NON-PERFORMING LOAN REGIMES IN BANKING REGULATION

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Declaration

I hereby declare that this thesis is my own work, except where acknowledgement is given to outside sources. It is submitted to the University of Warwick in support of my application for the degree of Doctor of Philosophy in Law. It has been composed by myself and has not been submitted for a degree at another university.

SAVEETHIKA LEESURAKARN

Abstract

Non-performing loans (NPLs) have recently been perceived worldwide as a troubling potential cause of vulnerabilities and a threat to national and global financial systems, undermining core banking-sector functions including lifeblood financing of economies. NPLs constitute a key determiner of banks' profitability and stability because the level of NPLs substantially affects bank lending behaviours and bank internal risk management, which chiefly include loan-loss provisioning (LLP) and capital charges. There is therefore a clear need to monitor and regulate the level of banks' NPLs.

This thesis examines regimes governing NPLs in Thailand in the respects of LLP and capital requirements. Most Thai banking regulation covering NPL regimes has implemented international standards, in particular those of Basel III and IFRS 9. The consequence of this transnational legal borrowing has clearly led to a significant increase in banks' provisioning and capital charges. This thesis therefore seeks to investigate whether the legal frameworks of LLP and capital requirements genuinely can assist in reducing and / or preventing the threats to financial stability caused by higher NPL ratios. It does so by applying a dynamic functionalist approach to assess whether the novel NPLs regime do in fact achieve their functional goals in diminishing the threats posed by NPLs to Thailand's financial stability. This thesis also adopts legal transplantation theory in banking regulation to demonstrate how and how effectively international standards have been transplanted into Thailand's banking regulations.

The thesis argues that the Thai financial regulatory system of NPLs is unable to function fully effectively to prevent instability arising from NPLs because of what might be called less than wholly appropriate appropriation of international standards into the context of the Thai financial system has had unintended and unwanted results. The transplantation has caused problems in the practices of banks in terms of the application of new rules in calculating LLP and capital requirements, and the new classification of bank assets on NPLs. The thesis considers whether there is a correlation between secured transactions law and prudential regulation, which

correlation could help to bridge the gap between credit promotion and financial stability by proposing the application of floating charges. In this light, the thesis attempts to investigate whether floating charges may be used productively as collateral to solve problems brought about by a higher level of NPLs.

This thesis shows that floating charges are not comfortably compatible or fully fitting with the Thai civil law-oriented legal system and its business practices in terms of the application and enforcement of court judgments. It is unlikely that floating charges will be used as collateral to solve problems unless there be more appropriate adaptation, truly insightful and skillful practitioners, and the requisite confidence in the enforcement of court judgments.

Keywords: NPLs, LLP, Capital Requirements, Dynamic Functionalist Approach, Legal Transplantation, Floating Charges

Abbreviations

BCBS	Basel Committee on Banking Supervision
BCP	Basel Core Principles
BIS	Bank for International Settlement
BOE	Bank of England
BOT	Bank of Thailand
BSA	Business Security Act
BCB	Business Security Bill
CCC	Civil and Commercial Code
CRD	Capital Requirement Directive
CRR	Capital Requirements Regulation
ECB	European Central Bank
EBA	European Banking Authority
EFRAG	European Financial Reporting Advisory Group
FASB	Financial Accounting Standards Board
FSB	Financial Stability Board
FIBA	Financial Institution Business Act 2008
FINMA	Swiss Financial Market Supervisory Authority
FINREP	Regulation (EU) No 680/2014
FSI	Financial Stability Institute
GAAP	Generally Accepted Accounting Principles
GFC	Global Financial Crisis
IASB	International Accounting Standards Board

IFRS 9	International Financial Reporting Standard 9
IMF	International Monetary Fund
MoF	Ministry of Finance
MoJ	Ministry of Justice
NPA	non-performing assets
NPE	non-performing exposures
NPLs	Non-performing loans
LLP	Loan loss provision/provisioning
ROA	Return on Assets
ROE	Return on Equity
RWA	Risk-Weighted Asset
SML	Special Mention Loan
SNA	System of National Accounts 1993
TFRS 9	Thai Financial Reporting Standard 9
UCC	Uniform Commercial Code
UNCITRAL	United Nations Commission on International Trade Law
UTP	Unlikely-to-pay

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Chapter 1: Introduction

1.1 Background

It is widely considered today that non-performing loans (NPLs) play a key role in every country's financial system because of their now clear potential to inflict severely negative impacts on banks' profits and on economic growth.[1] At the microeconomic level, a significant increase of NPLs can reduce banks' earnings and limit bank lending activity. The impact of credit loss on the quality of assets is a main determinant in banks' decisions to raise finance in the marketplace. If commercial banks are constrained by having to maintain a higher level of reserves to cover NPLs, this will inevitably lower both their profitability and their credit lending activity as a prominent source of finance to a nation's economy.[2] Thus, at the macroeconomic level, increasing the ratio of NPLs will tend to have a markedly negative effect on economic growth since less funding will be available to businesses.[3] This shows clear connections between banks, the nation's economic growth, and gross domestic product.[4] Because the effects of NPLs not only jeopardise banks but also harm the economy,

