


**ANALYZING EFFECTS OF INSTITUTIONAL QUALITY ON BANKING STABILITY:  
EVIDENCE FROM ASEAN COUNTRIES**

Nguyen Dang Hai Yen<sup>A</sup>, Le Van Son<sup>B</sup>, Dinh Tran Ngoc Huy<sup>C</sup>



ARTICLE INFO	ABSTRACT
<p><b>Article history:</b></p> <p><b>Received</b> 31 January 2023</p> <p><b>Accepted</b> 27 March 2023</p>	<p><b>Purpose:</b> The aim of this study is to examine the effect of institutional quality on bank stability using bank-level data from 2010 to 2020.</p> <p><b>Theoretical framework:</b> The study considers institutions from the perspective of governance institutions. Accordingly, the concept of government institutions is related to the country's organizational foundation in terms of governance, implying institutional quality.</p> <p><b>Design/methodology/approach:</b> The study uses GMM method and also choose the Zscore as the primary variable for bank stability.</p> <p><b>Findings:</b> The results show that institutional quality increases the stability of banks. Moreover, with the threshold model, the results show that countries with institutional quality above the threshold will increase the stability of banks. In addition, macroeconomic and banking characteristics variables such as total assets, income diversification, quality of control, inflation, and GDP growth rate have a high significance in the model.</p> <p><b>Research, Practical &amp; Social implications:</b> The study shows The study's empirical results have specific policy implications for the Government in implementing policies related to institutional quality to improve bank stability.</p> <p><b>Originality/value:</b> there are not many researches done to investigate institutional quality to improve bank stability. Moreover, from economic crisis, the matter of banking stability is among main concerns of many researches. Second, previous researches just focus on the aspect of corruption and ignore other aspects or other factors. That's why authors conduct this research.</p>
<p><b>Keywords:</b></p> <p>Institutional Quality; Bank Stability; ASEAN Countries.</p> <div data-bbox="172 931 480 1178" style="text-align: center;">  </div>	<p>Doi: <a href="https://doi.org/10.26668/businessreview/2023.v8i4.1154">https://doi.org/10.26668/businessreview/2023.v8i4.1154</a></p>

**ANALISANDO EFEITOS DA QUALIDADE INSTITUCIONAL NA ESTABILIDADE BANCÁRIA:  
EVIDÊNCIAS DE PAÍSES DA ASEAN**

**RESUMO**

**Objetivo:** O objetivo do presente estudo é analisar o efeito da qualidade institucional na estabilidade dos bancos, utilizando dados a nível dos bancos de 2010 a 2020.

**Estrutura teórica:** O estudo considera as instituições na perspectiva das instituições de governança. Assim, o conceito de instituições governamentais está relacionado com a base organizacional do país em termos de governança, implicando qualidade institucional.

**Projeto/metodologia/abordagem:** O estudo utiliza o método GMM e também escolhe o Zscore como a variável primária para a estabilidade bancária.

<sup>A</sup> PhD candidate. Banking University HCMC Ho Chi Minh city Vietnam. E-mail: [yennhdh@buh.edu.vn](mailto:yennhdh@buh.edu.vn)

Orcid: <https://orcid.org/0000-0003-1350-9810>

<sup>B</sup> Mestre. Banking University HCMC Ho Chi Minh city Vietnam. E-mail: [sonlv@buh.edu.vn](mailto:sonlv@buh.edu.vn)

Orcid: <https://orcid.org/0000-0001-5235-9443>

<sup>C</sup> MBA. Banking University HCM city Vietnam – GSIM, International University of Japan, Niigata, Japan.

E-mail: [dthuy2010@gmail.com](mailto:dthuy2010@gmail.com) Orcid: <https://orcid.org/0000-0002-2358-0699>

**Conclusões:** Os resultados mostram que a qualidade institucional aumenta a estabilidade dos bancos. Além disso, com o modelo de limiar, os resultados mostram que os países com qualidade institucional acima do limiar aumentarão a estabilidade dos bancos. Além disso, as variáveis das características macroeconômicas e bancárias, tais como o total dos ativos, a diversificação dos rendimentos, a qualidade do controle, a inflação e a taxa de crescimento do PIB, têm um significado elevado no modelo.

**Pesquisa, Prática & Implicações sociais:** O estudo mostra que os resultados empíricos do estudo têm implicações políticas específicas para o governo na implementação de políticas relacionadas à qualidade institucional para melhorar a estabilidade bancária.

**Originalidade/valor:** não há muitas pesquisas feitas para investigar a qualidade institucional para melhorar a estabilidade bancária. Além disso, devido à crise econômica, a questão da estabilidade bancária é uma das principais preocupações de muitos investigadores. Segundo, pesquisas anteriores apenas se concentram no aspecto da corrupção e ignoram outros aspectos ou outros fatores. É por isso que os autores realizam essa pesquisa.

**Palavra-chave:** Qualidade Institucional, Estabilidade Bancária, Países da ASEAN.

## ANÁLISIS DE LOS EFECTOS DE LA CALIDAD INSTITUCIONAL EN LA ESTABILIDAD BANCARIA: EVIDENCIA DE LOS PAÍSES DE LA ASEAN

### RESUMEN

**Objetivo:** El objetivo de este estudio es examinar el efecto de la calidad institucional en la estabilidad bancaria utilizando datos a nivel bancario de 2010 a 2020.

**Marco teórico:** El estudio considera a las instituciones desde la perspectiva de las instituciones de gobierno. En consecuencia, el concepto de instituciones de gobierno se relaciona con la base organizativa del país en términos de gobernabilidad, lo que implica calidad institucional.

**Diseño/metodología/enfoque:** El estudio utiliza el método GMM y también elige la Zscore como variable principal para la estabilidad bancaria.

**Resultados:** Los resultados muestran que la calidad institucional aumenta la estabilidad de los bancos. Además, con el modelo de umbrales, los resultados muestran que los países con calidad institucional por encima del umbral aumentarán la estabilidad de los bancos. Además, las características macroeconómicas y bancarias de variables como los activos totales, la diversificación de los ingresos, la calidad del control, la inflación y la tasa de crecimiento del PIB tienen una alta significancia en el modelo. El estudio muestra que los resultados empíricos del estudio tienen implicaciones políticas específicas para el gobierno en la implementación de políticas relacionadas con la calidad institucional para mejorar la estabilidad bancaria.

**Originalidad/valor:** no se han realizado muchas investigaciones para investigar la calidad institucional para mejorar la estabilidad bancaria. Además, a partir de la crisis económica, el tema de la estabilidad bancaria es una de las principales preocupaciones de muchos estudios. En segundo lugar, las investigaciones anteriores se centran en el aspecto de la corrupción e ignoran otros aspectos u otros factores. Es por ello que los autores llevan a cabo esta investigación.

**Palabras clave:** Calidad Institucional, Estabilidad Bancaria, Países ASEAN.

### INTRODUCTION

Banks play a vital role in the financial system. The stability of banks will affect the stability of the financial system in particular and the development of the economy in general (Baum, Caglayan, & Xu, 2021; Davies, Richardson, Katinaite, & Manning, 2010). Significantly, several new elements, such as institutional quality, have begun to attract the attention of many authors, especially after the global financial crisis of 2008-2009.

