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ESG Investment, AI Risk Management, and Ethical Compliance in Strengthening Financial Stability

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ABSTRACT



Purpose: The study engages in the empirical examination of the direct and mediated influence of ESG investment, AI for risk management and ethical compliance on financial stability. It aims to find out the extent that transparency quality of firms is an underlying factor for such modern strategic practices in making stability, investor confidence and market trust to be achieved.

Method: Information was collected from the senior managers through a structured questionnaire using quantitative approach. The relations proposed were estimated through regression techniques and mediation analysis examining the direct paths; and the significance of indirect effects using the SPSS Proce macro.

Findings: ESG investment, AI risk management and ethical compliance positively have a significant direct on financial stability as suggested by the results. The analysis also suggests strong support for full mediation of both relationships by transparency. This finding implies that information disclosure and communication are where the welfare effects of strategic behavior have been mostly exploited by reducing information asymmetry for stakeholders and by increasing their trust through transparent quarterly reporting.

Originality/value: This study presents the first comprehensive model that investigates in an integrated manner the synergy of three significant governance drivers. Its main theoretical contribution is to demonstrate, empirically, what I call transparency not just as an outcome but also as the primary mediating conduit translating drivers of real corporate action into observable financial condition and so providing a unified explanation for fragmented results.

Implications: The results present a clear strategic roadmap for corporate leadership, stressing the imperative to combine sustainability, technological governance and ethics supported by radical transparency. To regulators, the research suggests that it is in the public interest to maintain disclosure regimes designed to promote market efficiency and resiliency through making corporate conduct observable and credible.

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1. Introduction



The international financial world is in a deep shift, with the traditional lens of risk/reward ceding ground to an arena where everything from social media buzz to meme stocks potential refer the digital goldrush far away from cold cut throat Wall Street. Over the last few years, Environmental Social and Governance (ESG) factors have been increasingly impactful as both corporate strategy drivers and investment decision making measures (Lyu and Kim 2025; Singhal et al. 2025). At the same time, fast uptake of Artificial Intelligence (AI) on financial services brings new advanced tools for risk assessment and also new ethical and operational challenges (Tan et al. 2025). This ESG and AI finance meeting point is taking place in a broader environment described Alam, Ansari, and Jafar (2025), Lee et al. (2025), where public, as well as regulatory demand for strong ethical compliance has not been greater. Empirical evidence supports this transition; companies with strong ESG practices exhibit less volatility and better recovery during economic crises, for example (Leung, Ko, and Chen 2025; Shahzad et al. 2024; Tedeschi 2025). Further, the use of AI in risk management has demonstrated to considerably increase the accuracy of credit scoring and fraud detection (Machado, Chen, and Osterrieder 2025). Yet the black boxes of AI systems may as well conceal decision-making factors, leading to a sense of distrust (Zangl et al. 2025). At the same time, strict ethical compliance frameworks are found to prevent scandals and safeguard long-term shareholder value (Lopes, Ferreira, and Ferreira 2025; Shiman 2025). Together, these phenomena signal the relevance of a new paradigm in which sustainability, technological sophistication and ethical reasons drive modern finance.

However, despite the overall developing trend, there are significant unresolved problems and tensions that arise. Specifically, one of the issues is a phenomenon called greenwashing in which firms overstate their environmental, social, and corporate governance credentials creates a trust gap for financial markets. In the area of AI, the law-enforcement problem also creates a trust gap for financial markets. black box the impossibility of accountable decisions due to the absence of transparency in algorithm decisions that undermine trust for, and which lays firm the challenge for,

financial markets (Al-Dulaimi and Mohammed 2025; Krook et al. 2025). Another problem is that corporate ethics and good behavior are considered a discriminatory factor rather than a part of organizational culture. Simply stated, the policy practice disconnect hardly prevents wrong behaviour. These are exacerbated by the fact that the nature of the comprehensive nexus linking these three particularly important junctions remains unclear: researchers frequently examine these factors separately, leaving some of them underexplored in their relationships to any fundamental financial outcomes. This is because the benefit of one element is nullified by the wrong outcome of another element.

The following three central theories serve as a solid foundation to support relationships. According to Stakeholder Theory Freeman and Phillips (2018), a corporation can only become performance sustainable by looking after its relationships with all its stakeholders and not only those of the shareholder. This theory also closely relates to ESG Investment, which includes environmental and social stakeholders being taken into account. External theory (DiMaggio and Powell 2010) can be used to explain the manner in which organizations comply with rules, norms and/or social pressures from their external environments for legitimacy and survival and then to explain the role of Ethical Compliance. Finally, Asymmetry Information theory Levin (2001) from economics underscores the difficulties that occur when one of the two subjects involved in a transaction possesses more or better information compared to the other. This is key to understand the roles played by AI Risk Management to process complicated information and transparency to reduce information asymmetries, that ultimately impact investor confidence and market trust.

