Thammasat Review of Economic and Social Policy
Volume 7, Number 1, January – June 2021

Invited Article

Synergizing Economic Growth and Financial Stability: The Role of Banking Institutional Setup in Thailand[1]

Somprawin Manprasert
Executive Vice President Head of Division,
Research Division,
Bank of Ayudhya PCL, Thailand
somprawin.manprasert@krungsri.com

Kongphop Wongkaew
Ph.D. Candidate,
Graduate School of Economics,
Waseda University, Japan
wo.kongphop@toki.waseda.jp

[1] All opinions expressed are personal and do not necessarily represent the view of Bank of Ayudhya PCL and Waseda University. The authors are grateful to Professor Euamporn Phijaisanit for her valuable comments and suggestions.

ABSTRACT

The Thai banking system has contributed less to economic growth and has become more detached from the real economy in recent years. We find that Thailand's bank credit market has been distorted, with banks providing restricted corporate credit for new establishments and investments, particularly for SMEs. This article discusses the underlying reasons for low corporate lending and a distorted credit market. We demonstrate that the Thai corporate credit market has been constrained by inadequate credit supply for more than three-fourths of the time between 2010 and the third quarter of 2020. Additionally, we find that loan approval decisions have been substantially weighted toward risk. Then, we examine the link between credit inclusion and credit risk, highlighting the opportunity for the Thai banking system to benefit from the synergy between credit inclusion and risk management. The result implies that the Thai banking system should put more emphasis on credit inclusion. Finally, we seek to give remedies via the lens of new institutional economics from a historical viewpoint. That is, the regulator must prevent overprotection and encourage more competition within the banking industry.

Keywords: Economic Growth, Financial Stability, Credit, Banks, New Institutional Economics

JEL Classification: B52, E51, E58, G21

1. Introduction and Stylized Facts

Well-functioning financial systems are important in achieving sustained economic growth. They play a crucial role in channeling household savings into the corporate sector and allocating investment funds among firms.

Toshihiko Fukui
The 29th Governor of the Bank of Japan and a former director of the Bank for International Settlements (BIS)[2]

The financial system has played prominent roles in supporting and sustaining economic growth across the world. The quote mentioned above establishes the fundamental function of the financial system: to intermediate and help allocate financial resources. Financial intermediaries and financial markets possess specific technology and expertise to overcome information asymmetry between lenders and borrowers. As the world economy has increasingly matured and connected, the financial system has also provided instruments and services that help mitigate the detrimental consequences of the unprecedented economic shocks and their propagations.

But does the empirics suggest so? It seems not the case for the Thai economy. Table 1 indicates that, since the end of the 2008-2009 Global Financial Crisis (GFC), the Thai financial system has exhibited more solid and steady growth than the real sector, and this gap has been growing more pronounced over time. The recent COVID-19 pandemic confirmed our observations as Figure 1 indicates that the Thai financial sector has been much more resilient to the pandemic shocks than the

[2] Opening Speech at the 11th International Conference sponsored by the Institute for Monetary and Economic Studies, Bank of Japan, on July 5, 2004

real economy. This evidence implies that the Thai financial system has increasingly decoupled from the real economy and has contributed less to economic growth.

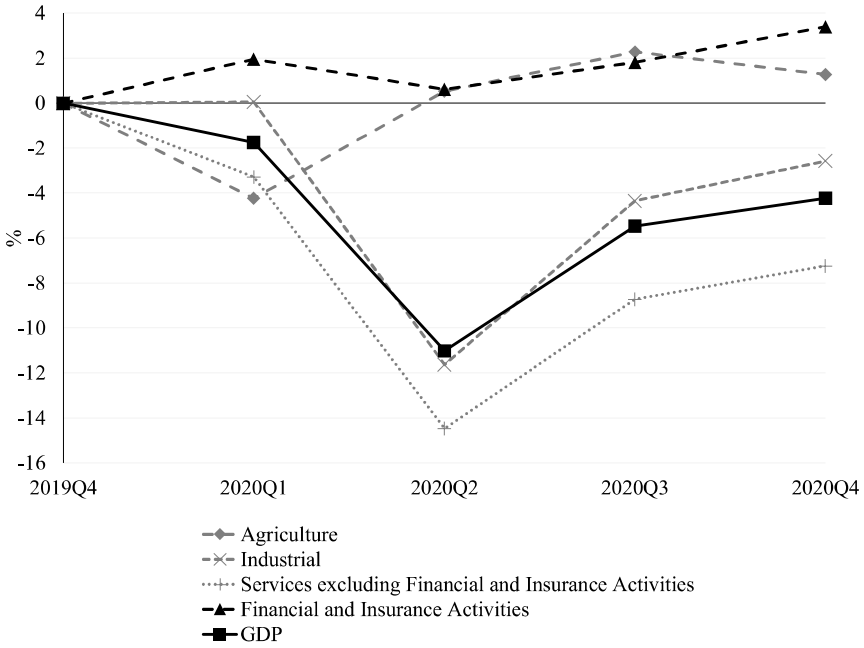
Table 1. Mean and standard deviation of Real GDP growth rates

Year-Over-Year Growth Rate (%)	All observation		1994-2000		2001-2009		2010-2020	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Agriculture	2.18	6.05	3.94	7.36	2.44	5.53	0.84	5.30
Industrial	3.68	6.07	4.80	6.64	5.12	4.26	1.79	6.57
Services excl. Financial and Insurance Activities	3.57	4.32	3.32	5.53	3.94	2.78	3.43	4.56
Financial and Insurance Activities	3.15	12.34	-7.06	19.06	6.51	6.96	6.91	4.41
Gross Domestic Product	3.33	4.45	2.95	6.07	4.31	2.83	2.78	4.29

Source: Office of the National Economic and Social Development Council

The natural question arises: where precisely does this decoupling take place? We found that the decoupling arises in the bank credit market, the external funding source on which Thai households and firms rely the most. We explore and compare the Thai bank credit market structure with international peers and detect many structural imbalances. We suspect that these imbalances could indicate market distortions attributable to the decoupling. The imbalances can be categorized into four groups as follows.