The literature has shown that analyzing macroeconomic factors contributing to the banking system's stability is essential for policymakers to avert a potential financial crisis (Agnello & Schuknecht, 2011; Beltratti & Stulz, 2012). However, the existing papers mainly

focus on macro elements and bank characteristics, not on new factors such as institutions. Meanwhile, institutions are also considered an essential factor affecting the stability of banks. The improvement of institutional quality can significantly impact credit risk in a bank, which affects the bank's stability. The literature has documented that better institutional quality can reduce asymmetric information and transaction costs and thus, improve resource allocation. That reduces risks in lending activities, thereby making the bank more stable (Ho & Michaely, 1988; Williamson, 2000). Yulianto & Wijaya (2023) showed that the training program and investor experience impact investor confidence. More importantly, the behavior of bank managers can vary in different contexts regarding the economic situation and conditions of their banks (Vo & Nguyen, 2014).

Freg (2020) pointed in ASEAN, there is low Z-score  $\leq 11.145$  meaning low stability in banking.

Next, the study also uses the threshold model (Hansen, 2000) to indicate the threshold of institutional quality. Thereby, examine how the impact of institutional quality will change at different institutional levels (precisely above and below the point). Mejbil et al (2023) present a self-evaluation framework, allowing strength determination for each organization and establishing those areas where additional enhancements need to be made.

In this study, we identify originality: previous researches use corruption factor (as a measure for institutional quality) affecting banking stability (negative impact) (Aseidu, 2003). On the other hand, previous researches indicated a general institutional quality matter (Nguyen, Su and Nguyen, 2018). Some other researches use less factors than our study. In our research, we use many more factors, esp. 6 factors we will mention in below sections. Also previous researches have been done for emerging markets and other countries, while our research focus on 8 countries in ASEAN context in specific period 2010-2020. Beside, our study has some policy and solution implications, esp. solutions to corruption. In order to control corruption effectively, an important measure is to make public and transparent information about the activities of enterprises and the people to prevent corruption from the side of law enforcement. At the same time, transparency of information about the operating mechanism of the government apparatus and administrative procedures must be public, clear, easy to understand and easy to implement. Encourage citizens to exercise their supervisory power to contribute to the prevention and effective fight against corruption. In particular, measures in the anti-corruption strategy must include both prevention and treatment, in order to create a three-no's environment: don't want, don't dare and can't.

To examine how institutional quality affects bank stability, we perform different model estimates such as the fixed-effect estimation method and the Generalized Time Method (GMM) on a sample of 157 banks from 8 ASEAN countries for the period 2010–2020. We find that institutional quality increases bank stability, especially, stability is highly enhanced when institutional quality is good. The result is specific when using different bank stability proxies.

## LITERATURE REVIEW

### The Conceptual Relationship Between Institutions and Bank Stability

Stability in banking is a topic of extensive discussion among regulators and researchers. The global financial crisis of 2008-2009 necessitated the development of a unified framework to avoid the risk of degrading the financial stability of the banking system and thus prevent any spread of the crisis.

Several studies have introduced the concept of financial stability in banking (also known as banking stability). However, the debate over the exact definition continues. Crockett (1997) considered stability in banks related to the absence of financial stress, leading to losses in larger banks and even bankruptcy in smaller banks. As a result, financially stable banks can meet their obligations without outside support. Micro-prudence efforts aim to reduce the probability of bankruptcy at each bank level. For example, "bank runs," which is one of the causes of bank instability (Bonin, Hasan, & Wachtel, 2014), can put the bank into bankruptcy (Diamond & Dybvig, 1983; Ngalawa, Tchana, & Viegi, 2016). Such as the "bank run" from American banks in the 1930s, the collapse of Bear Stearns in 2008, and the withdrawal of the Asian joint-stock commercial bank in Vietnam in 2003 (Đỗ, 2016). Lai (2002) argues that the fundamental cause of the financial instability of banks is a liquidity crisis due to the demand for short-term payments that exceed the reserves of highly liquid assets stemming from the loss of liquidity. The balance between support and capital when the bank's liabilities tend to be short-term while investments tend to be long-term and have low liquidity. In addition, a sudden credit tightening can also cause instability for the bank. Banks tighten and narrow credit suddenly because they are concerned that they do not have enough money to lend or because they must meet the central bank's requirements, especially when this happens at any interest rate level, which became the trigger of the financial crisis (Fратиanni & Marchionne, 2009). Thus, banking stability can be generalized as follows: "The bank's effective operation and ability to respond well to internal and external influences, both now and in the future, especially the shocks of the economy, but still maintain the ability to pay for due debts, maintain normal operations."

Regarding institutional quality, there are also many points of view. Thorstein (1912) argued that institutions are rules that define behavior or the normativeness of behavior in situations, were accepting social group members, and adherence to those rules. Rutherford (2001) argues that institutions are not merely constraints on the actions of individuals but also include ways of thinking and behavior in general. The nature of institutional change is legacy and depends on technology development. Although many studies have been conducted to determine the impact of institutional quality on a country's economic and financial development, little attention has been paid to analyzing these factors' effect on banking performance.

According to the World Economic Forum report in 2010 (WEF), institutions are seen as creating the frameworks that order, limit, and locate the enforcement mechanism of human relations. It is the consensus of people in establishing rules, order frameworks, standards, and constraints shared and agreed upon by the social community. Acemoglu, Johnson, and Robinson (2012) extend the concept of institutions in the expression of power and the ability of the state to the government to control harmful behaviors such as corruption for economic growth and social governance. Institutions are distinguished into financial institutions and political institutions.

According to (Matthews, 1986; North 1990; Williamson, 2000), institutions placed in the context of human economic behavior include three groups: the first group comprises informal institutions that exist in the conduct of people. Social behavior has norms, customs, traditions, culture, and religion. Next group comprises of rights (property)-laws-formal rules (Williamson, 2000). The third group, governance institutions, is concerned with the validity of contracts according to the respective laws and the reconciliation of contractual transactions. In this case, the concept of governance is understood as an attempt to enforce orders and thereby minimize conflicts and recognize common interests (Williamson, 2000).

In this study, we consider institutions from the perspective of governance institutions. Accordingly, the concept of government institutions is related to the country's organizational foundation in terms of governance, implying institutional quality.

### **Empirical Evidence on Institutional Quality and Bank Stability**

In this study, we identify research gap: A review of studies shows that a financial system becomes efficient when its institutions are sound and functional. The proven significant influence of different institutional quality variables on the financial system has encouraged us

to believe in the relationship between institutional quality and banking stability. However, very few studies focus on understanding the relationship between institutions and banking stability, or the studies evaluating the above relationship only consider institutions in one aspect (corruption). In this study, we determine each bank's composite institutional quality index and control variables and country-specific to examine banking stability in ASEAN countries with the hypothesis: Institutions increase bank stability in ASEAN countries. On the other hand, it is not enough if we use Z-score to measure banking stability, so authors use other indices such as NPL (Non performing loans) and adjusted Z-score.