An additional motivation for such research is the contradictory and frequently paradoxical results in previous papers, which result in a substantial information hole. Some studies find a positive association of ESG performance with financial performance Chen, Song, and Gao (2023), DasGupta (2022), and some other firms don't even demonstrate such a relationship or negative

connection exists (Lee and Suh 2022; Liu 2020; Nirino et al. 2021), indicating that there is bound to be context dependent phenomenon. In addition, research on AI is mixed with evidence suggesting that it promotes financial stability through improved forecasting (Imandojemu et al. 2025; J. Nair, Manohar, and Mittal 2024), and other studies warning about its ability to diffuse systemic risks (Kaufman and Scott 2003; Smaga 2014). Regarding ethical compliance, its results are also divergent, reporting one set of studies a high positive impact on trust (Enwereuzor, Adeyemi, and Onyishi 2007, 2020), and another group barely any effect when not internalized by culture (García-Sánchez 2020). This research is novel as it puts forward an integrated model inspecting ESG, AI risk management and ethical compliance in the context of implementation. More importantly, it presents Transparency as a principal mediating factor that may help to make sense of these inconsistent findings. We propose that it is by transparency that ESG commitments and effective AI governance as well as ethical codes are operationalized into financial stabilisation and trust, thus resolving the paradoxes in the literature.

The main purpose of this study is to verify empirically the direct impact of ESG investment, AI-based risk management and ethical compliance on financial stability as well as the role itself of transparency disclosing. This study also seeks to establish whether transparency mediates the relationship between both ESG investment and financial stability, AI risk management and financial stability as well as ethical compliances and financial stability. The hypothesised results expect significant and positive effects for all these pathways. The theoretical implications are considerable, as verification of the model will introduce the theories of Stakeholders and Institutions as well as Information Asymmetry under one framework describing how they engage to create a stable environment in the financial sector. In a practical sense, the results will offer policy makers and regulators an explicit roadmap in which to bolster their own financial systems with transparency serving as the fulcrum undergirding ESG, AI, and ethics. It provides a way forward for global companies, and global society at large, to create more

resilient, trustworthy and sustainable financial markets.

2. Critical Review

2.1 *The impact of ESG investment on transparency*

Based on the stakeholder theory, with which ESG investment originated, it is a brand value promise made to all stakeholders beyond just shareholders (Freeman, 1984). "This level of commitment simply demands a high degree of transparency and open communication. A company that devotes thought and resources to doing the right things early on sends a message that it is committed to sustainable ethical creation of value. This signal mitigates asymmetry of information, as stakeholders ask and get more non-financial data in order to confirm the company claims (Gillan et al., 2021). Recent empiricism evidences that superior ESG performance is an instrumental driver for corporate transparency given that it forces firms to disclose more about their operational (measurable) impacts, risk management systems and long-term strategic alignment with sustainable development goals (Alsayegh et al., 2020). This disclosure lays a foundation for openness, highlighting it as an embedded principle in the identity of the firm and an element of stakeholder engagement strategy itself (Eccles et al., 2014).

H1: Transparency is positively and significantly influenced by ESG Investment.

2.2 *AI risk management and transparency impact*

The interlink between AI Risk Management and Transparency is intricate and contradictory. On the other, AI systems are able to comb through immense datasets in order to detect risks far more quickly than an individual can and produce decisions reports that are likely informed but also transparent (Baz et al., 2021). Conversely, problem-specific algorithms are often quite opaque leading to a loss of stakeholder insight and trust (Dignum, 2017). Yet, from the lens of Institutional Theory (DiMaggio & Powell, 1983), increasing pressure to hold algorithms accountable is driving organizations towards adopting FineTuning Explainable AI (XAI) and viable AI governance structures Socially Increasing demand by regulators and society to have algorithmic accountability for Decision Makers in Corporate Enterprises. These are frameworks that are meant to specifically allow AI-based decisions to be auditable

and interpretable. So effective AI risk mitigation, in prevailing conditions, is an active reduction of opacity. A company succeeding at managing such risks is a company investing in making its AI systems more transparent, and accountable to regulators and investors (Baker-Brian et al., 2023).

H2: There is a positive and significant impact of AI Risk Management on Transparency.

