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Stock Market Liberalization and Enterprise Innovation Data: Chinese Listed Firm's Model: OLS

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ARTICLE INFO	ABSTRACT
Keywords: Stock Market, Liberalization, Enterprise Innovation, China, Transformation	This study aims to find out the Stock Market Liberalization and enterprise innovation in China. To reach the results, the quantitative method is used in which the OLS technique is used specifically. Results of the study show that enterprise innovation can help to reduce financial imbalances and lends support to the concept of "using liberalization to push transformation" in enterprise innovation, which is a basic policy of Chinese financial reopening policy. Moreover, this research determined that governance structures are important, trying to imply that expediting the market-based method could be efficient in exacerbating the impact of Enterprise innovation and sustainable development. This study can be useful for Chinese enterprises and enterprises in the world, stock markets, and financial institutions.

1. Introduction

It is a priority of the government these days for Stock market liberalization and Stock market liberalization is a decision of the government to control restrictions on foreign investment and let them work in the local equity markets. In recent years, stock market liberalization is believed to have had an impact on the world economy (Bekaert et al., 2005; Mitton, 2006). As Bekaert et al. (2005) said that stock market liberalization dominates a reasonable increment in the economic growth of the country. Thus. the economic mechanism under the influence of the growth of stock market liberalization is still not fully conceived.

Recent studies declare that liberalization favors risk sharing and reduces the cost of capital, thereby inducing more investment (Henry, 2000a; Wang, 2020). By the way, the growth effect of liberalization reconciles with the limited decline in the cost of capital as well as the modest growth in the level of investment (Henry, 2007)

In response, Bekaert et al. (2011) says that productivity as well as the efficiency through which economic mechanism reserves limited monetary resources of the organizations are vital parts while considering other, possibly organizational, or institutional, changes liberalization could induce However, emerging technologies and enterprise innovation is believed as backbone for the growth of the country, in other way, the growth of its economy (Solow, 1956; Romer, 1986), no empirical research explores innovation as a mechanism underlying the productivity effect of stock market liberalization. In this paper, we attempt to fill the gap between liberalization and enterprise by examining the impact of stock market liberalization on innovation. A considerable growth effect of innovation on the enterprise is justified by its features, that differentiate it from conventional investment like capital expenditures. About Holmstrom (1989), innovation contains different factors like long-term, risky, and idiosyncratic investment in intangible assets, however, conventional investment is exploitation of familiar and well-known methods and approaches. Thus, concerning conventional investment, innovation shows the use of intangible assets like human capital, knowledge, and organizational support. Similar distinctions result in two consequences. However, Henry (2000a) mentioned that stock market liberalization dominates and boosts up in capital expenditures, it is not clear how stock market liberalization affects a country's innovative activities. Secondly, the consideration of equity is very important for financial support and to encourage innovation (Hsu et al., 2014). Thus, novel approaches and innovative activities may be closely related to reforms in the equity markets, such as stock market liberalization (Chen, et al., 2022).

2. Literature review

Stock market liberalization and development maintain a stock market through promoting liberalization of the market, capitalization of the market, and properly accommodating capital towards positive investments. Therefore, latent studies indicate the presence of a significant correlation between stock market liberalization and financial development (Nayak, 2022). Furthermore, the neoclassical growth theory shows novelty in the production process which can assist in improving capacity and productivity, as well as, increase of total factor productivity. Pan, et al. (2022) emphasize that innovation is considered a backbone of economic growth, thus, it is believed a pillar of financial growth and positive development. by the way, this connection demonstrates a causal one. It is rare to find that very specific research work that has used a unified economic model in which the stock market, as well as innovation, is believed both as the model for the focus on the dynamics, feedback, and endogenous issues (Zhang, et al., 2022; Shaikh, et al., 2022; Chaudhry, et al., 2023).