Authors also analyze research issues based on GMM method for making judgments and analyses. And compared to existing similar studies that use factors such as their research model uses control variables such as NIM, asset quality, Bank concentration, etc. and other factors such as economic cycles, and audit committee effectiveness, and competition that affect banking stability, but this work will be different in an aspect of using many other factors to measure banking stability; moreover, our research emphasize direct impact of institutional quality on banking stability. However, there will come the novel of this work.

Overall, enhancing institutional quality brings multiple positive effects on banking operation, so, in this study, we view the impact of institutional quality on bank stability with Hypothesis 1.

**Hypothesis 1. Institutional quality has positively affected bank stability.**

## MATERIAL AND METHODOLOGY

### Data and Research methodology

**From 8 Asean countries (with 8 banks) we collect data with 1757 observations.**

**Research period: 2010-2020.**

A GMM method following (Bermpei et al., 2018; Tanasković & Jandrić, 2015; Uddin et al., 2020) as:

$$\text{Bank Stab}_{i,t} = \alpha_0 + \alpha_1 \text{INS}_{j,t} + \alpha_2 \text{B}_{ijt} + \alpha_3 \text{M}_{j,t} + \varepsilon_{i,t} \quad (1)$$

with  $i, j, t$  are the banks, country, and time indexes respectively.  $Zscore_{ijt}$  is the dependent variable (bank stability) for bank  $i$  in country  $j$  at time  $t$ .  $INS_{jt}$  is an explanatory variable.  $B_{ijt}$  includes bank-specific control variables (bank size, liquidity, diversification,

control quality...).  $M_{jt}$  are country-level macroeconomic variables (inflation, GDP growth).  $\beta$ ,  $\gamma$ , and  $\delta$  are estimated parameters of the model, and  $\varepsilon_{it}$  is the residual error term.

And threshold model proposed by (Hansen, 2000) (see eq2).

$$Y_{it} = \mu_{it} + \beta_1 X_{it} I(q_{it} \geq \theta) + \beta_2 X_{it} I(q_{it} < \theta) + \varepsilon_{it} (2)$$

$Y_{it}$  is dependent variable,  $X_{it}$  is an independent variables, and the  $q_{it}$  values are threshold variables representing institutional quality.

Regarding the bank stability of ASEAN countries, we use the Zscore index for calculation and analysis. Table 1 shows that countries' level of banking stability has fluctuated over the years. in which banks in Singapore, Malaysia, Thailand, and the Philippines have a higher level of stability than banks in the rest of the ASEAN countries (see table 1)

Table 1. The average Zscore of the banking system of countries and the average of the ASEAN region in the period 2010 - 2020

Năm	ASEAN	Campuchia	Indonesia	Lao	Malaysia	Philippines	Singapore	Thailand	Vietnam
2010	0.5961	0.4201	0.5305	0.4413	0.6796	0.7427	0.7729	0.5662	0.6579
2011	0.5540	0.4994	0.5161	0.2309	0.6074	0.6924	0.6807	0.5131	0.5444
2012	0.8565	0.7182	0.8950	0.5915	1.1484	1.0009	0.7034	0.9282	0.4384
2013	0.9154	0.9635	0.9979	0.7309	1.1836	0.9259	0.7965	0.9067	0.4339
2014	0.7924	0.8714	0.6415	0.3336	1.0874	0.6437	1.0696	0.9878	0.5430
2015	0.7691	0.7051	0.5413	0.4271	1.0458	0.7852	1.3962	0.9058	0.6379
2016	0.8745	0.5772	0.7616	1.2421	1.1053	1.0795	1.1146	0.8547	0.8349
2017	0.9306	0.6366	0.7666	1.2451	1.2451	1.1271	1.1246	0.9224	0.9039
2018	0.9232	0.7351	0.7208	0.5773	1.2119	1.1663	1.0433	1.1493	0.7484
2019	0.9093	0.7013	0.6569	0.8547	1.2171	1.0051	1.2370	1.0771	0.8932
2020	0.6247	0.5436	0.4487	0.6876	0.5982	0.6491	0.8184	0.6613	0.9651

(Source: Self-calculated and synthesized topic from Orisbank's data, 2020)

In addition, we use the credit risk index, which is measured non performing loan, as a proxy for bank credit risk to examine the impact of financial inclusion on bank stability (Al-Shboul, Maghyreh, Hassan, & Molyneux, 2020; Louhichi et al., 2020; Smaoui, Mimouni, Miniaoui, & Temimi, 2020).

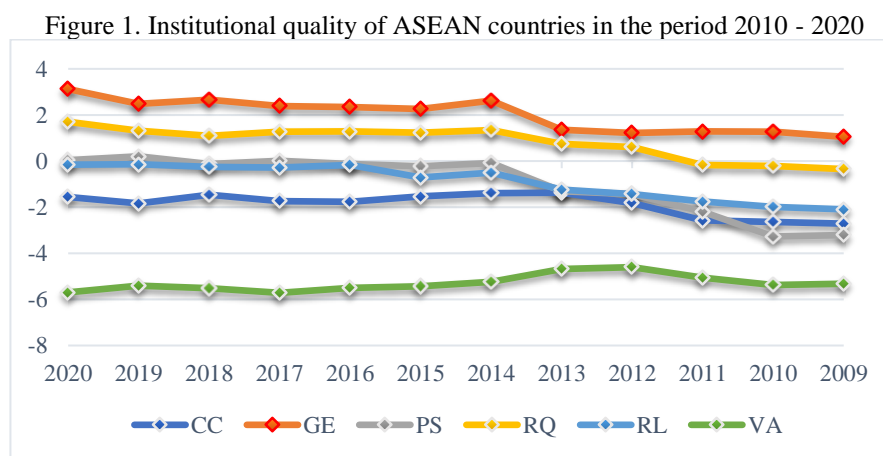
### Independent variable: Institutional quality index

The quality of institutions is determined in the most recent version of the World Bank's Global Governance Index (WGI) (Kaufmann, Kraay, & Zoido-Lobaton, 1999). WGI data recorded six dimensions reflecting institutional quality, including democratic rights (Voice and Accountability); political stability and social security (Political stability and absence of

violence/terrorism); Government Effectiveness; Regulatory Quality; the Rule of Law; and Control of Corruption. The scale of these afternoons is from -2.5 to 2.5. A higher value on this scale indicates higher institutional quality.

Like Herrera-Echeverri, Haar, and Estévez-Bretón's (2014) studies in emerging markets, this study uses the average index from the six above indexes. This will avoid the problem of dependencies on some common factors. Mean values have also been used by many previous studies such as McMullen, Ray Bagby, and Palich (2008), Wennekers, Van Wennekers, A., and Reynolds (2005).

In terms of institutional quality, ASEAN countries, on average, from 2010 to 2020, have low institutional quality (see Figure 1). The weakest index group is corruption control, the rule of law, and political stability; Indicators at the highest average level are government efficiency and regulatory quality.



