suggests a non-linear relationship, with low levels of ESG activity positively impacting bank value. (Bania & Biswas ,2023) reveal different value preferences for ESG pillars across regions and post-crisis periods. Additionally, studies by (Sharif et al.,2023) and (Mansor & Ibrahim,2023) link better environmental performance with improved credit access and lower debt ratios, respectively. In China, (Danyan et al.,2023) show how environmental legislation, like the EPL, enhances capitalization for high-polluting firms' environmental expenditures. (Yumei et al.,2023) find that regional banks like City Commercial Banks (CCBs) reduce pollution through green finance.(Li et al.,2023) further explore how CCBs contribute by boosting innovation, attracting FDI, and upgrading industrial structures, with pollution reduction effects amplified by stronger economies, larger populations, and higher marketization (Xiting et al., 2023).These findings collectively support the hypothesis that environmental factors significantly influence bank market capitalization in India and China, with positive impacts observed from environmental legislation and the establishment of regional banks promoting pollution reduction and improved environmental performance

H1: There is a positive relationship between environmental factors scores and the firm value of the bank.

### 2.2 Social and Environmental disclosures

Social factors play a multifaceted role in shaping environmental disclosures by banks in India and China. (Bhattacharya & Agbola,2023) highlight negative correlations between social and environmental disclosures in Indian companies and factors like consumer proximity, leverage, and industrial transport industry membership. This suggests that social context influences disclosure decisions. Additionally, (Baldini et al.,2023) emphasize how broader country-level characteristics, including political, labour, and cultural systems, significantly impact firms' ESG disclosure practices, including environmental disclosures. In China, the interplay between social and environmental disclosures is further explored. (Wang & Zhao,2023) find that firms with better external environmental disclosures and internal green innovation receive more bank loans, suggesting social factors like access to credit influence environmental disclosure practices. Moreover, (Su et al.,2023) demonstrate how China's national environmental information disclosure program positively impacts firm profitability, innovation, and even debt cost reduction, highlighting the social benefits of transparency. Additionally, studies by (Yingying et al.,2022) and (Fangyuan et al.,2023) suggest positive associations between religiosity, banking sector performance, and financial inclusion with ESG disclosures, including environmental disclosures. These findings collectively support the hypothesis that social factors, encompassing both industry-specific and broader country-level characteristics, as well as social initiatives undertaken by banks themselves, significantly influence the extent and quality of environmental disclosures in Indian and Chinese banks.

H2: Social disclosure factors have a significant positive impact on the improvement of environmental disclosure factors.

H2.a: Social disclosure factors positively impact bank market value with environmental disclosure acting as a mediating effect.

### 2.3 Total assets and Firm value

One essential indicator of a company's size and stability is its total assets. Within the banking industry, a bank's total assets frequently indicate its market presence, lending capacity, and level of risk exposure. According to research by Li et al. (2018), larger banks tend to command higher market valuations based on perceived stability, economies of scale, and benefits from diversification when measured by total assets. Numerous studies have looked into how total assets affect banks' market capitalization in China and India. According to one study, the firm-specific risk component of Indian bank stocks is significantly impacted by the total assets volume (Gaurango et al., 2017). A study conducted in 2008 by Sweta and Chhaochharia compared the capital markets of China and India. The results indicated that China possesses a greater proportion of global financial assets than India. This finding could potentially account for the disparity in market capitalization between the two countries. Furthermore, capitalization appears to have a significant negative impact on profitability in China, whereas profitability has a significant positive long-term impact on capitalization for both BRICS countries (Capitalization, 2022). This is according to a study on these countries, which also includes India. According to P. Vinayaranjan's study from 2022, there was positive correlation between market capitalization growth rates and GDP in the context of the Indian capital market.

H3: There is a positive relationship between total bank assets and market value for Indian banking companies

H3.1: Social and environmental disclosure factors act as mediators, improving the relationship between bank total assets and the value of the firm.