Even though China has proven growth in GDP in the last decade, let's say the innovative efficiency of the SMEs cannot be expected, so the economic sustainability and the economic growth of the country experience challenge. Several factors are influencing the Performance of enterprises' innovation, which may include the rules, rights, and leadership. Fang (2022) indicated stock liberalization is most important in the capital market because of its impact on SMEs and incremental innovation. Therefore, greater attention is paid to academic institutions to study the causes and connections between stock liberalization and enterprise technological innovation. Regulatory policies and laws can influence stock liberalization in the capital market.

A recent study has recommended a merger of stock liberalization and innovation which is different and uncertain. Such as Feng, et al., (2022) mentioned that stock liberalization may theoretically increase innovation in firms. The established market offers liberalization, which is considered helpful for firm innovation which is very cheap and decreases asymmetry information (Edmans and Manso 2011). However, it is noticed that stock market liquidity may be counterproductive. Let's say, excessive liquid stock markets could increase pressure to compromise the long-term performance (Edmans 2009), by the way. Greater liquidity may influence institutional investors and plans for investment in innovation risk. Thus, the influence of stock liquidity regarding innovation is very complex and ambiguous yet.

However, Yi, et al., (2022) finds out the promotion of stock liberalization diminishes innovation in the SMEs in the U.S.A, and it signals a new perspective as compared to the findings from different countries. There is a great distinction between U.S. and Chinese institutions which may include industrial background, regulations, and policies related to the environment. The industrial sector of China shows low concentration, competition, and the survival of public as well as private SMEs, which differentiates it from the U.S.

While China has shown distinction and improvement in socio-economic growth recently, thus, stock liberalization may boost firm innovation. Generally, it is seen that growing Stock Market Liberalization is supportive of innovation in SOEs, and the entry of investors and privatization of SOEs are two approaches that promote novelty. Such outcomes entail that privatization helps to improve the function of SOEs (Boubakri, Cosset, and Guedhami 2005; Dewenter and Malatesta 2001; Song, Storesletten, and Zilibotti 2011); Furthermore, privatization can increase the managerial incentives and improve firm performance. Such results furnish the policy implications regarding the economic reforms and privation in China.

Different studies have claimed that Stock Market Liberalization is dominating to reduce enterprise innovation and the major cause can be the influence of an external hostile takeover. Stein (1988, 1989), indicates the importance of information asymmetry between the manager and investors. While handling takeover pressure, management is interested to compromise the long-term performance (e.g. decreasing R&D investment) for short-term performance. Shleifer and Summers (1988) conclude in the same way, that managers surrender their incentives to invest in R&D in case of a hostile takeover. Chemmanur and Tian (2012) witnessed companies with greater

antitakeover initiatives experience more innovation. By the way, when stock liquidity is greater, the existence of liquid traders assists common traders to intensify the myopic response of managers (Kyle and Vila 1991).

The reduced transaction cost in stock markets can reduce technological innovation. Great stock liquidity gives great trade frequency in the case of short-term institutional investors, however, short-term profit by increasing the stress which can cause managers to assess the importance of a firm in error, hence a decrease in research and development (R&D) investment (Bushee 2001; Porter 1992). Simultaneously, in case of stress from external short-term institutional investors, the team may carry on real earnings management by slashing R&D investments (Bushee 1998). It connects with the findings of Graham, Harvey, and Rajgopal (2005) who verified the myopic attitude of compromising a firm's long-term efficiency to achieve a short-term profit target. To get a profit target to maintain the share price, the manager will reduce R&D investment and the firm's innovation level (He and Tian 2013). A reduced transaction cost from high stock liquidity may stimulate short-term institutional investors to exit the market in case of a short-term decline in firm performance caused by R&D investment. Thus, Financial managers prefer to least sell or least weigh a firm's stock rather than to collect information, contribute, and improve the corporate governance of the firm (Porter 1992), resultantly, the firm suffers from technological innovation (Chaganti and Damanpour 1991).