(source: prepared by the authors)

### Control variables

All variables are described in Table 2.

Table 2. Variable definition and sources

Variable	Symbol	Definition	Sources
<b>Dependent variables</b>			
Default risk	ZSCORE	Natural logarithm of Z-score	Authors calculation base on Oris Bank
Normalized Z-score	ZSCORE_n	Normalized Z-scores by using $[Z - \min(Z)] / [\max(Z) - \min(Z)]$	Authors calculation base on Oris Bank
Credit risk (NPL)	NPL	The nonperforming loans to total loans. Higher values mean a riskier loan portfolio and more instability	Authors calculation base on Oris Bank
<b>Independence variables</b>			
INS	IFI	Average of 6 sub-indices including: Control of Corruption, Rule of law, Regulatory Quality,	IMF



		Government Effectiveness, Political Stability and Absence of Violence, and Voice and Accountability.	
Bank size	SIZE	Natural logarithm of bank assets	Focusbank
Loan share	LTA	Loan to total assets	Authors calculation base on Focusbank
Competitive	LER	The Lerner Index is estimated as $LER_{it} = ((P_{it} - MC_{it})/P_{it})$ . Higher value of Lerner Index indicates less bank competition	Authors calculation base on Focusbank
Provision for loan risks	LLPL	Provision ratio for loans to Total loans	Authors calculation base on Oris Bank
Quality of management	MQA	Total earning assets to Total assets	Authors calculation base on Oris Bank
Capital risk control	ETA	Equity to Total Assets ratio	Authors calculation base on Oris Bank
Diversification	DIV	Non-interest income to Total operating income	Authors calculation base on Oris Bank
Economic development	GDP	The annual growth rate of real GDP	IMF
Inflation	INF	Inflation based on the consumer price index	IMF

(source: prepared by the authors)

## RESULTS AND DISCUSSION

### Summary Statistics

Fig 2 reports that The Z-score's mean value for 8 countries is 0.7943 and ranges between -2.9666 and 3.0506, with a standard deviation of 0.5429.

Fig 2. Descriptive statistics

Variable	Obs	Mean	SD	Min	Max
ZSCORE	1,727	0.7943	0.5429	-2.9666	3.0506
LZSCORE	1571	0.8131	0.5546	-2.9666	3.0506
ZSCORE_n	1,727	0.5916	0.1767	0	1
LZSCORE_n	1570	0.6973	0.1781	0	1
NPL	1,727	0.1308	1.6767	0.0036	54.2465
LNPL	1569	0.1366	1.7514	0.0036	54.2465
INS	1,727	-0.1093	0.6821	-1.7655	1.1336
SIZE	1,727	6.7578	0.8091	3.6636	8.6921
LTA	1,727	0.6106	0.1331	0.0684	0.9344
LER	1,727	0.0860	0.1123	0.0001	1.5022
LLPL	1,727	0.0096	0.0153	-0.0757	0.2867
MQA	1,727	0.1324	0.0882	0.0078	0.9919
ETA	1,727	0.2031	0.1369	0.0034	1.4712
DIV	1,727	0.3524	0.4481	-4.6927	3.6915
INF	1,727	3.2254	2.1759	-1.1387	18.6773
GDP	1,727	4.7521	3.1756	-9.5731	14.5256

(source: prepared by the authors)

### Panel Regression Results

The study, in turn estimates the impact of institutional quality on bank stability through four models. Then is, two models combine the control variables, such as macroeconomic and banking characteristics, and finally, a complete model with a combination of all relevant variables. Fixed effect (FEM) and random effect (REM) panel data models are commonly used in studies. However, unobservable properties can be fixed or random. Therefore, the study uses the Hausman test to choose the appropriate model as FEM or REM. After the Hausman test, the appropriate model is selected as FEM, if the correlation between the noise component (country-specific) and the explanatory variable in the model is allowed. This way approaches the fixed effect. (Fixed effects) helped limit one source of endogeneity problems in the estimation model (fig 3).

Fig 3: Financial inclusion and bank stability- Fixed effect estimation

	(1)	(2)	(3)	(4)
Variable	ZSCORE	ZSCORE	ZSCORE	ZSCORE
INS	0.36432*** (0.009)	0.2236 (0.106)	0.4518*** (0.001)	0.2951** (0.033)
LTA		0.9666*** (0.000)		0.9176*** (0.000)
SIZE		0.0939*** (0.002)		0.1425*** (0.000)
LER		-0.0276 (0.887)		-0.0406 (0.832)
LLPL		-0.0433*** (0.000)		-0.0378*** (0.000)
MQA		0.222 (0.430)		0.4514 (0.121)
ETA		0.0968 (0.634)		0.2889 (0.156)
DIV		-0.001 (0.849)		-0.0028 (0.583)
INF			-0.0243*** (0.000)	-0.0109** (0.049)
GDP			0.0226*** (0.000)	0.0247*** (0.000)
cons	1.6058*** (0.000)	-1.3133*** (0.009)	0.6651*** (0.352)	-2.2107*** (0.000)
Obs	1,727	1,727	1725	1727

\*\*\*, \*\*, and \* represent statistical significance at 0.01, 0.05, and 0.1, respectively.

(source: prepared by the authors)

### Institutional Quality Threshold Effects

A threshold score of -0.8327, institutional quality positively impacts bank stability, especially countries with higher institutional quality than the threshold point will increase bank stability higher row (see table 3)

Table 3. Regression result of the dependent variable Zscore

	Zscore
Pre-threshold estimator.	1.0563*** (0.000)
Estimation coeff	1.6187*** (0.002)
Threshold	-0.8327
Lower	-1.2530
Upper	-0.8003
Prob	0.050

\*\*\*, \*\*, and\* indicate statistical significance at the 1%, 5%, and 10% levels respectively.  
(source: prepared by the authors)

### Robustness Tests: Dynamic panel model

The results of the SYS-GMM model with the independent variable IFI and the dependent variables Zscore, Zscore\_n, and NPL, respectively, are presented in Table 4.