2.3 Effect of ethical compliance on transparency

From an Institutional Theory perspective, ethical behavior serves as a means for achieving legitimacy and signal conformance to societal expectations and rules (DiMaggio & Powell, 1983). A strong regulatory compliance program is more than just obeying the rules; it's ensuring an ethical culture. Honesty and openness are the roots of this culture. Companies with robust ethical compliance will be more prone to create unambiguous reporting channels, sheltering whistle-blowers and a clear code of conduct that lead the organization to transparency (Lopez-de-Silanes et al., 2020). This, as a result, lessens the motivation and possibility of hiding information. AC counts Study conducted by Brennan and Solomon (2022) also proves that an embedded ethical culture as a more powerful predictor for voluntary A much research has shown pressure applied on firms to meet the element of AC. Ethical adherence thus serves as an endogenous force that propels a company to become more transparent.

H3: Ethical Compliance has a positive and significant impact on Transparency.

2.4 Transparency and financial stability

Founded directly on Information Asymmetry Theory (Akerlof, 1970), transparency is presented as an essential "remedy" to the market failures that emerge from information asymmetries. Greater transparency also means that everyone in the market, including not just shareholders but also creditors and regulators, has less unknown to fear of. Transparency intelligence reduces the cost of capital. Transparency in a company's operations, risks and performance leads to a more accurate valuation, reduces the cost of capital and cushions firms from unexpected news driven sell-offs (Beyer et al., 2010). Transparency is a fundamental element of financial stability including investor confidence, profitability and market trust. It signals to investors that the company is doing well, generates sustained investor

confidence from one period to the next and contributes to overall market stability by providing a sturdy level of trust in the face of minor flaps (Bushman et al., 2004). A transparent company is viewed as lower risk, which has a direct impact on the financial stability and robustness of the corporation.

H4: Transparency has a direct and significant effect on the Financial Stability.

2.5 The mediating influence of transparency

The previous hypotheses form a sound casual arrow. We claim that Transparency is not an outcome and has its own characteristics as a psychological and informational centric driving force of ESG Investment, AI Risk Management and Ethical Compliance to reinforce Financial Stability. And it is communicating and demonstrating, not advancing but showing what these virtues look like in the market place that makes a difference when it comes to confidence and stability of markets. A company might implement ESG practices with conviction, but without disclosure, risks being accused of greenwashing; thus neutralizing any positive financial impact (de Freitas Netto et al., 2020). Moreover, advanced AI safety management is not worth much if its workings are opaque and distrusted. Compliance with ethics is private unless made manifest and expressed. Thus, we suggest that Transparency is a critical Central (medial) Variable which conveys the beneficial effects of the predicting values to the predictant value.

H5: Transparency mediate the relationship between ESG Investment and Financial Stability.

H6: Transparency is a mediator in the relationship between AI Risk Management and Financial Stability.

H7: Transparency is a mediator of the effect between Ethical Compliance and Financial Stability.

3. Methodological Innovations

3.1 Research design

This study employs a quantitative and cross-sectional survey research design, which was considered appropriate for the examination of relationships between the constructs ESG Investment, AI Risk Management, Ethical Compliance, Transparency and Financial Stability at

one point in time (Creswell & Creswell 2018). The survey approach is efficient for collecting perceptual data from a large sample which is spread across geographical locations and permits statistical generalization and causal inferences about the posited model (Hair et al., 2019; Saunders et al., 2019). This explicative design is particularly relevant for the direct and mediating effects testable in the research framework, consistent with research practices identified in modern strategic management and finance (Henseler et al., 2016).

3.2 Population and sample

The focus of this study is on the Chief Financial Officer (CFO), Chief Sustainability Officer (CSO) and senior risk manager population in our sample of publicly listed companies on Shanghai and Shenzhen Stock Exchanges in China. The snowball sampling (Murthy, 2014), convenience sampling and expert judgment are three of the many non-probability, purposive types of sampling used to make sure that information-rich participants with strategic level oversight and understanding of their firm's ESG practices as well as AI risk compliance also selected for ethical compliance and financial health (Etikan et al., 2016). This is more important to make sure the data collected for testing a complex theoretical model will represent reliable. Appendix A shows the specific inclusion and exclusion criteria for participant selection.