While looking at the capital market of China, it is clear that there are two kinds of business equity firms, which are SOEs and non-SOEs with private owners. There is a visible difference between these two firms, as the first one nonSOEs market value is small, an increase in the profitability of the takeover will reflect from the stock liquidity. Lerner, Sorensen, and Strömberg (2011) and Ferreira, Manso, and Silva (2014) endorsed that leverage buyouts can increase innovation. Further, Chemmanur and Tian (2012) seconded that innovation in firms is greater. Related findings of both studies support the opinion of lower pressure for takeover and greater innovation.

However, as the second one SEOs in China are controlled by either the local or central government. Both governments keep the firms under control for development, industrial restructure and such acquisitions take place in SOEs which take place outside investors.

3. Research Methodology

First, this modeling is tested using simple Ordinary least squares to determine the heteroscedasticity, multicollinearity, and autocorrelation issues, and afterward, the model's robustness was assessed. Next, the Reset test was used to specify the framework. Reset tests are extremely useful for determining the relevance of regression models and standard errors in linear equations created by simple Ordinary least of the dependent variable y. The effect of the Ramsey reset check on variable sampling errors is investigated. The Ramsey test is also relevant to regression functions. F - Ratio is more prevalent in the Ramsey test for such analysis, whereas Prob. Value of F - distribution is employed for assistance with null research hypotheses (Ramsey, 1969) and iterative forecasts (Just OLS). Researchers have many standard tests, such as

standardized residuals, nested beta coefficient, Cusum of a common unit, Cusum test, and each step prediction assessment, and we chose the Cusum assessment for model consistency verification because Cusum assessment visually symbolizes the tend to range of variables and sequence wise data analysis method presented by (Woodall, & Ncube, 1985). The dataset that is analyzed by a regular and simple OLS regression does have an issue with multi-collinearity and autocorrelation, therefore, the ARDL model has been used for further analysis.

A unit root analysis in the ARDL model isn't required since ARDL bound analysis has already been completed in each set irrespective of a Johansen co - integration structure. The conformational changes might be I (0), I (1), or independently approximately normally distributed, and yet no factor must be I. (2). (Enders, 2008) proposed this using both (Phillips-Peron, 1988) unit root tests and (Augmented Dickey-Fuller, 1979) tests. Unit root analyses assessed the very first variance using both interception and the slope. As advised by, Akaike information standards were employed to perform up lagged allocation (Persaran and Shin, 1999). The ARDL limits testing procedure, created by (Pesaran et al., 2001) was used to investigate co - integration tests between parameters such as SML, EI, RESL, SD, and RCI. To establish the persistent connectivity between both variables, co - integrating techniques were used as described by (Johansen and Juselius, 1990; Hansen and Phillips, 1991). Furthermore, (Bahmani and Fariditavana, 2016) primitively tried to introduce consolidated co-integration techniques to fully implement the ongoing connectedness among factors, wherein the four unique processes have always been consolidated jointly to anticipate the collaborative Johansen cointegration test among stock market liberalization, enterprise innovation, regulatory exchanges, and security laws, sustainable development and recreational investment.

3.1 Research Model:

$SML = \beta_0 + \beta_1\,EI + \beta_2\,RESL + \beta_3\,SD + \beta_4\,RCI + u$

Shown above regression model depicts the empirical model employed in this study, in which SML (Stock market liberalization) assesses the restrictions of international trade and Beta 0 represents the intercept. Meanwhile, Beta 1 presents the slope of Enterprise Innovation, Beta 2 is the slope of Regulatory exchanges and security laws, Beta 3 is the slope of sustainable development, Beta 4 is the slope of Re creational investment and u presents the error terms in this framework

3.2 Research analysis

Unit Root Estimations

Table 1: Unit Root Estimations

Sno.	Variables	Level	1st Dif.	2nd Dif.		Unit root No unit root
1	Stock market	0.0015	-	-	I	No Unit