Table 4. Institutional quality – Bank stability: The dynamic panel system GMM estimation results

	Z-score	Z_n	NPL
Lagged dependent	0.2296*** (0.000)	0.3442*** (0.000)	0.3669*** (0.000)
INS	0.1882** (0.003)	0.1172*** (0.000)	-2.8898*** (0.007)
LTA	3.2134*** (0.000)	0.7455*** (0.000)	-21.2243*** (0.009)
SIZE	0.4577*** (0.000)	0.1311*** (0.000)	-2.4762* (0.076)
LER	-0.3301 (0.128)	0.0011 (0.985)	-5.3704** (0.256)
LLPL	-0.1184*** (0.002)	-0.0255*** (0.003)	7.1058*** (0.000)
MQA	2.2907** (0.037)	0.3606* (0.096)	-4.0987 (0.797)
ETA	2.8052*** (0.008)	0.9414*** (0.001)	-31.4262** (0.015)
DIV	-0.6853** (0.022)	-0.2358*** (0.007)	-0.0362*** (0.965)
INF	-0.0209*** (0.348)	-0.0070 (0.220)	-3.9314 *** (0.000)
GDP	0.0243*** (0.003)	0.0063*** (0.002)	0.6030*** (0.000)
_cons	-4.9689*** (0.000)	-1.0780*** (0.001)	40.7658*** (0.005)
Numbers of obs	1,570	1,569	1,568
Numbers of groups	157	157	157

Numbers of instruments	31	29	18
AR (2)	0.276	0.765	0.242
Sargan	1.000	0.900	0.991
Hasen	0.333	0.110	0.393

\*\*\*, \*\*, and\* indicate statistical significance at the 1%, 5%, and 10% levels respectively.  
(source: prepared by the authors)

Regression results in Table 6 show that good institutional quality is significant in reducing bad debt, which positively increases bank stability. This result is consistent with the studies of (Uddin et al., 2020). This means increasing government effectiveness, controlling corruption, and improving agents' confidence and adherence to the rule of law to reduce bank risk exposure and improve banks' stability.

In addition to the institutional quality variable, the results show that the bank characteristics variables also influence the stability of the banks. Specifically, capital risk control, total assets, loans, and Quality of management positively affect bank stability.

## CONCLUSION

Bank stability has become a significant concern in many countries and is of interest to many scholars, especially after the 2008 economic crisis. Research results show that institutional quality positively impacts the stability of banks in ASEAN countries. However, the institutional quality in countries in ASEAN is still low, so to increase banking stability, the study proposes the following policies:

Generally, governments in ASEAN countries should implement more decisive institutional reforms to improve institutional quality. Furthermore, the government must take action to protect customers and the users of financial services, including a strict legal system on regulations related to banking activities and sanctions that must be clear. There are obvious signs of violation in transactions... Thereby increasing the bank's stability. We suggest specific solutions and implications:

Firstly, design the supervision mechanism and institution according to the principle that state power from the central to local levels must be controlled and supervised. We are completing the supervision and social criticism mechanism by creating and perfecting the legal corridor and mechanism to exercise the people's democratic rights. The independent judicial exercise, especially the adjudication work, must comply with the principle of independence, only obeying the law.

Second, enhancing transparency and accountability of officials and civil servants. Ensure the relationship between the state and citizens, in which the people participate widely in the policymaking process, and hold officials and civil servants accountable for the honesty and results of public service activities. It is necessary to establish an effective mechanism to enforce the people's right to access information to expand the space and opportunity for the public to participate in the affairs of the state substantively. The state also needs to consider improving the operating environment for social organizations representing the people's voice.

Third, improve the quality of the state administrative apparatus through the organization of a lean and efficient device, downsizing the payroll, and applying information technology to state management. Develop a mechanism for selecting, appreciating, and employing talented people in state agencies.

Fourth, to further expand and ensure citizens' property rights through the construction of a reliable legal system, freedom of contract, freedom to do business and competition, and a reliable mechanism to help resolve the issue. Dispute resolution and a transparent government, any government intervention in the economy are predictable and predictable.

Five is the solution to corruption. In particular, measures in the anti-corruption strategy must include prevention and treatment to create a three-no environment: don't want, don't dare, and can't. Specifically:

- Don't want to: educate employees on ethics and culture, pay them well, and make them no longer want to engage in corrupt actions
- Do not dare: the law is strict and strictly enforced, and the social value system promotes so that people do not dare to commit corrupt acts. Because if discovered, it will have to pay a hefty price in terms of prestige, money, and civil liberties.
- Impossible: establish strict, transparent, open institutions and procedures, have a system of corporate supervision and public scrutiny, officials cannot commit corrupt acts.

Finally, clarity in regulations on the content and scope of property rights and the fair and strict enforcement of rules will contribute to reducing risks and stimulating long-term investment activities, increasing transaction volume and density, and reducing transaction costs.

Secondly, banks must comply with regulations in banking activities such as credit size and bank capital size. More importantly, banks need to have an apparent supervision and management mechanism to limit negative impacts on banks activity. Only changes in

management can ensure the bank's stability. Finally, governments need to ensure stable economic growth and control inflation. When the macroeconomic environment is favorable, the economy develops, and inflation is controlled, leading to dynamism and development of banking services, making it a more stable bank.

However, there are more than 400 banks in ASEAN countries, but the data collection process ensures sufficient data and high accuracy; the study only collected 157 banks. Thus, in the coming time, the study will complete the data set and expand the research sample to consolidate the study's results has found.

Research limitation and suggestions for future work

Authors may expand study for detailed analysis of each case such as Vietnam banks and expand model for developing nations.

Moreover, there are some aspects need to be analyze more for future research work such as: The management process is still governed by multiple goals, such as controlling inflation and ensuring support for economic growth. Besides, the process of pursuing the goal of stabilizing the value of money and controlling inflation of the SBV is still having negative impacts of many factors such as: The roadmap to adjust the prices of goods under the control of the State. ; public investment policies are still scattered and ineffective; increasing public debt puts more pressure on monetary policy; challenges from global financial risks, actively devaluation of currencies of central banks of other countries...

### **ACKNOWLEDGEMENT**

Thank you editors, friends to assist this publication

### **CONFLICTS OF INTEREST**

There is no conflict of interest

### **REFERENCES**

Acemoglu, D., Johnson, S., & Robinson, J. A. (2012). The colonial origins of comparative development: An empirical investigation: Reply. *American Economic Review*, 102(6), 3077-3110. doi:DOI: 10.1257/aer.91.5.1369