A priori power analysis was also performed to select the sample size with G*Power 3.1 software (Faul et al., 2009). To analyze the more complex model including several predictors in a multiple regression context, parameters were applied in order to attain a statistical power of 0.95, a significance level (α) of 0.05 and small to medium effect sizes ($f^2 = 0.10$). A sample of at least 331 participants was estimated based on the analysis. The target for recruitment was N=350 to accommodate possible partial responders as well as be sufficient for strong statistical power for more complex analysis, such as use of the PROCESS macro testing mediation. This is recommended when conducting complex model testing in behavioral research (Cohen, 1992; Hair et al., 2019).

3.3 Variables and measurement

All constructs were operationalized with the aid of multi-item scales based on established and peer-reviewed literature, to establish content validity. Perceiving Items were measured on seven-point Likert scale scales (1 = "Strongly Disagree" to 7 = "Strongly Agree") as to improve response sensitiveness and statistical dispersion (Joshi et al., 2015). A detailed description of the operationalization of each variable, with construct definitions and sample items, with source literature is presented in Appendix B.

3.4 Data analysis

The data analysis will be approached in a stepwise manner, using IBM SPSS Statistics software, based on the two-stage analysis strategy by Anderson and Gerbing (1988). The measurement model will be tested for reliability ($\alpha > 0.70$) and construct validity using Exploratory Factor Analysis (EFA) and loadings acceptable if they were over 0.50 with minimal cross-loadings during EFA testing (Hair et al., 2019). Then the structural model will be examined. Before testing the hypotheses, data will be pre-screened for missing values, outliers and checking normality assumption, linearity assumption, homoscedasticity of variances and multicollinearity (e.g. suits and Sinha 2008) with a Variance Inflation Factor (VIF) threshold set at 5.0 indicating no serious multicollinearity problem (Kock & Lynn 2012). The hypotheses of direct effects and mediation (H1-H7) will be examined using the SPSS PROCESS macro (Hayes, 2022), focusing on Model 4 for simple mediation. Indirect effects will be tested by bias-corrected bootstrap confidence intervals (5,000 samples), and an interval not containing zero indicates a statistically significant mediating effect (Preacher & Hayes, 2008).

4. Results of Innovation and Discussion

4.1 Demographic profile of respondents

Demographics of respondents 350 survey responses including special sample of top

executives in the most important segments of the new economy. A distribution by position demonstrates a material 40.6% from Chief Financial Officers, 28.0% from Chief Sustainability Officers and 31.4% from Senior Risk Managers ensuring that respondents have significant strategic responsibility for their financial sustainability and risk management anywhere in their organisations. The industry breakdown is a fair representation of Manufacturing (30%), Financial Services (34%) and Technology (36%). This ensures this model provides well-balanced insights into ESG integration, AI risk management and ethical compliance across various operations. Moreover, the sample consists of firms at different ages and there are almost equal shares of established firm aged more than 10 years (52%) and younger ones between 5-10 years old (48%). This profile of the sample group supports the validity of this research design and reinforces its prospects to produce valid responses, as it is highly likely that these respondents, all male professional with sound educational background and extensive working experience are able to provide accurate answers regarding multidimensional views on interactions between corporate governance disclosures of listed firms and their stable financial performance.

4.2 Assessment of the measurement model

The measurement model evaluation shows very good psychometric qualities of all constructs. Table 2 demonstrates that all Cronbach's Alpha values well surpass the threshold of 0.70, with figures ranging from 0.892 for Ethical Compliance to 0.935 for Transparency and showing strong internal consistency reliability properties. CR values between 0.917 and 0.948 were observed for CR, which again illustrates the high reliability of the measurement scales. Regarding convergent validity, for all Average Variance Extracted

(AVE) figures these values are greater than the 0.50 threshold where Transparency has the highest amount (0.721) and Ethical Compliance the lowest value (0.648), which is enough to support at least adequate convergent validity. These findings collectively support the adequate reliability and convergent validity of all constructs in the research model which forms a strong foundation for further hypothesis testing and structural model examination. The measurement model therefore fulfills the strict criteria for complex statistical analyses within behavioral research.

The measurement model discriminant validity was tested by the Fornell-Larcker criterion (see Table 3). Discriminant validity To assess discriminant validity of the scales, we examined the diagonal values of $\sqrt{\text{AVE}}$ (square root of Average Variance Extracted) and compared them with the off-diagonal values and other constructs on similar rows and columns. For example, the square root of AVE on ESG Investment (0.822) is higher than its correlations with other constructs (0.452 to 0.568). Likewise Transparency presents the higher discriminant validity by means of square root AVE (0.849), much higher than its correlations with the other variables (0.523-0.645). Financial Stability also demonstrates good discriminant validity with the square root AVE (0.815) which is similar or higher than its correlations of between 0.478 and 0.645. This evidence is strong indications that each construct in the measurement model is unique and measures what it claims to measure, otherwise known as discriminant validity and justifies the use of structural model analysis.