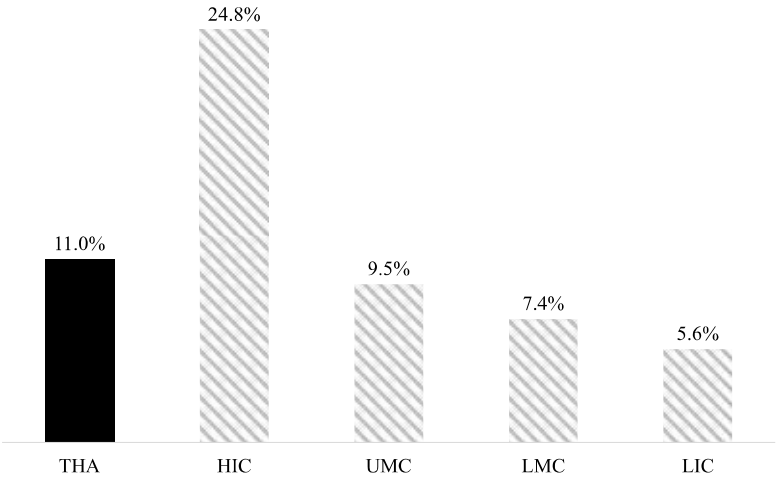
Figure 1. Real GDP Development since the fourth quarter of 2019



Source: Office of the National Economic and Social Development Council

First, Thai firms have received relatively limited credit for the establishment, operation, and expansion of business. The World Bank's Global Findex survey in 2017 suggests that only 11% of the Thai population of age 15 or above had access to credit to start, operate, or expand a business. This number is less than half of the high-income countries' number (Figure 2).

Figure 2. Percentage of respondents who report borrowing any money to start, operate, or expand business

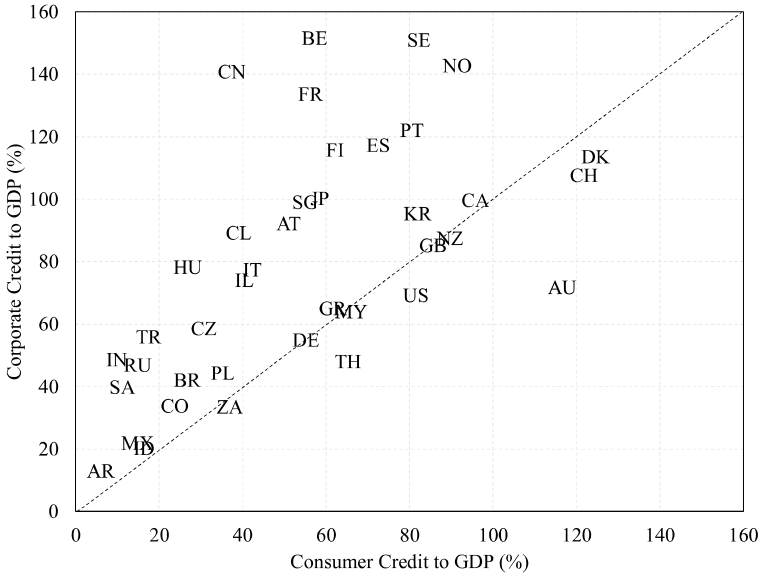


Note: The percentage of respondents of age 15 or above who report borrowing any money to start, operate, or expand a farm or business in the past 12 months. The data is the most recent values over the period 2009–2017. THA, HIC, UMC, LMC, and LIC refer to Thailand, the average of high-income countries, upper-middle-income countries, lower-middle-income countries, and low-income countries, respectively.
Source: Global Findex Database 2017, World Bank

Second, Thai credits are skewed heavily towards consumer credits, while corporate credits are subdued. Figure 3 suggests that most countries were characterized by higher corporate credit to GDP ratio than consumer credit to GDP ratio during 2010-2018. On the other hand, the Thai consumer credit (65.24%) notably exceeded the corporate credit to GDP ratio (48.28%). The Thai corporate credit to GDP ratio is lower than other countries from the same per-capita income groups, such as Malaysia (64.18%) and Turkey (56.13%). Thailand's ratio is even far below high-income countries such as Canada

(99.87%), France (133.90%), and Belgium (151.83%). In fact, consumer and corporate credits are essential for different purposes. Consumer credits facilitate the intertemporal income allocation to smooth lifetime consumption.

Figure 3. Relative size of consumer credit and corporate credit across countries

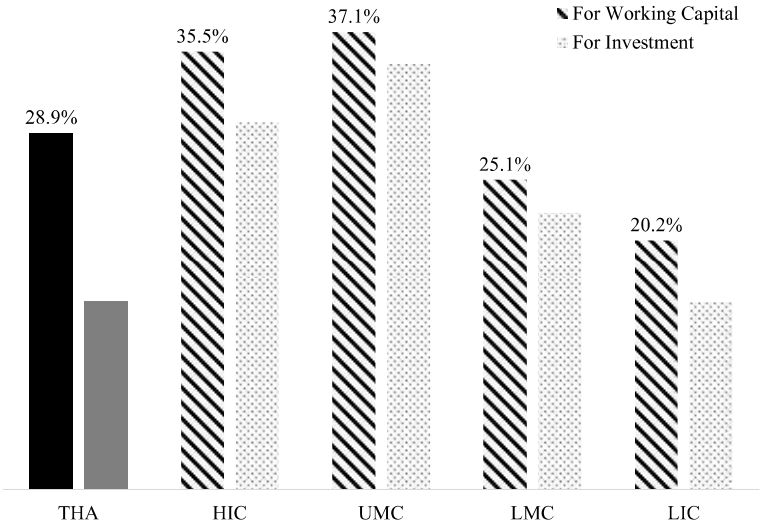


Note: Average values over the period 2010–2018.
Source: Bank of International Settlements