- Agnello, L., & Schuknecht, L. (2011). Booms and busts in housing markets: Determinants and implications. *Journal of Housing Economics*, 20(3), 171-190. doi:<https://doi.org/10.1016/j.jhe.2011.04.001>
- Ahamed, M. M., & Mallick, S. (2017). Does regulatory forbearance matter for bank stability? Evidence from creditors' perspective. *Journal of Financial Stability*, 28, 163-180. doi:<https://doi.org/10.1016/j.jfs.2017.01.001>
- Al-Shboul, M., Maghyereh, A., Hassan, A., & Molyneux, P. (2020). Political risk and bank stability in the Middle East and North Africa region. *Pacific-Basin Finance Journal*, 60, 101291. doi:<https://doi.org/10.1016/j.pacfin.2020.101291>
- Albaity, M., Mallek, R. S., & Noman, A. H. M. (2019). Competition and bank stability in the MENA region: The moderating effect of Islamic versus conventional banks. *Emerging Markets Review*, 38, 310-325. doi:<https://doi.org/10.1016/j.ememar.2019.01.003>
- Ashraf, B. N. (2017). Political institutions and bank risk-taking behavior. *Journal of Financial Stability*, 29, 13-35. doi:<https://doi.org/10.1016/j.jfs.2017.01.004>
- Asiedu, E. (2003). Foreign direct investment to Africa: The role of government policy, governance and political instability. *Department of Economics, University of Kansas*.
- Ayaydin, H., & Karakaya, A. (2014). The effect of bank capital on profitability and risk in Turkish banking. *International Journal of Business and Social Science*, 5(1).
- Baele, L., Jonghe, O., & Vander Vennet, R. (2007). Does the stock market value bank diversification? *Journal of banking & Finance*, 31(7), 1999-2023.
- Bai, G., & Elyasiani, E. (2013). Bank stability and managerial compensation. *Journal of banking & Finance*, 37(3), 799-813. doi:<https://doi.org/10.1016/j.jbankfin.2012.10.026>
- Baum, C. F., Caglayan, M., & Xu, B. (2021). The impact of uncertainty on financial institutions: A cross-country study. *International Journal of Finance & Economics*, 26(3), 3719-3739. doi:<https://doi.org/10.1002/ijfe.1983>
- Beck, T., De Jonghe, O., & Schepens, G. (2013). Bank competition and stability: Cross-country heterogeneity. *Journal of financial Intermediation*, 22(2), 218-244. doi:<https://doi.org/10.1016/j.jfi.2012.07.001>
- Bektas, E., Elbadri, M., & Molyneux, P. (2022). Do institutions, religion and the economic cycle impact bank stability in dual banking systems?. *Journal of International Financial Management & Accounting*, 33(2). <https://doi.org/10.1111/jifm.12146>
- Beltratti, A., & Stulz, R. M. (2012). The credit crisis around the globe: Why did some banks perform better? *Journal of financial economics*, 105(1), 1-17.
- Berger, A. N., & DeYoung, R. (1997). Problem loans and cost efficiency in commercial banks. *Journal of banking & Finance*, 21(6), 849-870. doi:[https://doi.org/10.1016/S0378-4266\(97\)00003-4](https://doi.org/10.1016/S0378-4266(97)00003-4)
- Bermpei, T., Kalyvas, A., & Nguyen, T. C. (2018). Does institutional quality condition the effect of bank regulations and supervision on bank stability? Evidence from emerging and

developing economies. *International Review of Financial Analysis*, 59, 255-275. doi:<https://doi.org/10.1016/j.irfa.2018.06.002>

Bhargava, V. (2005). *The cancer of corruption*. Paper presented at the World bank global issues seminar series.

Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of econometrics*, 87(1), 115-143. doi:[https://doi.org/10.1016/S0304-4076\(98\)00009-8](https://doi.org/10.1016/S0304-4076(98)00009-8)

Bonin, J., Hasan, I., & Wachtel, P. (2014). Banking in transition countries.

BTT Hang et al. (2020). [Current situation of Bitcoin management and use: perspectives from the world and recommendations for vietnam](#), *Management* 24 (2)

Borio, C. (2003). Towards a macroprudential framework for financial supervision and regulation? *CESifo Economic Studies*, 49(2), 181-215. doi:<https://doi.org/10.1093/cesifo/49.2.181>

Boulanouar, Z., Alqahtani, F., & Hamdi, B. (2021). Bank ownership, institutional quality and financial stability: evidence from the GCC region. *Pacific-Basin Finance Journal*, 66, 101510.

Chen, M., Jeon, B. N., Wang, R., & Wu, J. (2015). Corruption and bank risk-taking: Evidence from emerging economies. *Emerging Markets Review*, 24, 122-148. doi:<https://doi.org/10.1016/j.ememar.2015.05.009>

Cohen, K. J., Hawawini, G. A., Maier, S. F., Schwartz, R. A., & Whitcomb, D. K. (1983). Friction in the trading process and the estimation of systematic risk. *Journal of financial economics*, 12(2), 263-278. doi:[https://doi.org/10.1016/0304-405X\(83\)90038-7](https://doi.org/10.1016/0304-405X(83)90038-7)

Crockett, A. J. E. R.-F. R. B. o. K. C. (1997). Why is financial stability a goal of public policy? , 82, 5-22.

Dash, M. K., & Kabra, G. (2010). The determinants of non-performing assets in Indian commercial bank: An econometric study. *Middle Eastern Finance and Economics*, 7(2), 94-106.

Davies, R., Richardson, P., Katinaite, V., & Manning, M. J. (2010). Evolution of the UK banking system. *Bank of England Quarterly Bulletin*, Q4.

DT Tinh et al. 92021). [Doing Business Research and Teaching Methodology for Undergraduate, Postgraduate and Doctoral Students-Case in Various Markets Including Vietnam](#), *Elementary education Online* 20 (1)

Demirgüç-Kunt, A., & Detragiache, E. (2005). Cross-country empirical studies of systemic bank distress: a survey. *National Institute Economic Review*, 192, 68-83.

Demirguc-Kunt, A., & Huizinga, H. (2010). *Are banks too big to fail or too big to save? International evidence from equity prices and CDS spreads*: The World Bank.



Diaby, A., & Sylwester, K. (2015). Corruption and market competition: Evidence from post-communist countries. *World Development*, 66, 487-499. doi:<https://doi.org/10.1016/j.worlddev.2014.09.003>

Diaconu, R.-I., & Oanea, D.-C. (2014). The main determinants of bank's stability. Evidence from Romanian banking sector. *Procedia Economics Finance*, 16, 329-335.

DT Tinh et al. (2021). [Doing Business Research and Teaching Methodology for Undergraduate, Postgraduate and Doctoral Students-Case in Various Markets Including Vietnam](#), Elementary education Online 20 (1)

D Thi Ngu, DT Huong, DTN Huy, PT Thanh, ES Dongul. (2021). [Language teaching application to English students at master's grade levels on history and macroeconomic-banking management courses in universities and colleges](#), Journal of Language and Linguistic Studies 17 (3), [1457]-1468

DTN Huy, DTN Hien. (2010). [The backbone of European corporate governance standards after financial crisis, corporate scandals and manipulation](#), Economic and business review 12 (4)

DTN Huy, NN Thach, NT Hoa, NT Dung. (2021). [Using Internet Data for Evaluating Market Risk During Period 2011-2020-A Case of Eximbank in Vietnam in the Concept of Sustainable Development](#), Management, 18

DTN Huy. (2015). [The critical analysis of limited south asian corporate governance standards after financial crisis](#), International Journal for Quality Research 9 (4)

DTN Huy, BTT Loan, TA Pham. (2020). [Impact of selected factors on stock price: a case study of Vietcombank in Vietnam](#), Entrepreneurship and Sustainability Issues 7 (4)

DTN Huy, PM Dat, PT Anh. (2020). [BUILDING AN ECONOMETRIC MODEL OF SELECTED FACTORS'IMPACT ON STOCK PRICE: A CASE STUDY](#), Journal of Security & Sustainability Issues 9

DTN Huy, NT Thuy, PM Dat, VT Dung, PT Manh. (2020). [A set of international OECD and ICGN Corporate Governance Standards after financial crisis, Corporate scandals and manipulation-applications for Nigeria and implications for Developing countries](#), Management 24 (1), 56-80

Diamond, D. W., & Dybvig, P. H. (1983). Bank runs, deposit insurance, and liquidity. *Journal of political economy*, 91(3), 401-419.