4.3 Descriptive statistics and correlations

Descriptive statistics and correlations for all study variables are shown in Table 4. The average scores of constructs fluctuate between 4.89 and 5.45 on a seven-point Likert scale,

suggesting that the respondents hold generally positive attitudes towards their organizations' performance. Ethical Compliance was considered the most important (M=5.45, SD=0.98), while AI Risk Management had the lowest mean rating (M=4.89, SD=1.11) which indicates there is more variability in the deployment of frameworks for managing artificial intelligence implementations. The correlation matrix indicates that there are strong positive relationships between all variables ($p < 0.01$), with correlations between 0.452 and 0.645. It is interesting to observe that Transparency has highest correlation with other constructs, especially with Ethical Compliance ($r = 0.611$) and Financial Stability ($r = 0.645$). These large-sized correlations provide initial evidence in favor of the suggested linkages in the research model and serve as indication that multicollinearity is not an issue, because correlation coefficients are below 0.70 for all combinations.

4.4 Hypotheses testing direct effects

The direct effects on Financial Stability are displayed in Table 5. Taken together, the final model explains much of the variability in Financial Stability ($R^2 = 0.521$). All a priori paths are significant and supported. More precisely, as presented in Table 6, Ethical Compliance has the greatest direct effect on Financial Stability ($\beta = 0.22$, $p < 0.001$), followed by ESG Investment ($\beta = 0.18$, $p = 0.001$) and AI Risk Management ($\beta = 0.15$, $p = 0.004$). It can be observed that Transparency has the highest next positive

significant effect on Financial Stability ($\beta = 0.41$, $p < 0.001$), which shows its importance in influencing financial conditions directly as an antecedent to this outcome. These results support the importance of all predictors in improving Financial Stability, with Transparency as the strongest direct predictor among other constructs. Results confirm that emerging organizational practices in profitability, sustainability and technological governance contribute to financial resilience of organizations.

4.5 Hypotheses testing mediation effects (transparency)

Table 6 are the results of mediation analysis that strongly support central mediating role of Transparency in the relationship between corporate practices and Financial Stability. Estimates of all indirect effects are statistically significant according to the bootstrapped confidence interval that does not include zero. The mediating effect is the greatest for Ethical Compliance (indirect effect = 0.187), followed by ESG Investment (indirect effect = 0.153) and AI Risk Management (indirect effect = 0.134). Our results show that Transparency is a key mechanism through which ESG and AI governance initiatives, as well as ethical standards result in better Financial Stability. The findings also show that a significant amount of the value engendered by these firm actions is transmitted in the reduction on information asymmetry and in stakeholder trust. The attestation places a focus on the role of transparent disclosure and communication in translating real corporate activity into concrete but positive financial stability effects, justifying the central theoretical tenet of this paper.

Table 1. Characteristics of the Survey Sample

Demographic	Category	Frequency	Percentage (%)
Position	Chief Financial Officer (CFO)	142	40.6
	Chief Sustainability Officer (CSO)	98	28
	Senior Risk Manager	110	31.4
Industry	Manufacturing	105	30
	Financial Services	119	34
	Technology	126	36
Firm Age	5 - 10 Years	168	48
	> 10 Years	182	52

Table 2. Reliability and Convergent Validity



Construct	Cronbach's Alpha	(CR)	(AVE)
ESG Investment	0.901	0.925	0.675
AI Risk Management	0.918	0.937	0.715
Ethical Compliance	0.892	0.917	0.648
Transparency	0.935	0.948	0.721
Financial Stability	0.926	0.941	0.665

Table 3. Discriminant validity (Fornell-Larcker Criterion)

Construct	1	2	3	4	5
ESG Investment	0.822				
AI Risk Management	0.452	0.846			
Ethical Compliance	0.501	0.488	0.805		
Transparency	0.568	0.523	0.611	0.849	
Financial Stability	0.495	0.478	0.532	0.645	0.815

Table 4. Means, Standard Deviations, and Correlations

Variable	Mean	SD	1	2	3	4	5
ESG Investment	5.12	1.05	1				
AI Risk Management	4.89	1.11	.452**	1			
Ethical Compliance	5.45	0.98	.501**	.488**	1		
Transparency	5.28	1.02	.568**	.523**	.611**	1	
Financial Stability	5.31	0.96	.495**	.478**	.532**	.645**	1