### 2.4 Total assets and environmental disclosure factors

The provided studies examine how total assets affect social factors in Indian and Chinese banking. According to research, there is a significant correlation between employees' financial knowledge, behavior, and attitude and the social and financial sustainability of Indian banks in the banking sector (Sarfaraz, Javed., Uvesh, Husain. 2021). It has been discovered that the growth of shadow banking businesses in China, which offer a variety of financial products, has an impact on the overall scope of social financing. Although the growth of shadow banking within businesses encourages the broader growth of social financing, it may also negatively impact the businesses' own profitable investments (Partha, Sarathi, Senapati. 2016). As a result, China and India have different perspectives on how total assets affect social factors in the banking sector. China looks at the connection between social financing and shadow banking, while India concentrates on sustainability and financial literacy.

H4: Bank total assets have positive effect on Environmental factors.

### 2.5 Total assets and social disclosure factors

Total assets serve as a key metric reflecting the scale and operational footprint of banks. Social disclosure encompasses the voluntary communication of non-financial information related to a bank's environmental, social, and governance (ESG) performance. Exploring the relationship between total assets and social disclosure factors sheds light on banks' CSR initiatives, stakeholder engagement practices, and commitment to sustainable development. The banking sector's total assets have a significant impact on environmental factors. Nieto's study measures loan exposure to high-risk environmental sectors in the US, EU, China, Japan, and Switzerland. It emphasizes the need to investigate prudential policy measures to internalize the adverse externalities linked to climate risks (Maria, J., Nieto, 2017). The transition to a low-carbon economy will be aided by banks implementing green banking initiatives, according to a second study by Roy and Savarimuthu (Samrat, Roy., Xavier, Savarimuthu 2021). The Chinese government's focus on 'green GDP' and prohibitions on bank lending to companies that

pollute the environment demonstrate how government intervention has the potential to skew bank credit distribution and deteriorate environmental conditions (Yufend et al., 2021). Furthermore, the research conducted by Huang, Punzi, and Wu demonstrates that stricter environmental regulations negatively impact company balance sheets, increasing the risks that the financial systems face (Bihong et al., 2019).

H5: Bank total assets have a positive effect on social disclosure factors.

## 2.6 Women on Board and Firm Value:

As countries strive for gender equality and diversity in leadership positions, understanding the impact of women on board (WOB) on banks' market capitalization becomes crucial. This literature review aims to synthesize existing research on the influence of WOB on banks' market capitalization, with a specific focus on China and India, two emerging economies experiencing rapid changes in their financial sectors and corporate landscapes. Numerous studies have explored the relationship between WOB and financial performance, including market capitalization, in various contexts. According to (Vafaei et al., 2015), there is a positive correlation between improved financial performance and a larger percentage of female directors in developed market (Australian) list firms. There is a positive correlation between the presence of women on boards and financial performance in a global sample (Adams and Ferreira, 2009). In China and India, cultural norms and regulatory frameworks shape the dynamics of board composition and corporate governance. Studies examining the impact of WOB on banks' market capitalization in India indicate mixed findings, with some suggesting a positive relationship between diversity in gender and financial performance. In contrast, others emphasize the importance of board independence and expertise. Gender diversity on board helps top managers see things from new perspectives and provides insightful counsel (Anderson et al., 2011). This leads to better problem-solving and performance boosting decisions (Daily et al., 2003; Garcia-Meca et al., 2015). A number of arguments challenge the potential advantages of having a female director (Terjesen et al., 2016), but only a small percentage of people think that having a female director is more valuable when compared to their male counterparts (Li et al., 2017). According to Gordini and Rancat, the market value of a company rose when there were more women on the board.

H6: There is no significant relationship between the percentage of women on the board and the value of the firm.