On the other hand, corporate credit allows firms to invest and better manage working capital. The evidence, however, signals that the distribution between consumer and corporate credits is suboptimal. We conjecture that the inflated consumer credit is attributable to the distortive institutional design, which grants easy access to consumer credit. For example, Thai firms can easily access consumer loans and credit cards and use them for business purposes without adequate

monitoring or restriction from banks. Since the lending rate on consumer credit is higher than corporate credit, these borrowers incur additional costs and are deemed cost-inefficient.

Figure 4. Percentage of firms who report using banks loans to finance working capital / purchases of fixed assets



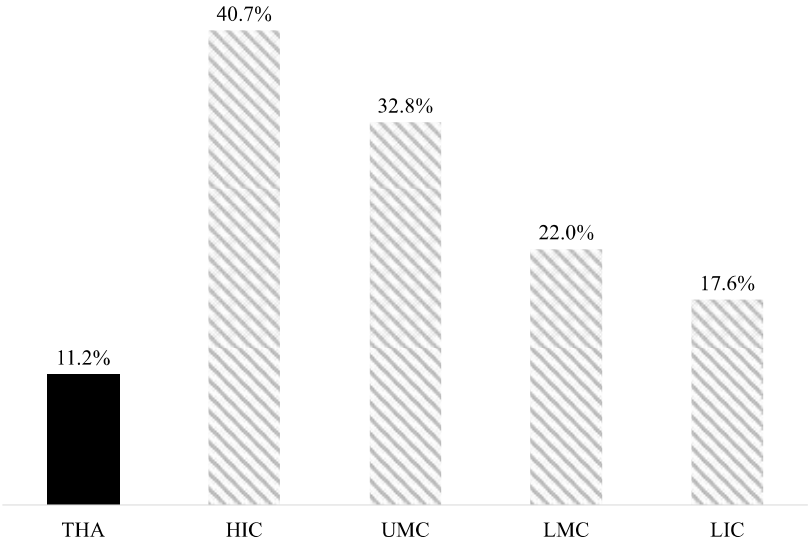
Note: Corporate credit for working capital refers to the percentage of firms using banks loans to finance working capital. Corporate credit for investment refers to firms using banks loans to finance purchases of fixed assets. The data is the most recent values over the period 2009–2017. THA, HIC, UMC, LMC, and LIC refer to Thailand, the average of high-income countries, upper-middle-income countries, lower-middle-income countries, and low-income countries respectively.
Source: Global Financial Development Database, World Bank

Third, Thai corporate credit is characterized by excessive credit for working capital but limited credit for investment. In 2017, around 28.9% of surveyed Thai firms reported using bank credits to finance working capital (Figure 4). On the

contrary, only 15.3% have access to bank credits to finance investment. Thailand's investment credit ratio is indifferent to the average ratio of low-income countries.

Fourth, access to corporate credit has been even more subdued for small enterprises. A recent survey from the World Bank's Global Financial Development Database suggests that only 11.2% of small Thai firms in 2016 have access to credit from formal financial institutions (Figure 5).

Figure 5. Percentage of small firms (5-19 workers) in the formal sector with a line of credit or a loan from a financial institution



Note: The data is the most recent values over the period 2009–2017. THA, HIC, UMC, LMC, and LIC refer to Thailand, the average of high-income countries, upper-middle-income countries, lower-middle-income countries, and low-income countries respectively.
Source: Global Financial Development Database, World Bank

Compared to other countries, the Thai economy is far behind the average among high-income countries (40.7%) and upper-middle-income countries (32.8%) during 2009-2017. The Thai economy is even lacking behind the average among low-income countries (17.6%).

These four imbalances share a common inconvenient story: the Thai credit market is distorted. More importantly, Thai banks have provided limited corporate credit for new establishments and new investment purposes, especially for SMEs.

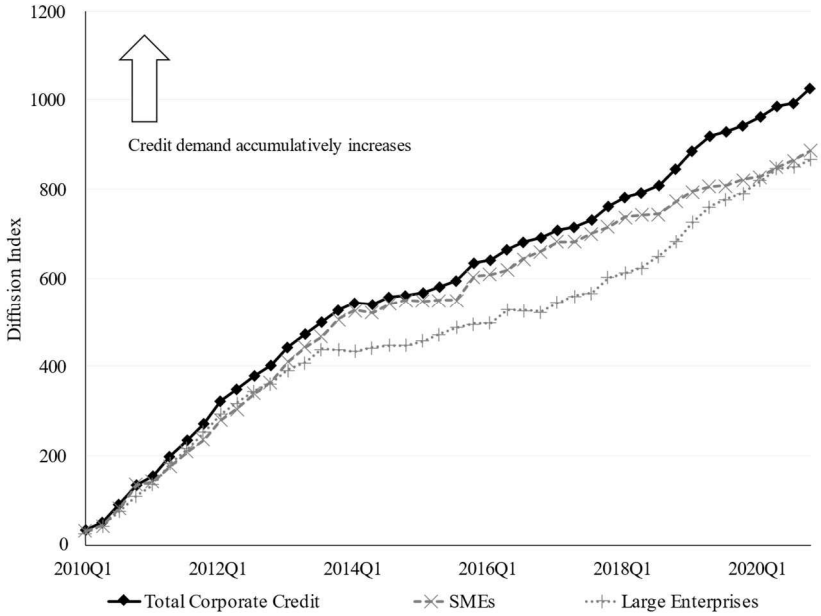
Motivated by these observations, this paper attempts to explain the causes of bank credit market distortion and subdued corporate credit. We first identify the corporate credit market disequilibrium and review the bank's incentives and the credit approval process. Then, we attempt to interpret the results through the framework of institutional economics. We present the opportunity for the Thai banking system to achieve better synergy between credit inclusion and credit risk within the Thai corporate credit market. Lastly, we attempt to provide the general solution from an institutional economics perspective.