	Liberalization				(0)	root
2	Enterprise	0.0155	-	-	I	No Unit
	Innovation				(0)	root
3	Regulatory	0.0001	-	-	I	No Unit
	Policies and				(0)	root
	Security Laws					
4	Sustainable	0.0012	-	-	I	No Unit
	development				(0)	root
5	Re conventional	0.0000	-	-	I	No Unit
	Investment				(0)	root

Table 1 illustrates how well the Dickey And fuller assessment was employed to verify the unit root cause within the framework for Stock market liberalization P-value is 0.0015, Enterprise Innovation P-value is 0.0155, Regulatory policies and security laws p-value is 0.0001, Sustainable development p-value is 0.0012, and Re conventional investment, the p-value is 0.0000. Since these most factors are just under 0.05 at a 95% error range. So in the factor, there is no unit problem.

Co- Integration Test:

Table 2: Co-integration estimations

Hypothesized No. of CE (s)	Eigen Value	Trace Statistics	0.05 Critical Value	Prob.**
None *	0.463344	153.8232	95.74355	0.0001
At most 1*	0.260543	93.56345	69.81767	0.0005
At most 2*	0.229234	64.27675	47.85465	0.0003
At most 3*	0.186767	38.93345	29.79745	0.0036
At most 4*	0.142076	18.86753	15.49423	0.0143

As per MacKinnon, there seems to be co-integration in this framework since the p-value is 0.000 and it is less than 0.05, so the h0 will dismiss the existence of co-integration within the model, as well as hypothesis 1 would be acknowledged. But also, in the long-term, this framework will be accurate since these factors have a strong relationship.

OLS Regression for Stock Market Liberalization:

Table 3: OLS estimations with SML

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Enterprise Innovation	-0.12334	0.073124	1.689634	0.0001
Regulatory Policies and Security Laws	-0.234669	0.092823	2.522234	0.0112
Sustainable development	-0.097563	0.093912	1.039412	0.3211
Re conventional Investment	-0.710235	0.100635	7.064734	0.9711
Stock market Liberalization	0.129453	0.137256	0.945054	0.3443

R-Squared	0.786615	Mean y	4.267600	
Adjusted R-squared	0.785371	variable	0.855604	
	0.14628	S.D y	-	
S.E of regression	1.674575	variable	1.135691	
S.R of regression	61.63255	Akaike info	-	
	713.1140	cr.	0.973581	
Log-likelihood	0.000000	Schwarz	-	
		Criterion	1.063429	
F-Statistic		Hannan -	0.644288	
P (F-Statistic)		Quinn Cr.		
		Durbin		
		Watson		

Table 3 illustrates the OLS estimations. After completing the stationary & co-integration tests, this framework has been run as just an OLS simple regression analysis, and R^2 is 0.7866. Stock market liberalization in the Chinese Stock market varies by 78.86% due to Enterprise innovation,

regulatory policies and security laws, sustainable development, and re-conventional investments. At a 5% significance level, Enterprise Innovation and Regulatory policies and security laws are statistically significant. Sustainable development and conventional investments are not statistically meaningful even though P values are greater than 0.05. Because adjusted R2 is much more reliable, the outcome is nearly identical to 0.7853, even though R square (Dalwai and Salehi, 2021) also supported these findings.

3.4 Residual Diagnostic:

Null Hypothesis: Homoscedasticity.

Table 4: Homoscedasticity estimations

F-Statistics	5.026336	Prob. F	0.0111
Observed R-	13.4552	(5,94)	0.0115
Sq.	79.42473	P Chi-	0.0000
Scaled		Square (5)	
Explain SS		P Chi-	
		Square (5)	

Upon operating OLS in this framework, a few factors are just not significant, and as such more analysis has to be done. Table 4 illustrates the Breusch Pagan Godfrey test estimations results. The test was used to detect a residue left and a heteroscedasticity dilemma. Inside this framework shown in Table 4, the P-value is 0.0111, which is lower than 0.05 at a 95% error range, indicating that the null hypothesis will be dismissed and that there isn't homoscedasticity, implying that there is a heteroscedasticity problem with this model.