## 2.7 Women onboard and social disclosures

A broad range of non-financial details about an organization's social and environmental performance are included in social disclosure. Increased corporate social responsibility (CSR) and increased transparency in revealing social impacts, representing a range of viewpoints and stakeholder interests in decision-making processes, have been associated with the presence of women on board. China has experienced a gradual increase in the representation of women on boards, driven by government initiatives and evolving corporate governance norms. Studies examining the relationship between WOB and social disclosure factors in China suggest a positive association, with female directors often advocating for greater transparency and accountability in CSR reporting. In India, regulatory measures such as the Companies Act, of 2013, and guidelines issued by the Securities and Exchange Board of India (SEBI) have sought to enhance board diversity, including the representation of women. Research on the impact of WOB on social disclosure factors in India remains limited but indicates the potential for gender diversity to drive improvements in CSR practices and stakeholder engagement. The findings reveal a positive relationship between the percentage of women representation on corporate boards and ESG disclosure, whether in non-financial or financial companies. The goal of (Xie et al., 2020) was to determine how gender diversity affected the financial performance and environmental strategy of businesses. Their findings showed that having

more women on boards of directors supports the advancement of proactive environmental measures, particularly those aimed at preventing pollution.

H7: The percentage of women on the board has a positive impact on social disclosure factors.

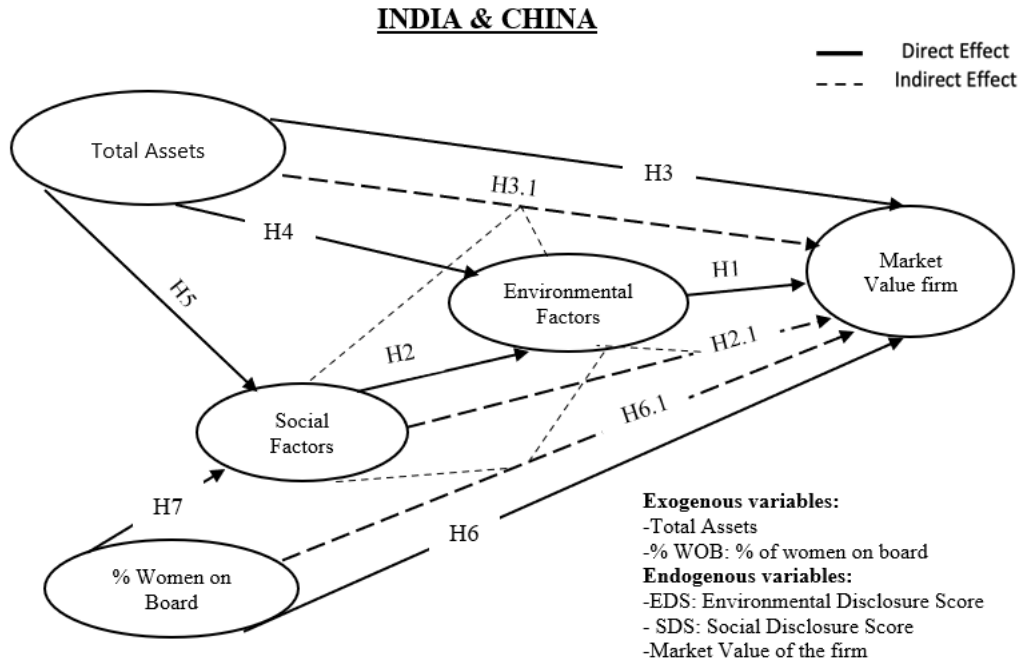


Fig 1 Conceptual model

A research hypothesis is a proposition that suggests a relationship or distinction between variables to be tested through empirical research. The following theories were developed after a thorough analysis of the body of existing research, careful formulation of the research questions, and a precise definition of the study objectives.

H1: There is a positive relationship between environmental disclosure scores and the firm value of the bank.

H2: Social disclosure factors positively impact the improvement of environmental disclosure factors for Indian banking companies.

H2.a: Social disclosure factors positively impact bank market value with environmental disclosure acting as a mediating effect.

H3: There is a positive relationship between total bank assets and firm value for Indian banking companies.

H3.1: Social and environmental disclosure factors act as mediators, improving the relationship between bank total assets and the value of the firm.

H4: Bank total assets have positive effect on Environmental factors.

H5: Bank total assets have a positive impact on social disclosure factors for Indian banking companies.