The rest of this paper is organized as follows. Section 2 provides evidence of corporate credit market disequilibrium and layout potential determinants. Section 3 documents the synergy between credit access and credit risk from cross-country evidence and locates the choice of Thai banking system. In Section 4, we propose an institutional framework to achieve better combination of credit inclusion and financial stability. Section 5 concludes.

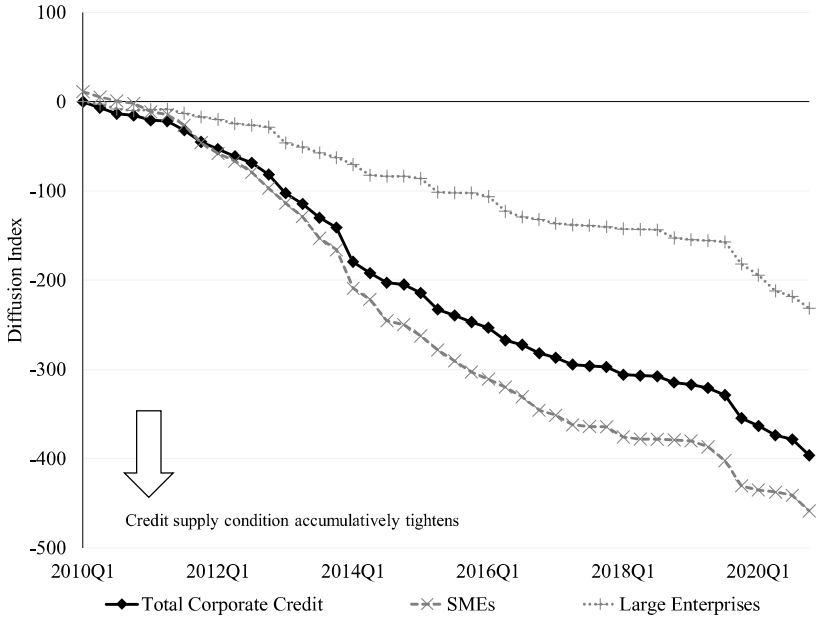
2. Corporate Credit Market Disequilibrium: Thai corporate credit is insufficient

Is corporate credit insufficient? This section investigates whether limited corporate credit is demand-driven or supply-driven. We resort to credit demand and supply conditions from banks' perspective as the proxies of the actual conditions. We utilize the Bank of Thailand's Senior Loan Officer Survey, which provides the views of senior loan officers from banks, credit card providers, and personal loan companies regarding the actual and expected credit demand and supply conditions. Preliminary observation points to persistent excess demand of corporate credit: credit demand has accumulated continuously since the first quarter of 2010. Nonetheless, financial institutions have kept raising credit standards, especially for the credit to SMEs (Figure 6).

Figure 6. Credit demand and supply condition



(a) Accumulative credit demand condition



(b) Accumulative credit standard
Note: Diffusion Index (DI) format ranges between -100 and 100.

Source: Senior Loan Officer Survey, Bank of Thailand

We adopt Maddala and Nelson (1974)'s model of markets in disequilibrium (MN henceforth) to estimate the time series of excess demand (supply) of corporate credit in Thailand. MN provided the parsimonious model of credit demand, credit supply, and the observable credit equilibrium. The advantages of the MN model are that it is well-specified to utilize the data-embedded information regarding excess demand (supply) of credit, and also allow us to estimate the probability with which the credit market in a particular point in time belongs to excess demand or excess supply regime. The model consists of the following equations:

$$D_t = \alpha_0 + \alpha_1 DEMANDSURVEY + u_{1t}, \quad (1)$$

$$S_t = \beta_0 + \beta_1 SUPPLYSURVEY + u_{2t}, \quad (2)$$

$$Q_t = \min(D_t, S_t), \quad (3)$$

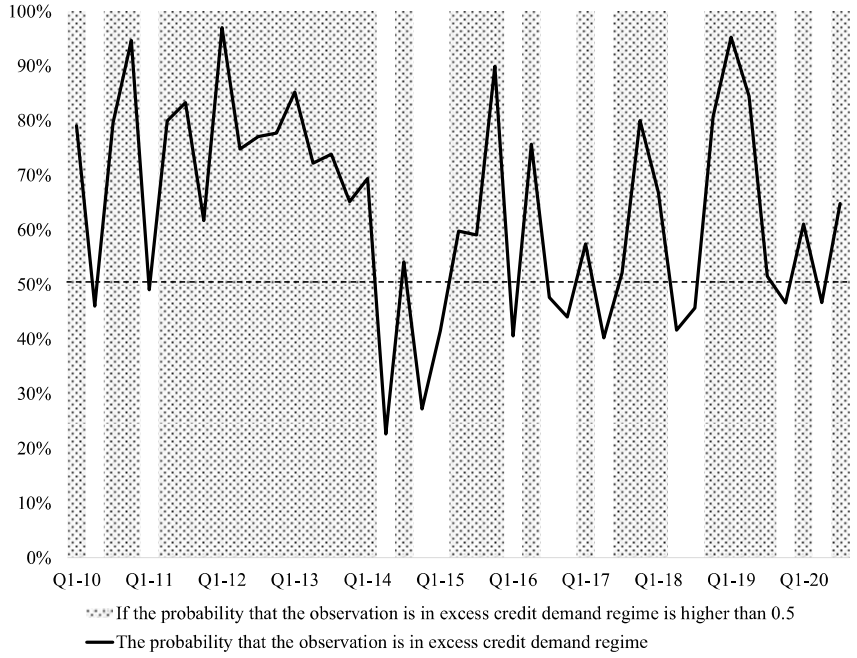
where D_t denotes the credit demand at t, S_t denotes the credit supply at t, $DEMANDSURVEY$ denotes credit demand condition in bank's view, $SUPPLYSURVEY$ denotes credit supply condition in bank's view, and Q_t denotes the observed net new credit at t. We assume that u_{1t} and u_{2t} are independently and normally distributed with zero means and constant variances σ_1^2 and σ_2^2 respectively, and they are independent from each other. Given the estimated results, we can obtain the probability that the observable net new credit Q_t belongs to the excess demand regime as

$$\pi_t = \Pr(D_t > S_t). \quad (4)$$

We estimate our model with Maximum Likelihood methods, where we derive the likelihood function from the unconditional density of Q_t and the conditional density of Q_t on that Q_t belongs to the excess demand regime. We adopt the OLS estimated coefficient values as initial parameter values. For the net new corporate credit data, we resort to the actual corporate credit data provided by the Bank of Thailand. The sample period covers the first quarter of 2010 to the third quarter of 2020.

Figure 7 presents the estimated probability that the observable net new credit Q_t at time t belongs to the excess demand regime. The estimation shows that the Thai corporate credit market has experienced excess demand for credit for 30 quarters of total 43 quarters, which is 73% of the sample period. We conclude that corporate credit is constrained from the supply side, and is insufficient compared to credit demand.

Figure 7. The estimated probability that the observable net new credit belongs to the excess demand regime



Source: Authors' Calculations

Now, we further investigate the rationale behind constrained corporate credit supply. According to Shekhar and Shekhar (1974), a bank allocates credit across borrowers to maximize the risk-adjusted return from lending. From the theoretical and empirical literature, we established three groups of corporate credit supply's determinants[3]. The first group of determinants is a borrower's return and risk profile. The bank collects and examines the borrower's return and risk

[3] For theories, refer to Shekhar and Shekhar (2013), and Heffernan (2005). For empirical analyses, refer to Kishan and Opiela (2000), and Jiménez, Ongena, Peydró, and Saurina (2012).

from the company's financial history, financial statements, and business plan. The bank also considers the economic factors at the sectoral and macroeconomic level, such as sectoral and aggregate GDP or price dynamics. Moreover, whether the bank approves a loan request is contingent heavily on the bank's risk perception and risk tolerance. The second group of determinants is the source of funds. This group covers the quantity and quality of funds, funding sources, and the cost of funds. If the bank can raise a large amount of funding at a low cost, they would have more incentive to grant credits. The third group of determinants relates to competition in credit markets. This group encompasses the competition from banks and non-bank financial institutions.

We attempt to quantify roughly the relevance of each group of determinants in explaining the variation in corporate credit supply. We regress the actual credit standard ($SUPPLYSURVEY$) on the following potential determinants. First, the determinants relating to a bank's external cost of funds include bank capital ($CAPITAL$), funding market access ($MARKET\_ACCESS$), liquidity position ($LIQUIDITY$). Second, a bank's competition with other lenders includes competition against the other banks ($OTHER\_BANKS$), the equity market ($EQUITY\_MARKET$), the bond market ($BOND\_MARKET$), and foreign borrowing ($FOREIGN\_BORROWING$). The third group of determinants relates to banks' risk perception, it includes the general conditions of the economy ($GENERAL\_ECONOMY$), industry-specific conditions ($INDUSTRY\_SPECIFIC$), and collateral position ($COLLATERAL$). We resort to the Senior Loan Officer Survey on the determinants of credit standard. We estimate several specifications with the ordinary least square method and capture the R-squared statistics to measure each determinant's contribution to the total variation of credit standard, using the sample period from the fourth quarter of

2007 to the third quarter of 2020. Due to the lack of SME's data, we use the data of large enterprises.

Table 2 documents the estimation results. The determinants related to a bank's risk perception are the most influential determinants over the sample period. Specification 13 suggests that they jointly explain over 51.21% of the total variation in the Thai corporate credit standards, while Specification 10-12 also suggest that separate effects of each determinant are also significantly relevant. These findings indicate that the Thai bank's corporate credit approval process is significantly risk-based. That is, banks perceive and consider heavily various risks of lending before they grant credits. This conclusion helps explain why credit supply is constrained over the past decade, especially credit to SMEs since the Thai economy has been relatively vulnerable and volatile while inequality has increased. Meanwhile, the determinants related to funding and competition are relatively less influential. We note that the residual variance is considerable, accounting for over 39.48% of the total variation. It is more or less attributable to the other determinants we cannot measure, such as the perception of individual credit risk. Given that the residual variance is large, we suspect that the perception of individual risk is strongly relevant.