3.5 Serial Correlation Test:

Null Hypothesis: No Serial Correlation at up to 2 lags.

Table 5: Serial correlation estimations

F-Statistics	59.38744	Prob. F	0.0000
Observed R-	55.77562	(2,92)	0.0000
Sq.	0.644288	P Chi-	
Durbin		Square (2)	
Waston			

Table 5 is employed for SM guesstimates. Since deriving the heteroskedasticity inside this framework, the Breusch Godfrey Test LM test was used to verify the serial correlation dilemma, such that P-Value is 0.0000 and it is systemic 5%, and therefore null hypothesis should be rejected and the H1 hypothesis was accepted, thus in this framework, it is also serial correlation issue at up to two lags, whereas the Durbin Watson statistic is 0.644, which is less than 2. Therefore in this model, Stock market liberalization, Enterprise innovation, regulatory policies and security laws, sustainable development, and re-conventional investments have very little and few serial correlation issues.

Coefficient Diagnostic:

Table 6: Autocorrelation estimations

Sno.	Variables	Level	Un centered VIF	Centered VIF
1	Stock market Liberalization	0.018834	105.7942	N/A
2	Enterprise Innovation	0.005346	517.9930	N/A
3	Regulatory Policies and Security Laws	0.008613	863.1875	37.94165
4	Sustainable development	0.008832	918.4599	36.42036
5	Re conventional Investment	0.010126	1048.300	35.41772

Table 6 illustrates how Stock market liberalization, Enterprise innovation, regulatory policies and security laws, sustainable development, and re-conventional investments are associated with one another. Variance Inflation parameters were employed to quantify multi-co-linearity and also the worth of Focused VIF throughout this framework. All factors are strongly linked with each other and there is excellent multi-co-linearity throughout this framework.

3.6 RAMSEY REST TEST:

Null Hypothesis: The model is specified correctly

Table 7: Model Specifications

	Value	DF	Probability
t-Statistics	0.358577	93	0.7207
F-Statistics	0.128578	(1.93)	0.7207
Likelihood ratio	0.138160	1	0.7101

F-Test Summary:	Sum of Square	DF	Mean Square
Test SSR	0.002310	1	0.002310
Restricted SSR	1.673475	94	0.017803
Unrestricted SSR	1.671164	93	0.017970

LR test Summary:			
Restricted Log L	62.61955		
Unrestricted Log L	62.68863		

Table 7 illustrates that the Ramsey Reset test was employed to determine if the framework was properly configured or not. Throughout this framework, there have been a confined SSR of 1.6734 and an unrestrained SSR by slashing one freedom degree as well as the worth is almost identical to 1.671164, the Computed f - statistic is 0.12 and the P-value is 0.7207, however, it rejects the alternative hypothesis and recognize the null hypothesis. Enterprise innovation, regulatory policies and security laws, sustainable development, and re-conventional investments properly clarified the Stock market liberalization.

3.7 Normality Test:

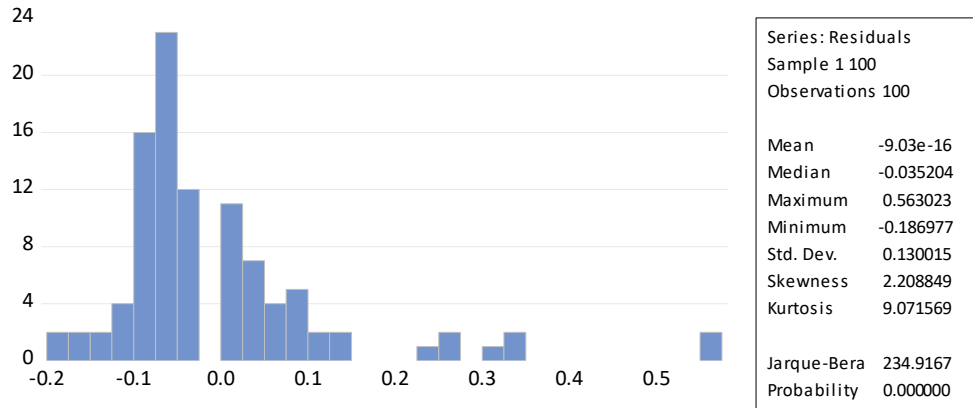**Null Hypothesis: There is no normality in this model.**