H6: The firm value of Indian banking companies is not significantly correlated with the number of women on board.

H6.a: Social disclosure factors and environmental disclosure factors serially mediate the relationship between percentage of women on board and value of the firm.



H7: The presence of women on board has a positive impact on the social disclosure factors.

### 3. Research Methodology

#### 3.1 Structural Model

Regression models are widely used in research, but have flaws in multiple hypotheses, model fitting, and errors. Equation modelling (SEM) was used in this study to thoroughly test hypotheses and offer an improved comprehension of complex relationships, mediation, and moderation. Structural equation modelling (SEM) was used to investigate the connections between the visible and the invisible. The indicators were assigned equal weights in the measurement models for the predicted outcomes. (Hair & others.,2022). Explanation and prediction are two different ideas considered when evaluating the ability of statistical models and estimates to generate predictions on novel data (Hair et al.,2019). Using multigroup analysis, researchers can do this Compare parameter estimates between pre-specified data groups to identify significant differences in external weights, loadings, and path coefficients.

#### 3.2 Correlation Matrices

The table shows the correlation coefficients between different factors. A correlation coefficient measures the strength and direction of the linear relationship between two variables. It ranges from -1 to 1, with -1 indicating a perfect negative correlation, 0 indicating no correlation, and 1 indicating a perfect positive correlation.

Table 1 Correlation matrices

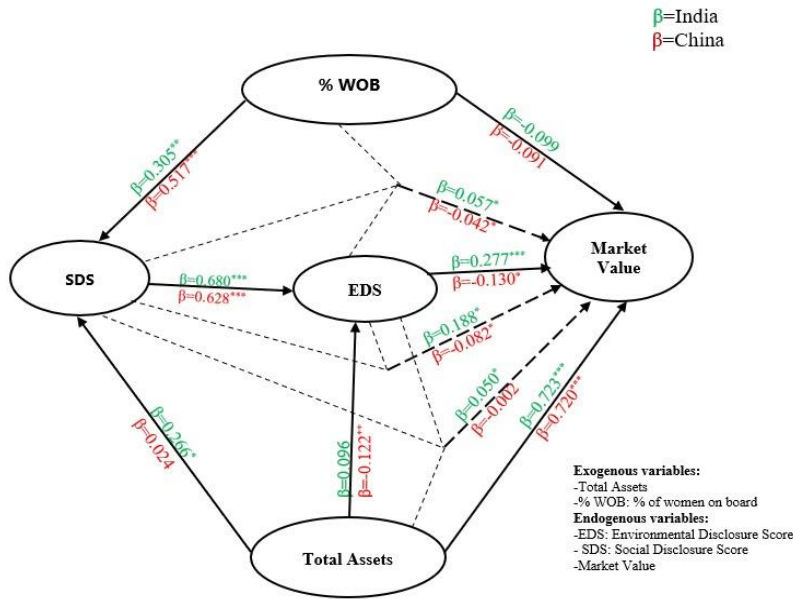
Factors	Environmental score	Social score	% Women on board	Market value	Log Assets
Log Assets	-0.586	-0.432	-0.244	0.231	1
Market value	0.176	0.290	0.315	1	
Social score	0.743	1	-	-	-
% Women on board	0.334	0.404	1	-	-

Based on the table-1, here are some observations: Log assets have a negative correlation with environmental and social disclosures. This means that the values of protocol resources tend to decrease as the values of environmental and social factors increase. Protocol resources have a positive correlation with market value. This means that as the value of market value increases, the value of timber resources also tends to increase. Social factors have a positive correlation with environmental factors and women on board. This means that as environmental and women on board values increase, the value of social factors tends to increase as well.

### 4. Results

Simple regression analysis is used in studies to assess how inflation affects stock returns. However, in order to comprehend the mediating factors, a casual predictive analysis is necessary. Latent variables are assigned in the first assessment; variance and t-tests are employed. According to Augirre-Urreta and Ronkko (2018), the procedure is comparable to assessing indicator weights in informal evaluations. The structural equation path modelling performance is greatly enhanced by the bootstrapping method, which uses 5,000 samples from the original dataset (A sample size of 384) and allows for the determination and estimation of standard errors and confidence intervals.