Table 2 Regression results of the determinants of Thai corporate credit standards

Dependent Variable : SUPPLYSURVEY	(1)	(2)	(3)	(4)	(5)	(6)	(7)
CAPITAL	0.3870			0.0625			
	(0.2668)			(0.4171)			
MARKET_ACCESS		0.4496		0.8749*			
		(0.2793)		(0.4967)			
LIQUIDITY			-0.5018	-0.7916			
			(0.4291)	(0.4769)			
OTHER_BANKS					0.1579		
					(0.1469)		
EQUITY_MARKET						0.9093	
						(0.7352)	
BOND MARKET							0.2865
							(0.3625)
FOREIGN_BORROWING							
GENERAL_ECONOMY							
INDUSTRY_SPECIFIC							
COLLATERAL							
constant	-6.702***	-6.755***	-7.602***	-5.224***	-9.767***	-8.753***	-8.872***
	(1.6639)	(1.4927)	(1.4233)	(1.4725)	(2.8313)	(1.9170)	(2.4940)
N	52	52	52	52	52	52	52
R-squared	0.0374	0.0422	0.0955	0.2389	0.0264	0.0860	0.0197
Adjusted R-squared	0.0181	0.0231	0.0774	0.1913	0.0070	0.0677	0.0001

Notes: The column number indicates specification number. Robust standard errors are Win parenthesis. *,**,*** indicate that the coefficient is significantly different from zero at 10%, 5%, and 1% significance level.
Source: Authors' Calculations

Table 2 Regression results of the determinants of Thai corporate credit standards (continued)

Dependent Variable : SUPPLYSURVEY	(8)	(9)	(10)	(11)	(12)	(13)	(14)
CAPITAL							0.0078
							(0.2423)
MARKET_ACCESS							0.1487
							(0.2679)
LIQUIDITY							-0.2250
							(0.2760)
OTHER BANKS		0.0714					-0.0848
		(0.1354)					(0.1509)
EQUITY_MARKET		0.7769					0.2842
		(0.5505)					(0.3524)
BOND MARKET		-0.2673					0.0868
		(0.2292)					(0.3292)
FOREIGN BORROWING	2.0192	1.7841					1.2551
	(1.8320)	(1.6694)					(0.7677)
GENERAL_ECONOMY			0.4647***			0.4753***	0.3158
			(0.1218)			(0.1650)	(0.1960)
INDUSTRY SPECIFIC				0.4522***		-0.0030	0.1290
				(0.1316)		(0.1749)	(0.2400)
COLLATERAL					0.6060**	-0.0224	-0.0725
					(0.2857)	(0.1771)	(0.1974)
constant	-7.632***	-8.350***	1.6462	2.3498	-4.179***	1.6596	2.1039
	(1.3744)	(2.2286)	(2.0946)	(2.5174)	(1.3052)	(2.2758)	(2.9426)
N	52	52	52	52	52	52	52
R-squared	0.1279	0.1801	0.5119	0.4520	0.2294	0.5121	0.6052
Adjusted R-squared	0.1105	0.1103	0.5022	0.4411	0.2139	0.4816	0.5089

Notes: The column number indicates specification number. Robust standard errors are Win parenthesis. *,**,*** indicate that the coefficient is significantly different from zero at 10%, 5%, and 1% significance level.
Source: Authors' Calculations

3. Synergy Between Credit Inclusion and Credit Risk: More Inclusive Today for Future Stability

Thus far, we have examined the corporate credit market distortion and constrained supply closely. The previous section sheds lights on two compelling findings. First, the corporate credit constraint is supply-driven. Second, Thai banks rely heavily on the risk-based approach to assess credit request. *Is risk-based credit assessment somehow attributed to constrained corporate credit supply? If so, then how?*

There has been a long debate among economists and policymakers about the relationship between credit inclusiveness and credit risks. *The key question is whether there is a trade-off between credit inclusiveness and risks.* Since the GFC, in which the unprecedented credit expansion led to economic recession, central banks have put a strong emphasis on financial stability. However, recent literature found that an overemphasis on financial stability may cause or exacerbate financial exclusion. Claessens (2006) argues that a regulatory framework that excessively focuses on financial stability may end up over-regulating fundamental financial services, which unintentionally excludes small firms from the financial system.

Many recent works of literature argued for the synergy between credit inclusiveness and credit risks. Hannig and Jansen (2010) explained that one should consider the trade-off between credit inclusiveness and credit risk, if it exists, in the longer term. Credit to SMEs is riskier than credit to large enterprise only in the early stage. With a proper credit approval process and credit contract designs, SME businesses should thrive and return sustainable profits. In fact, Mehrotra and Yetman (2014) argue that greater inclusion to credit markets equip broader ranges of firms with better tools for economic and financial risk management, making them more resilient to

shock. As clients become healthier, the banking sector also becomes healthier and more resilient to shocks. Furthermore, new proliferating businesses will add to thicker and well-distributed goods and labor markets which, in turn, contribute to the deeper and more diversified financial markets.