Figure 2: Normality estimations

Figure 2 indicates that the data also isn't normal; it is skewed to the right, indicating that there is no normality throughout this framework even though the P-Value is 0.000, which is less than 0.05 at a 5% critical value. So, the null hypothesis is denied. The Framework info is distributed by 0.130015, the framework is heavily skewed with such a value of 2.20849. Kurtosis is 9.0715, which reflects a very heavy tail with a leptokurtic distribution in this model, and Jarque bera is 234.9167, which reflects the fit goodness throughout the framework.
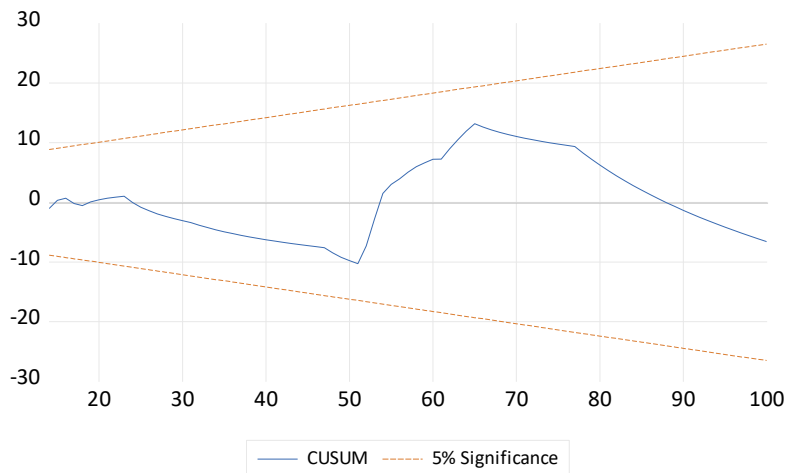
3.8 CUSUM TEST

Figure 3: Stability in parameters

Figure 3 is applied to evaluate parametric consistency. The Cusum test is implemented and operates by Iterative estimates Ordinary least only, the red line reflects the relevant information at a 5% significance level, and thus the blue color is the Cusum, therefore the line is situated between the red lines and does not manage to cross the red lines, indicating that the variables are constant in this framework.

3.10 ARDL APPROACH.

Table 8. Auto-Regressive Distributed lag estimation Test Results

The dependent variable is: Stock Market Liberalization

Maximum dependent lags: 4 (Automatic selection)

Model Selection Method: Akaike Info Criterion

Variable	Coefficient	Std. Error	t- Statistic	Prob.
Stock market liberalization (-1)	0.647776	0.104750	3.385162	0.0016
Enterprise Innovation	3.800455	2.685032	1.415438	0.1647
Enterprise Innovation (-1)	7.675623	2.968376	2.501437	0.0166
Enterprise Innovation (-2)	-9.34556	2.833791	- 3.286420	0.0021
Regulatory Policies and Security Laws	0.46677	0.024506	5.636377	0.0000
Sustainable development	0.152151	0.029111	5.226520	0.0000
Re conventional Investment	-0.144935	0.204592	- 0.708411	0.4828
C	-0.760797	0.382171	- 1.990724	0.0534
R-Square	0.608153	Adjusted R- Square	0.657080	

Table 9. ARDL Long-form and Bound test estimation Test Results

The dependent variable is: D (Stock market liberalization)

Selected Model: ARDL (1, 2, 0, 0, 0)