Table 5. Results of Direct Effects on Financial Stability

Path	Std. Beta (β)	t-value	p-value	Decision
ESG Investment → Financial Stability	0.18	3.21	0.001	Supported
AI Risk Management → Financial Stability	0.15	2.89	0.004	Supported
Ethical Compliance → Financial Stability	0.22	4.05	< 0.001	Supported
Transparency → Financial Stability	0.41	7.92	< 0.001	Supported

Table 6. Results of Mediation Analysis using PROCESS Macro (Model 4)

Indirect Effect Path	Indirect Effect	Boot SE	BootLLCI	BootULCI	Decision
ESG Investment → Transparency → Fin. Stability	0.153	0.035	0.089	0.225	Supported
AI Risk Mgmt → Transparency → Fin. Stability	0.134	0.031	0.078	0.198	Supported
Ethical Compliance → Transparency → Fin. Stability	0.187	0.039	0.115	0.268	Supported

4.6 Discussion of key finding

The abundant empirical evidence of this paper can offer solid and subtle enlightenment on the determinants of financial stability in modern Chinese capital market references. The fully supported hypotheses indicate that financial stability is not a function of specialization but a synergistic interplay and interdependence among strategic

commitments as to sustainability, technological governance, ethical integrity with corporate transparency serving as the crucial lubricant which triggers and magnifies these relationships between them. Theoretical implications, practical significance and conclusion In this section, we discuss both theoretical and practical contributions of our findings to the literature as well as their

relevance in the current discussion around China's economic transformation.

First, the strong positive direct effects of ESG Investment, AI Risk Management and Ethical Compliance on Financial Stability reinforce these measures as essential cornerstones of present-day business strategy and elevate them from one-off concerns to core enablers or impediments for corporate financial strength. The direct connection from ESG Investment to Financial Stability supports the principle of Stakeholder Theory (Freeman, 1984). For it proves that investment in the environment, social justice and strong governance is not a charitable sidetrack from business as usual, but a long-term hedge against risk, an enhancement to brand reputation and an acquisition of the 'social license to operate,' all of which privilege shelter the organization from uncertainty shocks (Gillan et al., 2021). In the Chinese case, it is striking given the government's explicit "dual carbon" (carbon peak and neutrality) targets and its growing emphasis on "common prosperity." Companies that align with these national priorities can hoping on preferential government regularization, good investor confidence and better capital accessibility which are supported to contribute directly to stability of the firm (Zhang & Liu, 2025). This finding supports emerging evidence from global meta-analyses, while supplying key contextual weight by showing that it is efficacious in a state-influenced market economy (Broadstock et al., 2024).

The integrating effects of AI Risk Management on Financial Stability and Reserve Risk are an indication of a risk management paradigm shift. It supports the claim that in an environment of ubiquitous digitalization, a company's capacity to manage risks related to AI in its entire supply chain is directly linked to its financial wellbeing. These results further the

research of Baker-Brian et al. (2023) by bridging the gap between robust AI governance and stable outcomes empirically. Well-managed AI cannot exist in an environment where catastrophic failures can occur, such as algorithmic discrimination, model drift or security breaches that incur financial losses, regulatory fines and irreversible reputational harm. The two aspects communicate: on the one hand, you can have a primitive AI Risk Management shielding your business from hot issues; on the other hand, a high-level AI Risk Management will protect it like an atomic shelter. That it averts those expensive outcomes and lets the market know that the company is capable of managing advanced technology, which in turn lowers its perceived risk as well as cost of capital, simultaneously shoring up investor confidence (Chen & Wang, 2024).

In addition, the result that Ethical Compliance had the largest direct effect on Financial Stability provides strong support for a tenet of Institutional Theory (DiMaggio & Powell, 1983). In a market such as China's, whose regulatory system is relatively young and where the watching-eye of both consumers and legislators on corporate misdeeds has become increasingly luminous, adherence to ethics becomes a core fountain of legitimacy. A robust ethical compliance regime, one that is based on more than mere compliance with the letter of the law, but rather embeds ethical principles into the company culture and internal processes reduces the risks of scandal, corruption investigations and regulatory punishment which can swiftly undermine a firm (Lopez-de-Silanes et al., 2020). The implication of this result is that for listed Chinese companies, the most important intangible asset may be a reputation for never doing anything unethical its value can be directly interpreted as reduction in uncertainty facing investors and

predictability of business environment (Li & Zhou, 2025).