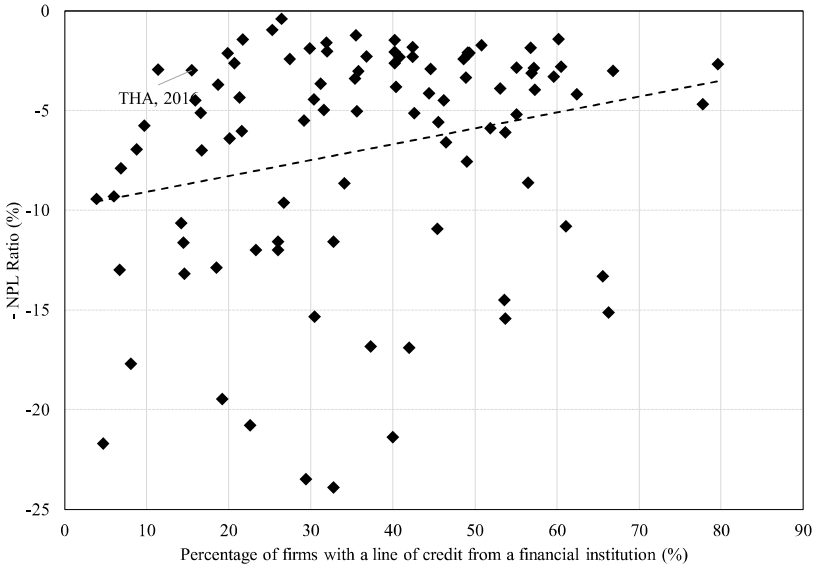
Cross-country evidence also supports the synergy between credit inclusiveness and risks. Morgan and Pontines (2014) use the cross-country panel data between 2005-11 to estimate the relationship between SME credit inclusiveness and the banking system's nonperforming loans (NPL). The result suggested that promoting SME credits significantly reduces NPLs. Morgan and Pontines also explain that the diversification towards SMEs credit helps lessen systemic risk due to the concentrated credit portfolio of large enterprises.

To better illustrate the credit inclusiveness - credit risk synergy, Figure 8 plots credit inclusiveness against credit risk. We measure credit inclusiveness by the percentage of firms in the formal sector with a line of credit or a loan from a financial institution. We measure risk by minus non-performing loans to gross loans ratio. We resort to the latest survey data from World Bank's Global Financial Development Database, which we focus on the records after the GFC ended.

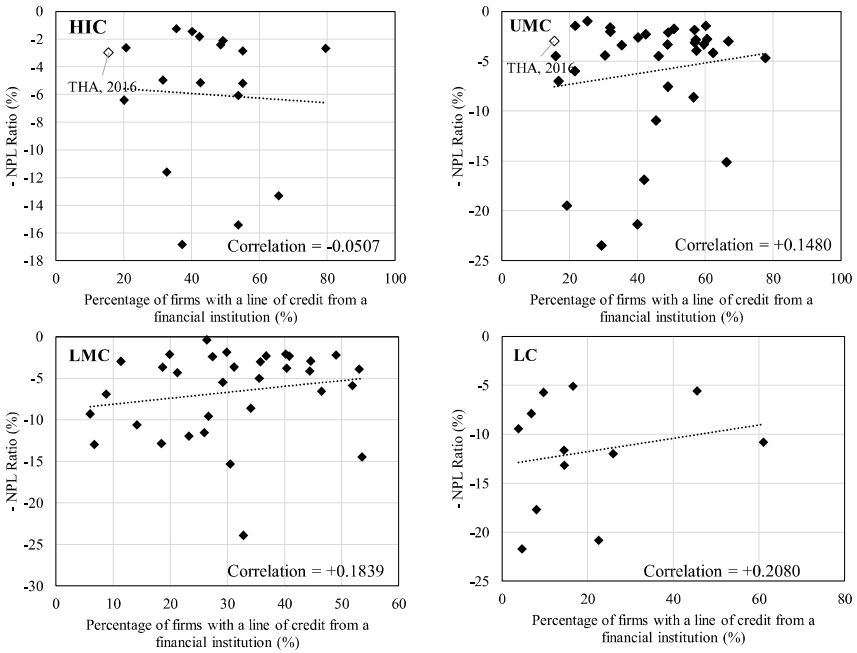
From Figure 8, we document the slightly positive relationship between credit inclusiveness and credit risk, the evidence in favor of synergies. The correlation between credit inclusiveness and credit risk is slightly positive. More interestingly, we find that synergies become more evident in less developed countries. On the other hand, there exists a negative but insignificant correlation between credit inclusiveness and credit risk among high-income countries.

Figure 8. Relationship between credit inclusiveness and credit risk

(a) Relationship between credit inclusiveness and credit risk



(b) Relationship between credit inclusiveness and credit risk by income groups



Note: Credit inclusiveness is measured by the percentage of firms in the formal sector with a line of credit or a loan from a financial institution. Credit risk is measured by minus non-performing loans to gross loans ratio. The data is the most recent values over the period 2009–2017. THA, HIC, UMC, LMC, and LIC refer to Thailand, the average of high-income countries, upper-middle-income countries, lower-middle-income countries, and low-income countries respectively.
Source: Global Financial Development Database, World Bank

Why? We conjecture that high-income countries have already developed inclusive and well functioned financial systems. So, the regulators can shift priority from promoting credit inclusiveness to managing credit risk. Furthermore, since the well-developed financial system is efficient and complicated, it enables new advanced financial innovations which are accompanied by more complex and unprecedented risk. Thus, the system warrants considerable attention to risk management. On the other hand, less developed countries with lower inclusiveness and less developed financial systems should put more emphasis on credit inclusion. The positive relationship between credit inclusiveness and credit risk not only allows developing economies to promote credit inclusion with less financial stability concerns than developed countries, but also encourages these economies to move to the more efficient allocation of risk and return on the upper-left region of the figure.

For the Thai economy, the Thai banking system has upheld its financial stability mandate very well. However, it significantly lacks credit inclusiveness compared to other upper-middle-income peers. These findings warrant the Thai banking system and the regulators to revisit the policy paradigm and regulatory framework with respect to credit inclusion and credit risk.

4. Policy Recommendation from Institutional Economics Perspective

In the previous section, we present the opportunity in which the Thai banking system could offer better credit inclusion, especially corporate credits, to achieve the more desirable allocation between credit inclusiveness and credit risk. *But how could the Thai economy achieve such*

allocation? In this last section, we attempt to provide a general solution from institutional economics perspectives.