Note: \*p< 0.05, \*\*p<0.01, \*\*\*p<0.001

Fig.2 Structural equation model results

Table 2: Evaluation of the effects

Country/Region		INDIA										
H	Constructs	Direct	T	Sig	Indirect	T	Sig	Total	T	Sig	Direct	T
H1	EDS -> FV	0.277	4.239	***p	NA			0.277	4.239	***p	-0.130	1.980
H2	SDS -> EDS	0.680	7.948	***p	NA			0.680	7.948	***p	0.628	10.464
H2.1	SDS -> EDS->FV	NA			0.188	4.567	*p	NA			NA	
H3	TA -> FV	0.723	9.437	***p	NA			0.799	11.408	***p	0.720	27.586
H3.1	TA -> SDS->EDS-> FV	NA			0.050	2.085	*p	NA			NA	
H4	TA-> EDS	0.096	1.160	NS	NA			0.277	2.366	*p	-0.122	2.476
H5	TA-> SDS	0.266	2.047	*p	NA			0.266	2.047	*p	0.024	0.316
H6	WOB-> FV	-0.099	1.686	NS	NA			-0.042	0.723	NS	-0.091	1.542
H6.1	WOB -> SDS -> EDS -> FV	NA			0.057	2.294	*p	NA			NA	
H7	WOB-> SDF	0.305	2.998	**p	NA			0.305	2.998	*p	0.517	5.730

Note: \*\*\*P<0.001, \*\*P<0.01 \*P<0.05, S: supported, NS: not supported

The above table-2 shows the results of a path analysis, a statistical technique used to examine the relationships between multiple variables. The tables are divided into three sections: Direct Effects, Specific Indirect Effects and Total Effects.

Table 3: Direct Effects

Variables	Original Sample	Sample Mean	Standard Deviation	T-Value	P-Value
ED ->Mar Cap	0.277	0.278	0.065	4.239	0.000
Soc Dis -> Env Dis	0.680	0.671	0.086	7.948	0.000

TA -> Environ Dis	0.096	0.103	0.083	1.160	0.246
TA -> Mar Cap	0.723	0.715	0.077	9.437	0.000
TA -> Social Dis	0.266	0.262	0.130	2.047	0.041
Wo Board -> Mar Cap	-0.099	-0.100	0.059	1.686	0.092
Wo Board -> Social Dis	0.305	0.302	0.102	2.998	0.003

Note: \*\*\*P<0.001, \*\*P<0.01 \*P<0.05, S: supported, NS: not supported

This table-3 displays how each independent variable affects the dependent variables directly. When two variables have a direct relationship that is statistically significant, it means that the other factors in the model have no influence on the relationship.

The results in table-3 showing that there is a clear and substantial relationship between environmental disclosure (ED) and market capitalization (Mar-Cap), with higher ED values leading to increasing market capitalization. Furthermore, social disclosure has a strong and statistically significant influence on environmental disclosure, suggesting that higher levels of social disclosure are associated with greater environmental disclosure. There is no statistically significant direct effect of TA on ED, suggesting that firm size does not have a direct impact on environmental information disclosure. There is a positive and statistically significant direct relationship between TA and Mar-Cap, indicating that larger companies tend to have higher market capitalization. Larger companies exhibit a significant positive direct relationship between TA and Soc Dis, suggesting that they have higher levels of social transparency. Having a woman on the board has no statistically significant direct impact on market capitalization (Mar cap), but does have a positive and statistically significant impact on social transparency (Soc Dis). This includes the fact that companies with female board members are more likely to increase their social transparency.