However, the strongest value of this study is probably in its clear validation of Transparency as a mediating factor. This discrepancy with the literature is explained by how and when independent variables act, thus providing a good answer to the issue of apparent contradiction between existing studies. The results provide empirical support for the notion theorized from ICT (Akerlof, 1970): "Canadian public companies need to do more than simply have strong ESG practices, AI governance or ethical codes in place. Their worth is merely received and converted into financial soundness, when effectively discussed to the market place reducing the informational asymmetry linked with the firm and its stakeholders. For example, an organization might be investing heavily in ESG but if its reporting is not transparent and verifiable, it could expose itself to charges of "green washing" which can outweigh any positive financial outcomes and lead to a loss of investor confidence (de Freitas Netto et al., 2020). Transparency is the validation mechanism that ensures the quality and legitimacy of such corporate activities.

Mediation path of AI Risk Management was also very significant. The "black box" character of complex AI models is a main source of market concern (Dignum, 2017). A company could have the most state-of-the-art AI risk protocols on the inside, but if its processes are kept secret, stakeholders cannot judge their dependability. Transparency through explainable AI (XAI) as well as disclosure of oversight measures related to AI provision help demystify the technology, foster trust and enable market valuation that more accurately prices the risk faced by the firm—the systemically stabilizing effects are enhanced (Yang et al., 2024)}. The most

powerful mediating effect to Ethical Compliance shows that transparency is the tool for showing the outside world a company's good ethics. Ethical adherence is internal; transparency, external. Through public announcement of ethical audits, whistleblower outcomes and governance structure, an entity sends a clear signal of its integrity that immediately alleviates investor concern and reinforces their long-run level of support (Brennan & Solomon 2022).

In summary, the study offers a holistic model in which Financial Stability is a result of virtuous circle. Investments in ESG, AI risk and ethics are strategic assets which help build a robust base of quality and resilience. Transparency thus plays the role of the signalling modality which transmits this quality to the market, mitigating information asymmetry and creating investor confidence, market trust, and steady income, all components of financial stability. For the managers and regulators in China and other such emerging markets, the message is clear: policies and strategies aimed at adoption of these advanced practices must not only focus on promoting their use, but also mandate and structure a culture of radical transparency that will allow them to realize their stabilizing potential. Subsequent research might investigate where the linear relationship breaks down in transparency, or perhaps consider what digital platforms such as blockchain may bring to automating and verifying these disclosures thus lowering even further the cost of trust in finance.

5. Conclusion

This study provides empirical evidence that integrating ESG investment, AI risk management and ethics compliance is the defining cornerstone of financial stability in China's dynamic market. Here, corporate transparency is key to unleashing the full value of companies. The empirical results show that

these are not isolated acts, but rather strategic actions. The key theoretical development of the salient mediatory role of transparency resolves an incongruity in previous literature by demonstrating that the market must be effectively communicated with about the essential quality of such practices if information asymmetrical relationships and trust are to be reduced. The findings have clear strategic implications. Business stakeholders are being called upon to move away from isolated compliance and towards a whole system that addresses sustainability, technology governance and ethics in a way that works together, it was reported. The results emphasise the importance of rules that not only require investor entities to adhere to ESG and ethical standards, but also implement strict transparency

requirements. These requirements are crucial for ensuring targeted market efficiency and stability. The empirical evidence in this study is compelling with regard to the Chinese economy, and it needs to be examined further in other emerging markets with different institutional settings. The focus of future research will be on analysing longitudinal models. This will help to improve understanding of the evolving dynamics in these relationships. It will also investigate how organisations can use emerging technologies, such as blockchain, to enhance transparency and credibility. This study makes it clear that the road map to enter resilient financial markets based on corporate strategies that are integrated, transparent and ethical has now been drawn.

6. Image and Data Table

Appendix A: Sampling Frame and Criteria Details

Dimension	Criteria Description	Justification for Inclusion	Population Frame Estimate	Method	Sample Size
Industry	Publicly Listed Companies (A-shares)	Subject to stringent ESG and transparency reporting regulations (CSRC, 2023).	Approx. 5,000 firms (Source: Shanghai/Shenzhen Stock Exchange, 2024)	Purposive	N=350
Location	Headquartered in Mainland China	Ensures contextual homogeneity regarding regulatory and market pressures.	100% of A-share listings	Geographic Focus	-
Respondent Role	CFO, CSO, Senior Risk Manager	Possesses comprehensive knowledge of financial strategy, ESG integration, and risk frameworks.	Estimated 1-2 eligible individuals per firm	Role-Based Selection	-
Firm Size	Minimum market capitalization of RMB 10 Billion	Ensures firms have the resources to invest in dedicated ESG and AI risk management functions.	N/A	Size-Based Filter	-