DTN Huy, NN Thach, NT Hoa, NT Dung. (2021). [Using Internet Data for Evaluating Market Risk During Period 2011-2020-A Case of Eximbank in Vietnam in the Concept of Sustainable Development](#), Webology, 18

Đỗ, T. A. T. (2016). Lý Thuyết Khủng hoảng tài chính. Retrieved from <https://fsppm.fulbright.edu.vn/>

DTN Huy, V ANH, NN Thach, LD Hac, TT Anh, HT Hanh. (2021). [Weighted Beta CAPM Based On Bank Market Value And Meanings of Financial Data Transparency-Case of 7 Big](#)

Listed Commercial Banks In Vietnam, Journal of Contemporary Issues in Business and Government| Vol 27 (2),

Fang, Y., Hasan, I., & Marton, K. (2014). Institutional development and bank stability: Evidence from transition countries. *Journal of banking & Finance*, 39, 160-176. doi:<https://doi.org/10.1016/j.jbankfin.2013.11.003>

Flamini, V., McDonald, C. A., & Schumacher, L. B. (2009). The determinants of commercial bank profitability in Sub-Saharan Africa. *IMF Working Papers*, 2009(015).

Fратиanni, M. U., & Marchionne, F. (2009). The role of banks in the subprime financial crisis. *Review of Economic Conditions in Italy*, 1.

Goetz, M. R. (2018). Competition and bank stability. *Journal of financial Intermediation*, 35, 57-69. doi:<https://doi.org/10.1016/j.jfi.2017.06.001>

G Shen, J Manafian, SM Zia, DTN Huy, TH Le. (2021). The New Solitary Solutions to the Time-Fractional Coupled Jaulent–Miodek Equation, Discrete Dynamics in Nature and Society 2021

Hansen, B. E. (2000). Sample splitting and threshold estimation. *Econometrica*, 68(3), 575-603. doi:<https://doi.org/10.1111/1468-0262.00124>

Hac LD et al. (2021). Enhancing risk management culture for sustainable growth of Asia commercial bank-ACB in Vietnam under mixed effects of macro factors, Entrepreneurship and Sustainability Issues 8 (3),

Ho , T. S., & Michaely, R. (1988). Information quality and market efficiency. *Journal of Financial and Quantitative Analysis*, 23(1), 53-70.

Hoque, H., Andriosopoulos, D., Andriosopoulos, K., & Douady, R. (2015). Bank regulation, risk and return: Evidence from the credit and sovereign debt crises. *Journal of banking & Finance*, 50, 455-474. doi:<https://doi.org/10.1016/j.jbankfin.2014.06.003>

Hosono, K. (2005). *Market discipline to banks in Indonesia, the Republic of Korea, Malaysia and Thailand*. Paper presented at the Proceeding ADBI Conference.

HT Hanh et al. (2020). The quantified analysis of causes of market risk fluctuations in the group of construction, real estate and construction material companies in Vietnam during and after the crisis, WSEAS Transactions on Environment and Development 16, 189-197

Houston, J. F., Lin, C., Lin, P., & Ma, Y. (2010). Creditor rights, information sharing, and bank risk taking. *Journal of financial economics*, 96(3), 485-512. doi:<https://doi.org/10.1016/j.jfineco.2010.02.008>

Jude, C., & Levieuge, G. (2015). Growth effect of FDI in developing economies: the role of institutional quality. doi:<https://dx.doi.org/10.2139/ssrn.2620698>

Khemraj, T., & Pasha, S. (2009). The determinants of non-performing loans: an econometric case study of Guyana.

- Kosmidou, K. (2008). The determinants of banks' profits in Greece during the period of EU financial integration. *Managerial finance*. doi:<https://doi.org/10.1108/03074350810848036>
- Laeven, L., & Levine, R. (2009). Bank governance, regulation and risk taking. *Journal of financial economics*, 93(2), 259-275.
- Lai, A. (2002). Modelling financial instability: a survey of the literature.
- Lalountas, D. A., Manolas, G. A., & Vavouras, I. S. (2011). Corruption, globalization and development: How are these three phenomena related? *Journal of Policy Modeling*, 33(4), 636-648. doi:<https://doi.org/10.1016/j.jpolmod.2011.02.001>
- Lepetit, L., Nys, E., Rous, P., & Tarazi, A. (2008). Bank income structure and risk: An empirical analysis of European banks. *Journal of banking Finance*, 32(8), 1452-1467.
- Lindset, S., Lund, A.-C., & Persson, S.-A. (2014). Credit risk and asymmetric information: A simplified approach. *Journal of Economic Dynamics and Control*, 39, 98-112. doi:<https://doi.org/10.1016/j.jedc.2013.11.006>
- LT Hue et al. (2020). [Factors Affecting the Access to Bank Credit of SMEs in Northeastern Region, Vietnam](#), *International Journal of Entrepreneurship* 24, 1-12
- Louhichi, A., Louati, S., & Boujelbene, Y. (2020). The regulations–risk taking nexus under competitive pressure: What about the islamic banking system? *Research in International Business and Finance*, 51, 101074. doi:<https://doi.org/10.1016/j.ribaf.2019.101074>
- Matthews, R. C. (1986). The economics of institutions and the sources of growth. *The Economic Journal*, 96(384), 903-918. doi:<https://doi.org/10.2307/2233164>
- Mauro, P. (1995). Corruption and growth. *The quarterly journal of economics*, 110(3), 681-712. doi:<https://doi.org/10.2307/2946696>
- Mejbel, M. K., Abdullah, S. A., & Hussein, I. A. (2023). Evaluating The Performance of People in the Central Bank of Iraq (Cbi) According to the European Excellence Model. *International Journal of Professional Business Review*, 8(2), e0657. <https://doi.org/10.26668/businessreview/2023.v8i2.657>
- Méndez, F., & Sepúlveda, F. (2006). Corruption, growth and political regimes: Cross country evidence. *European journal of political economy*, 22(1), 82-98. doi:<https://doi.org/10.1016/j.ejpoleco.2005.04.005>
- Miller, S. (2015). Information and default in consumer credit markets: Evidence from a natural experiment. *Journal of financial Intermediation*, 24(1), 45-70. doi:<https://doi.org/10.1016/j.jfi.2014.06.003>
- Mongid, A. (2007). *The political openness of banking system, political governance, law enforcement and cost of banking crisis: Indonesia in the international perspective*. Paper presented at the 32nd Annual Conference of the Federation of ASEAN Economist Association FAEA, Bangkok.