Table 4: Specific Indirect Effects

Variables	Original Sample	Sample Mean	Standard Deviation	T-Value	P-Value
TA -> SDS -> EDS	0.181	0.171	0.081	2.232	0.026
WOB-> SDS -> EDS	0.207	0.208	0.084	2.482	0.013
TA -> SDS -> EDS -> Mar Cap	0.050	0.047	0.024	2.085	0.037
SDS -> EDS -> Mar Cap	0.188	0.184	0.041	4.567	0.000
WOB -> SDS -> EDS -> Mar Cap	0.057	0.057	0.025	2.294	0.022
TA -> EDS -> Mar Cap	0.027	0.031	0.028	0.961	0.337

Note: \*\*\*P<0.001, \*\*P<0.01 \*P<0.05, S: supported, NS: not supported

This table-4 shows the exact indirect effects of each independent variable on the dependent variables via a mediator variable. A statistically significant special indirect effect indicates that there is a mediated relationship between the two variables via a third variable. The results show that there are notable positive indirect effects, suggesting that larger companies (TA) and companies with female board members (WOB) are more likely to engage in social disclosure, which in turn leads to higher levels of environmental disclosure. Larger companies also have a positive indirect influence on market capitalization through the disclosure of environmental information. Having a woman on the board leads to more social and environmental disclosures, which in turn increases

market valuation. However, there were no statistically significant specific indirect effects of total wealth or the presence of a woman on the board on environmental disclosure, indicating that these characteristics do not have an independent influence on environmental disclosure beyond their influence on social disclosure. The observations improve understanding of how business characteristics, disclosures and market capitalization interact with environmental and social issues.

Table 5: Total Effects

Variables	Original Sample	Sample Mean	Standard Deviation	T-Value	P-Value
EDS ->Mar Cap	0.277	0.278	0.065	4.239	0.000
SDS -> EDS	0.680	0.671	0.086	7.948	0.000
SDS -> Mar Cap	0.188	0.184	0.041	4.567	0.000
TA -> EDS	0.277	0.274	0.117	2.366	0.018
TA -> Mar Cap	0.799	0.793	0.070	11.408	0.000
TA -> SDS	0.266	0.262	0.130	2.047	0.041
WOB -> EDS	0.207	0.208	0.084	2.482	0.013
WOB-> Mar Cap	-0.042	-0.043	0.058	0.723	0.469
WOB -> SDS	0.305	0.302	0.102	2.998	0.003

Note: \*\*\*P<0.001, \*\*P<0.01 \*P<0.05, S: supported, NS: not supported

Examining the overall effects between the variables (see table-2) revealed that the proportion of women on the board of directors (WOB) had different effects on company value in both countries. In China, the overall impact of WOB on firm value was statistically significant and negative ( $\beta = -0.133$ ,  $t = 2.712$ ,  $p = 0.003$ ). Put simply, a higher proportion of women on the board was related with a reduction in company value in the Chinese environment. The study concluded that the impact of women on the board of directors (WOB) on business value in India was minimal, suggesting that there is no significant relationship between the proportion of women on the board of directors and business value in the Indian environment. These results highlight the need to consider cultural and environmental differences between countries when analysing the relationship between gender diversity on corporate boards and firm performance.

#### 4.1 In sample predictive power (R-Square)

Regressions were employed in the study to ascertain the external loadings, external weights, path coefficients, and R-squared values of endogenous latent variables. We examined the relationship between indicators and underlying factors (Lohmöller, 1989). The predictive capacity of the model within the sample was assessed by evaluating the R-squared value, with a threshold of 0.3 or greater indicating satisfactory model fit according to Bentler and Bonett (1980). According to Henseler et al., R2 values in the range of 0.75 to 1.00 apply. as high, values are classified as moderate (between 0.25 and 0.50) or weak (below 0.25). as well as Hair and other (2011). These standards are frequently applied when assessing how well structural equation models fit data. These standards may change based on the nature of the study and the circumstances of the research.