From the view of institutional economics, incentives and institutional conditions that govern the behaviour of banks, as well as the regulator, play the key role in promoting greater corporate credit provision to small firms. Economic history advocates the importance of institutions in shaping the destiny of the banking system.

Here, we provide the renowned example of the French banking system. The French banking system is one of the most developed, sustainable, and inclusive banking systems in the world. BIS data indicates that the French economy in 2019 accumulated over 150.1% of corporate credit to GDP, ranking sixth out of 48 countries in the sample. The French banking system has also strongly supported SMEs. The European Banking Federation (EBF) data shows that new loans to SMEs accounted for 42% of total new loans granted in December 2019, with a 97% investment loan approval rate in the fourth quarter of 2019.

Interestingly, before this prominent success, the French economy had experienced days when the banking system was fragile, inefficient, and exclusive. We refer to Bertrand, Schoar, and Thesmar (2007) who studied the effects of the deregulation of the French banking industry in the 1980s on French banks' behaviour and the implications on the Schumpeterian process.

After the second world war ended in the 1940s, the French Government centralized the banking system under the Treasury's supervision. The government heavily intervened in banks' behaviours in two aspects. First, the Ministry of Finance established the Deposit Network, a network of influential banks and cooperatives. The Ministry of Finance subsidized Deposit Network's members with low-cost deposits and had assigned members to grant subsidized loans to some poorly

performing firms. Zombie lending accumulated as a result. Second, the major oil price shock in the 1970s precipitated a sudden increase in inflation and crippled economic growth, leading to severe stagflation, which posed a colossal policy dilemma. The French government provided subsidized loans via the Deposit Network's members to stimulate growth. To grapple with inflation, however, the French government refused to raise the interest rate. Instead, the Ministry of Finance curbed credit supply by issuing the so-called *Encadrement du crédit program*, which set the credit ceiling for the outsiders of the Deposit Network.

The intervention heavily distorted the banking market structure and impaired market mechanisms. Consequently, the banking system failed to reallocate financial resources efficiently. Eventually, the banking system distortion adversely affected the real economy. The French economy experienced a Balance of Payments deficit. Furthermore, the excessive intervention incurred high costs, causing government debt to hover.

As economic and political pressure increased, the government finally decided to implement banking reform in late 1984. The critical development is the enactment of the 1985 Banking Act, which literature attributes to be a major turning point of the French banking system's outlook. Under the 1985 Banking Act, the Treasury removed subsidized funds to Deposit Network's members and discarded the credit ceiling under *the Encadrement du crédit program*. The government also privatized big banks and cooperatives. This development has significantly changed the market structure of the French banking system as these financial institutions accounted for up to 20% of the total assets of the whole banking system at that time.

The enactment of the 1985 Banking Act has considerably improved the efficiency of financial resource allocation. The

French financial institutions cut zombie lending and started to allocate credit considering the actual return and risks. Furthermore, the new 1985 Banking Act helped bring down the dominance of Deposit Network's members and intensify competition within the banking system.

What can we learn from the French banking reform? First, excessive protection and interference from the government and the regulators could end up impairing the functionality of the banking system. The consequences are far-reaching as a dysfunctional banking system destabilized the French economy in the 1970s. Second, fair competition and equal distribution of financial resources and market power among banks are crucial to ensure the most efficient allocation of financial resources and the finest outcome for the economy as a whole.

5. Conclusion

Well-functioning banking systems are necessary but not sufficient to ensure that financial systems provide enough support to the real economy and to enable the equal distribution of economic opportunities. But the banking system needs appropriate institutional setup to induce better individual decision and to lubricate market mechanisms which finally returns the efficient and equal allocation of financial resources.

In this review paper, we illustrate that the Thai banking system could provide finer support to the real economy through greater and better corporate credit provision for investment purposes, especially to SMEs. We propose that the Thai banking system and the regulator should and could put more emphasis on credit inclusion. Credit risk management is crucial, but putting too much aversion to risk could result in undesirable outcomes. Lastly, the institutional setup is the key

to reset the course of the Thai banking system. Regulators cannot overprotect or intervene in the market mechanism. Instead, regulators should establish rules for fairer competition and equal allocation of market powers among banks.

References

Bertrand, M., Schoar, A., & Thesmar, D. (2007). Banking Deregulation and Industry Structure: Evidence from the French Banking Reforms of 1985. *The Journal of Finance,* 62(2), 597-628.

Claessens, S. (2006). Access to financial services: a review of the issues and public policy objectives. *Journal of Financial Transformation,* 17, 16-19.

Hannig, A., & Jansen, S. (2010). Financial Inclusion and Financial Stability: Current Policy Issues, *SSRN Electronic Journal*.

Heffernan, S. (2005). *Modern Banking*. John Wiley & Sons, Ltd.

Jiménez G., Ongena S., Peydró, J-L. & Saurina, J. (2012). Credit Supply and Monetary Policy: Identifying the Bank Balance-Sheet Channel with Loan Applications. *American Economic Review,* 102(5), 2301-2326.

Kishan, R. P., & Opiela, T. (2000). Bank Size, Bank Capital, and the Bank Lending Channel. *Journal of Money, Credit and Banking*. 32(1), 121-41.

Maddala, G. S. & Nelson, F. D. (1974). Maximum Likelihood Methods for Models of Markets in Disequilibrium. *Econometrica,* 42(6), 1013-1030.

Mehrotra, A., & Yetman, J. (2014). *Financial inclusion and optimal monetary policy* (No. 476). Bank for International Settlements.

Morgan, P., & Pontines, V. (2014). Financial Stability and Financial Inclusion. *SSRN Electronic Journal*.

Shekhar, K. C., & Shekhar, L. (2013). *Banking Theory and Practice, 21st Edition.* Vikas Publishing House.