Conditional Error Correction Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.763797	0.382171	-1.990724	0.0534
SML (-1) *	-0.642405	0.104750	-6.161396	0.0000
Enterprise Innovation (-1) *	1.913670	3.852736	0.496445	0.6223
Regulatory Policies and Security Laws **	0.133127	0.024506	5.636377	0.0000
Sustainable development**	0.152151	0.029111	5.236520	0.0000
Re conventional Investment **	-0.142935	0.204592	-0.748411	0.4828
D (Enterprise Innovation)	3.804495	2.685032	1.435438	0.1647
D (Enterprise Innovation (-1))	9.314029	2.833791	3.286420	0.0021

Table 10. ARDL Long-form and Bound test Restricted Constant and No Trend Estimation test results

Variable	Coefficient	Std. Error	t- Statistic	Prob.
Enterprise Innovation	0.363519	5.919315	0.500652	0.0001
Regulatory Policies and Security Laws	0.313017	0.038268	5.592550	0.0000
Sustainable development	0.332745	0.048791	4.831741	0.0000
Re conventional Investment	-0.122565	0.324534	- 0.691963	0.4930
C	-1.672790	0.573688	- 2.054757	0.0465

Table 11: F-Bound Test results

Tests Statistic	Value	Significance	I (0)	I (1)
F Statistic Value	7.732357	Finite sample=50		
K	4	10%	2.373	3.32
		5%	2.8223	3.872
		1%	3.845	5.15

Table 8 illustrates the ARDL test where; Enterprise Innovation with first and second distinction hurts Stock market liberalization, and also the p-value is less than 0.05. At a 5% significance level, regulatory policies and security laws, and sustainable development are significant effects on Stock market liberalization. Only Re conventional investments is insignificant on stock market liberalization, with a p-value greater than 0.05. R^2 is greater than pretty standard Ordinary least square outcomes in this case, where Enterprise innovation, regulatory policies and security laws,

sustainable development, and re-conventional investments declare 60% variations in return on assets. The model was initially run by OLS in Table 3.

Tables 8-11 show the short- and long-run various sorts. In Table 9, the short-run model for error correction has been demonstrated using the factors of Enterprise innovation, regulatory policies, security laws, and sustainable development. They are proportionally significant in the short run, except For conventional investments, which are not.

The approximate betas again for long-run association with such a constant trend with both Stock market liberalization and are statistically significant in Table 11 because the p-value is 0.000 at 5%, and Sustainable development and stock market liberalization are also statistically significant at the 5% level. In addition moment, Enterprise innovation is not statistically significant with a stock market liberalization p-value greater than 5%, indicating that Enterprise innovation is not positive effect on stock market liberalization. Recreational investment, on the other hand, has no effect on stock market liberalization with constant trends or even no market analysis inside the framework. The beta for Enterprise innovation is 0.36, which implies that if Enterprise innovation increases by one, the Autoregressive distributed long-run model can predict that stock market liberalization in the Chinese stock market will increase by 36%. The beta for Regulatory exchanges and security laws is 0.31, which means said if regulatory exchanges and security laws increase by one, the Autoregressive distributed long-run model can predict that Stock market liberalization will increase by 31% in the Chinese Stock market. The sustainable development beta is 0.33 implies that when sustainable development increases by one point, the Autoregressive distributed long-run model can predict a 33% increase in stock market liberalization in the Chinese Stock market. The Recreational investments beta is -0.122 implying that when Re creational investments increased by one point, the Autoregressive distributed long-run model can predict a 12% decrease in stock market liberalization in the Chinese Stock market. According to the Autoregressive distributed lag and OLS models, Re creational investments have no statistically significant relationship with Stock market liberalization.