Table 6 Coefficients of determination( $R^2$ )

Variable	Original Sample	Sample Mean	Standard Deviation	T-Value	P-Value
Environmental factors	0.523	0.525	0.085	6.127	0.000
Market capitalization	0.677	0.676	0.081	8.358	0.000
Social factors	0.227	0.243	0.076	2.997	0.003

Note: \*\*\* $P < 0.001$ , \*\* $P < 0.01$  \* $P < 0.05$ , S: supported, NS: not supported

#### 4.2 Overall Model Fit

A crucial metric called SRMR compares the replicated correlation matrix with the observed correlation matrix to assess how well the model fits the data. As indicated in Table 7, every difference matrix between our model and the reference distribution (both observed and model-implied) was less than the corresponding H195 and H199 values. Stated differently, the model passed the 5% or 1% significance level.

Table 7 Model Fit

Variables	Estimated Model	95%	99%	Result
SRMR	0.011	0.037	0.046	Accepted
D_ ULS	0.002	0.020	0.031	Accepted
D_ G	0.001	0.016	0.027	Accepted

Note: SRMR: Standardized Root Mean Squared Residual, d\_ ULS & d\_ G: Discrepancy function

The discrepancy function is represented by the standardize root mean square residual, or D\_ ULS and D\_ G. Upon conducting extensive bootstrapping using 5,000 samples, we discovered that the SRMR was 0.011. since the value is less than the predetermined cutoff of 0.080, the model appropriately fits the data.

## 5. Discussions

The literature highlights a significant difference in market capitalization of banks between India and China. In Indian banks, the inclusion of women on the board has a positive impact on the value of the company, which is influenced by social and environmental variables. Nevertheless, the effect in China is negative. While some research suggests a positive relationship between female board representation and firm performance (e.g., Huang and Kisgen, 2013), others find inconclusive or context-dependent results. The market value of Indian banks increased significantly due to improved social transparency factors and further increased with the addition of environmental elements. In China, on the other hand, there were clear negative effects that led to a reduction in the above-mentioned elements. While some research suggests a positive relationship between corporate social responsibility (CSR) practices and firm value (e.g., Zhang et al., 2020), others find inconclusive or negative relationships. Social and environmental variables have played an important role as intermediaries in increasing the overall market value of assets of Indian banks. In China, however, there were no major impacts. Studies by Chen et al. (2019) found a positive relationship between financial reporting quality and firm value in Chinese banks, suggesting that transparent financial reporting enhances investor trust and positively influences firm valuation. Environmental disclosures have a significant impact on increasing the market value of Indian banks, while they have a significant negative impact in China. The R-squared model shows that in India, social and

environmental disclosure and women on the board together account for 67.7% of the influence on market value, while in China they account for 58.3%. Indian banks have significantly improved the social aspects of their overall assets, but Chinese banks have made little progress in this area.

### 5.1 Consequences for Decision Makers

This research has several implications for policy makers and bank management. Policymakers in India should consider implementing regulations that incentivize banks to increase female representation and disclose social and environmental information. Chinese policymakers should consider implementing rules that encourage higher levels of social and environmental disclosure by banks, while avoiding measures that promote greater participation of women in banks. Bank management in India and China should consider the results of this study when making decisions about the operations of their banks. Indian banks should prioritize improving women's representation and social and environmental disclosure, while Chinese banks should prioritize improving women's social and environmental disclosure and avoid increasing women's representation.

## 6. Conclusions

This study examined the impact of total assets, women on board, and social and environmental disclosure on market capitalization of banks in India and China. It is found that there is a positive relationship between total assets and market capitalization in both countries. However, the relationship between female representation and market capitalization is insignificant in India but negative in China. The relationship between social-environmental disclosures and market capitalization is positive in both countries, but the effect is stronger in India. These results suggest that investors in both India and China value banks with larger total assets. However, investors in India appear to place more value on banks with a higher proportion of women and social-environmental disclosure, while investors in China appear to place more value on banks with a lower proportion of women.

### Limitations and Future Research

The limitations of the study include the examination of a limited number of variables. Other factors, such as the general health of the economy and the regulatory environment, can also play a role in determining market capitalization. This study was cross-sectional, meaning it only examined data at one point in time. It is possible that the relationships between the variables change over time. The focus is exclusively on the market capitalization of India and China, which requires further research in different economic sectors.

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