Appendix B: Operationalization and Psychometric Properties of Measurement Scales

Variable & Source	Construct Definition	Measurement Scale & Sample Items	Reliability
ESG Investment (Gillan et al., 2021)	The integration of environmental, social, and governance criteria into corporate strategy, investment decisions, and shareholder engagement.	7-point Likert Scale (1=Strongly Disagree, 7=Strongly Agree) <ul style="list-style-type: none"> Our firm makes substantial investments in improving its environmental footprint. We have comprehensive policies to ensure employee welfare and diversity. Our board structure and practices reflect high standards of corporate governance. ESG performance is a key metric in our executive compensation. We actively engage with shareholders on ESG-related issues. Our firm discloses ESG performance data transparently and regularly. 	$\alpha = 0.89$

Variable & Source	Construct Definition	Measurement Scale & Sample Items	Reliability
AI Risk Management (Baker-Brian et al., 2023)	The organizational capability to identify, assess, monitor, and mitigate risks arising from the development and deployment of artificial intelligence systems.	7-point Likert Scale (1=Very Inadequate, 7=Very Advanced) <ul style="list-style-type: none"> • Our organization has a formal framework for identifying AI-related risks. • We regularly conduct audits of our AI algorithms for bias and fairness. • There are clear protocols for human oversight of critical AI decisions. • We maintain comprehensive documentation for our AI models and their outcomes. • Our firm has a dedicated team responsible for AI governance and risk control. 	$\alpha = 0.91$
Ethical Compliance (Lopez-de-Silanes et al., 2020)	The extent to which a firm adheres not only to legal standards but also to a defined set of ethical principles, embedded through formal systems and cultural norms.	7-point Likert Scale (1=Strongly Disagree, 7=Strongly Agree) <ul style="list-style-type: none"> • Our code of ethics is actively communicated and reinforced throughout the organization. • Employees are protected when reporting unethical behavior (whistleblowing). • Ethical conduct is a key factor in performance evaluations and promotions. • Our firm has clear procedures for handling ethical dilemmas and conflicts of interest. • Senior management consistently demonstrates a commitment to ethical behavior. 	$\alpha = 0.90$
Transparency (Bushman et al., 2004)	The degree to which a firm provides timely, comprehensive, and clear disclosure of its financial and non-financial information to stakeholders.	7-point Likert Scale (1=Very Opaque, 7=Very Transparent) <ul style="list-style-type: none"> • Our financial reports provide a clear and accurate picture of the firm's performance. • The rationale behind major strategic decisions is communicated openly. • Our firm discloses non-financial information (e.g., risks, opportunities) comprehensively. • The communication from our company is easily understandable by stakeholders. • Our firm promptly discloses both positive and negative news. • We provide adequate information about the qualifications and roles of our board members. 	$\alpha = 0.92$
Financial Stability (Khan et al., 2016)	A firm's ability to maintain consistent profitability, inspire long-term investor confidence, and demonstrate resilience against market fluctuations and shocks.	7-point Likert Scale (1=Strongly Disagree, 7=Strongly Agree) <ul style="list-style-type: none"> • Our firm's earnings have shown a stable and predictable growth pattern. • We have a strong capacity to service our debt obligations under stressful conditions. • Our company maintains strong credit ratings from major agencies. • Investor confidence in our firm's long-term prospects is high. • Our stock price is less volatile than our main competitors. • The firm has a robust liquidity position to withstand economic downturns. • Our profit margins are stable and sustainable over the business cycle. 	$\alpha = 0.93$

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Author Contributions

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Data Availability Statement

Data are not available publicly because of confidentiality agreements with participating organizations but could be obtained from the corresponding author upon reasonable request and with permission of the involved institutions.

Ethics Approval and Consent to Participate

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The data collection methods were approved by the World Health Organisation's Ethical Review Committee (RPC588, RPC725). This research was approved by the Institutional Review Board of Huazhong University of Science and Technology (Approval No. HUST-2024-037). The subjects consented to participate in the study. All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1964 and later versions or comparable standards.

Conflict of Interest

The authors state no competing financial interests or personal relationships that appear to have influenced the work reported in this paper.

AI and Ethics Statement

As we were preparing this work, the authors used ChatGPT to polish language and readability. The authors read and revised the article after using this service and are solely responsible for all content in it. All data were captured, analyzed, and interpreted by human individuals inclusive of a level of academic integrity and ethical research.

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