3.11 Hypotheses Testing

Table 12: Hypotheses results

Hypotheses	Prob.	Result
H1= There is a positive effect of enterprise innovation on stock market liberalization	0.0001	Supported
H2= There is a positive effect of regulatory policies and security laws on stock market liberalization	0.0000	Supported
H3= There is a positive effect of sustainable development on stock market liberalization	0.0000	Supported
H4= There is a positive effect of Re conventional Investment on stock market liberalization	0.4930	Not Supported

Table 12 illustrates the Hypotheses testing. By focusing on ARDL testing the P-values are considered for hypotheses testing. A P-value of H1 is 0.0001 hence it supports the H1 and we can say that there is a positive effect of enterprise innovation on stock market liberalization. The P-value H2 is 0.0000 hence it supports the H2 and we can say that there is a positive effect of Regulatory policies and security laws on stock market liberalization. The P-value H3 is 0.0000 hence it supports the H3 and we can say that there is a positive effect of Sustainable development on stock market liberalization. The P-value H4 is 0.4930 hence it doesn't support the H4 and we can say that there is no positive effect of Re creational investments on stock market liberalization.

4 Discussion

This paper's study results have substantial practical consequences. First, against the scenery of severe enterprise innovation and stock market liberalization around the world, our findings highlight the significance of stock market liberalization to enterprise innovation, particularly in emerging markets. Able to connect financial systems in emerging economies like China could indeed greatly enhance enterprise innovation by having allowed more mature stockholders to cooperate in corporate governance and regulatory changes. China could perhaps enhance the stock market liberalization process and seek foreign investment to manage sustainable development and nurture a sustainable future. The procedure of liberalization with a more rational financial market, laws will assist in creating a much more logical and efficient financial market. A much more multiple market mix as well as an investment company pool, trying to promote fresher development of the financial system (Zhang et al, 2021; Wang, 2021). Furthermore, decision-makers interest in Sustainable development and experts' recognition may have a major impact on regulatory exchanges and security laws. As a result, we must continue to build and enhance the financial system, particularly in developing nations. We must reduce enterprise information asymmetry as well as enhance enterprise business oversight and safety checks. Researchers must also make clear the penalties for breaking regulatory exchanges and security laws, as well as establish creational investments and also other trends to mean to increase decision-makers sustainable development for working in stock market liberalization (Feng et al., 2022). Whereas researchers demonstrate that stock market liberalization would seem to have a favorable, cause-and-effect impact on enterprise innovation, two significant provisos must be noted once perceiving or generalize our research results. Initially, and although we investigate various methods and models and run a variety of tests to confront the exogenous variables issue, enterprise innovation, regulatory exchanges & security laws and sustainable development may still start driving the favorable relationship between stock market liberalization and Re creational investment is not positively affecting on it. For instance, after one nation liberalizes its financial markets, companies may shift their patent protection approach from patent protection less significant advances to patent protection more relevant parts (Moshirian et al., 2021). ARDL and OLS suggest that Recreational Investment and Stock market liberalization have a negative impact on the Chinese Stock market (Kinuthia & Etyang, 2014). Using an ARDL and OLS approach, researchers examine the stock

market liberalization response to enterprise innovation using the Chinese stock market. We show that the stock market liberalization responded positively to Sustainable development and regulatory exchanges and security laws. Firms with more stringent financing constraints, in particular, have a higher proportion of Innovations and Sustainable projects. The above result indicated that enterprise innovation can help to reduce financial imbalances and lends support to the concept of "using liberalization to push transformation" in enterprise innovation, which is a basic policy of the Chinese financial reopening policy. Moreover, this research determined that governance structures are important, trying to imply that expediting the market-based method could be efficient in exacerbating the impact of Enterprise innovation and sustainable development. (Chari et al., 2022).

5 Conclusion

Enterprise innovation and stock market liberalization is in the global discussion nowadays around the world, in this regard, this study also indicates the importance and significance of stock market liberalization to enterprise innovation and incremental innovation which is the ultimate goal of every emerging market around the country around the globe. Thus, an emerging economy like China could indeed greatly enhance enterprise innovation by having allowed more mature stockholders to cooperate in corporate governance and regulatory changes.

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