Neyer, U. (2004). Asymmetric information in credit markets—implications for the transition in Eastern Germany. *Economic Systems*, 28(1), 61-78.  
doi:<https://doi.org/10.1016/j.ecosys.2003.11.004>

Nguyen, Q. K. (2022). Audit committee structure, institutional quality, and bank stability: evidence from ASEAN countries. *Finance Research Letters*, 46.  
<https://doi.org/10.1016/j.frl.2021.102369>

Ngalawa, H., Tchana, F. T., & Viegi, N. (2016). Banking instability and deposit insurance: The role of moral hazard. *Journal of Applied Economics*, 19(2), 323-350.  
doi:[https://doi.org/10.1016/S1514-0326\(16\)30013-7](https://doi.org/10.1016/S1514-0326(16)30013-7)

ND Trung, DTN Huy, TH Le. (2021). [IoT, machine learning \(ML\), AI and digital transformation affects various industries-principles and cybersecurity risks solutions](#), Management 18, 10.14704

NN Thach, DTN Huy. (2021). [Solutions for Enhancing Risk Management Mechanism of Vietnam Bank System-Case of Listed Banks](#), Revista Geintec-Gestao Inovacao E Tecnologias 11 (2), 315-326

ND Trung et al. (2021). [IoT, Machine Learning \(ML\), AI and Digital Transformation Affects Various Industries-Principles and Cybersecurity Risks Solutions](#), Webology, 18

Nguyen , C. P., Su, T. D., & Nguyen, T. V. H. (2018). Institutional quality and economic growth: the case of emerging economies. *Theoretical Economics Letters*, 8(11), 1943.

North , D. C. (1990). *Institutions, institutional change and economic performance*: Cambridge university press.

NTT Phuong et al. (2020). [The evaluation of impacts of a seven factor model on nvb stock price in commercial banking industry in vietnam-and roles of Disclosure of Accounting Policy In Risk Management](#), International Journal of Entrepreneurship 24, 1-13

NT Hoang, DTN Huy. (2021). [Cost-benefit Analysis of FDI: FDI Barriers and Firm Internal Capabilities](#), Revista Geintec-Gestao Inovacao E Tecnologias 11 (3), 1371-1381

North, D. C. (1991). Institutions. *Journal of economic Perspectives*, 5(1), 97-112.

NN Thach et al. (2020). [Measuring the Volatility of Market Risk of Vietnam Banking Industry After the Low Inflation Period 2015–2017](#), Review of Pacific Basin Financial Markets and Policies 23 (04)

NN Thach, DTN Huy. (2021). [Solutions for Enhancing Risk Management Mechanism of Vietnam Bank System-Case of Listed Banks](#), Revista Geintec-Gestao Inovacao E Tecnologias 11 (2), 315-326

NN Thach, HT Hanh, DTN Huy, QN Vu. (2021). [technology quality management of the industry 4.0 and cybersecurity risk management on current banking activities in emerging markets-the case in Vietnam](#), International Journal for Quality Research 15 (3)

- Park, J. (2012). Corruption, soundness of the banking sector, and economic growth: A cross-country study. *Journal of International Money and Finance*, 31(5), 907-929. doi:<https://doi.org/10.1016/j.jimonfin.2011.07.007>
- Qu, W., Wongchoti, U., Wu, F., & Chen, Y. (2018). Does information asymmetry lead to higher debt financing? Evidence from China during the NTS Reform period. *Journal of Asian Business and Economic Studies*.
- Rutherford, M. (2001). Institutional economics: then and now. *Journal of Economic Perspectives*, 15(3), 173-194. doi:DOI: 10.1257/jep.15.3.173
- Salas, V., & Saurina, J. (2002). Credit risk in two institutional regimes: Spanish commercial and savings banks. *Journal of Financial Services Research*, 22(3), 203-224. doi:<https://doi.org/10.1023/A:1019781109676>
- Scherpf, A. (2015). Asian Demographic Trends: A Threat to Growth. *Global Risks Insight*, 22.
- Shim, J. (2019). Loan portfolio diversification, market structure and bank stability. *Journal of Banking & Finance*, 104, 103-115. doi:<https://doi.org/10.1016/j.jbankfin.2019.04.006>
- Smaoui, H., Mimouni, K., Miniaoui, H., & Temimi, A. (2020). Funding liquidity risk and banks' risk-taking: Evidence from Islamic and conventional banks. *Pacific-Basin Finance Journal*, 64, 101436. doi:<https://doi.org/10.1016/j.pacfin.2020.101436>
- P Van Tuan et al. (2020). [Impacts of Competitor Selection Strategy on Firm Risk-Case in Vietnam Investment and Finance Industry](#), Revista Geintec-Gestao Inovacao E Tecnologias 11 (3), 127-135
- Tanasković, S., & Jandrić, M. (2015). Macroeconomic and institutional determinants of non-performing loans. *Journal of central banking Theory and practice*, 4(1), 47-62. doi:doi:10.1515/jcbtp-2015-0004
- Tandelilin, E., & Hanafi, M. M. (2021). DOES INSTITUTIONAL QUALITY MATTER IN THE RELATIONSHIP BETWEEN COMPETITION AND BANK STABILITY? EVIDENCE FROM ASIA. *Journal of Indonesian Economy & Business*, 36(3).
- Thorstein, V. (1912). *The theory of the leisure class: An economic study of institutions*: BW Huebsch.
- Toader, T., Onofrei, M., Popescu, A.-I., & Andrieș, A. M. (2018). Corruption and banking stability: Evidence from emerging economies. *Emerging Markets Finance and Trade*, 54(3), 591-617. doi:<https://doi.org/10.1080/1540496X.2017.1411257>
- TTH Ha et al. (2021). [Modern corporate governance standards and role of auditing-cases in some Western European countries after financial crisis, corporate scandals and manipulation](#), International Journal of Entrepreneurship 23 (1S)
- Uddin, A., Chowdhury, M. A. F., Sajib, S. D., & Masih, M. (2020). Revisiting the impact of institutional quality on post-GFC bank risk-taking: Evidence from emerging countries. *Emerging Markets Review*, 42, 100659. doi:doi:10.1016/j.ememar.2019.100659

Vo , X. V., & Nguyen, P. C. (2014). Monetary policy and bank credit risk in Vietnam pre and post Global Financial Crisis *Risk Management Post Financial Crisis: A Period of Monetary Easing*: Emerald Group Publishing Limited.

Wei, S.-J. (1999). Corruption in economic development: Beneficial grease, minor annoyance, or major obstacle? *Minor Annoyance, or Major Obstacle*.

Weill, L. (2011). Does corruption hamper bank lending? Macro and micro evidence. *Empirical Economics*, 41(1), 25-42.

Williamson, O. E. (2000). The new institutional economics: taking stock, looking ahead. *Journal of economic literature*, 38(3), 595-613.

Wu, J., Yao, Y., Chen, M., & Jeon, B. N. (2020). Economic uncertainty and bank risk: Evidence from emerging economies. *Journal of International Financial Markets, Institutions and Money*, 68, 101242. doi:<https://doi.org/10.1016/j.intfin.2020.101242>

Yulianto, A., & Wijaya, A. P. (2023). Disposition Effect: Does Investor Confidence Matter? Examining Service From Securities Brokerages. *International Journal of Professional Business Review*, 8(2), e03184. <https://doi.org/10.26668/businessreview/2023.v8i2.1384>

Zheng, X., Ghoul, S., Guedhami, O., & Kwok, C. C. (2013). Collectivism and corruption in bank lending. *Journal of International Business Studies*, 44(4), 363-390.