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[1] Hippolyte Fofack, 'Nonperforming Loans in Sub-Saharan Africa: Causal Analysis and Macroeconomic Implications' (2005)World Bank Policy Research Working Paper No. 3769, 1; Raphael Espinoza and Ananthakrishnan Prasad, 'Nonperforming Loans in the GCC Banking System and Their Macroeconomic Effects' IMF Working Paper No. 10/224 (2010) 1-24; Emilios Avgouleas and Charles Goodhart, 'Utilizing AMCs to Tackle Eurozone's Legacy Non-Performing Loans' (2017) 1 European Economy Banks, Regulation, and the Real Sector, 97.

[2] European Banking Authority 'EBA Report on Statutory Prudential Backstops: Response to the Commission's Call for Advice of November 2017', 11.

[3] Ahlem Messai and Fathi Jouini, 'Micro and Macro Determinants of Non-performing Loans' (2013) 3 International Journal of Economics and Financial Issues 852-860; Maria Balgova, Michel Nies and Alexanber Plekhanov, 'The Economic Impact of Reducing Non-Performing Loans' (2016) European Bank for Reconstruction and Development Working Paper No. 193, 2; ChaipornVithessonthi, 'Deflation, bank credit growth, and non-performing loans: Evidence from Japan' (2016) 45 International Review of Financial Analysis 295-305.

[4] Panayotis Kapopoulos, Efthymios Argyropoulo and Kalliopi Zekente, 'Financial Distress, Moral Hazard Aspects and NPL Formation Under a Long-Lasting Recession: Empirical Evidence from the Greek Crisis' in Platon Monokroussos and Christos Gortsos (eds.), *Non-Performing Loans and Resolving Private Sector Insolvency Experiences from the EU Periphery and the Case of Greece* (Palgrave Macmillan 2017) 265.

this points to a need to implement greater supervision and stricter regulation of banks' NPLs.[5]

Moreover, in the course of the global financial crisis and its aftermath, NPLs have been widely perceived as one of its principal causes.[6] During the Asian Financial Crisis, major banks in Asia collapsed under the weight of vast numbers of NPLs.[7] Over half of all Thai banks' assets turned into NPLs, for example.[8] The financial systems of East Asian economies have similar hindrances in that they all suffered gravely from the gathering impacts of accumulated NPLs.[9] An excessive amount of NPLs can cause bank failures and severe market disruption.

The Great Financial Crisis of 2007-2009 has also given rise to an expansion of NPLs' negative impact worldwide, and to much greater awareness of it. In corporate lending, multiple companies defaulted on their loans from domestic banks, thereby rendering a large segment of the corporate sector insolvent.[10] When defaults on loans (or

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[5] Platon Monokroussos, Dimitrios Thomakos and Thomas Alexopoulos, 'Explaining Non-Performing Loans in Greece: A Comparative Study on the Effects of Recession and Banking Practices' (2016) GreeSE paper: Hellenic Observatory papers on Greece and Southeast Europe 101, Hellenic Observatory, London School of Economics and Political Science (LSE), London, UK, 5.

[6] Rym Ayadi, Giovanni Ferri, and Rosa Lastra, 'Systemic Solutions to Systemic Crises. Dealing with NPLs' in the Eurozone' (2017) 1 European Economy, 145.

[7] Ippei Yamazawa, 'Economic development and Structural Changes in East Asia: Overview' (Asia-Latin America Cooperation (ALAC) Seminar Promoting Growth and Welfare: The Role of Institutions and Structural Changes in Asia, Santiago, 29-30 April and Rio de Janeiro, 2-3 May 2002) 13.

[8] William Overholt, 'Thailand's Financial and Political System: Crisis and Rejuvenation' (1999) 39 Asian Survey University of California Press, 1009-1035; Steven Radelet and others, 'The East Asian Financial Crisis: Diagnosis, Remedies, Prospects' (1998) 1 Brookings Papers on Economic Activity, 1-90.

[9] ibid 19.

[10] Rodrigo Caminal and Andrea Miglionico, 'Non-performing Loans: Challenges and Options for Banks and Corporations' in Platon Monokroussos, Christos Gortsos (eds), *Non-Performing Loans and Resolving Private Sector Insolvency Experiences from the EU Periphery and the Case of Greece* (Hellenic Bank Association 2017) 17.

liabilities) of a bank become greater than its assets, the bank becomes insolvent.[11] Thus, it is reasonably held that NPLs are a root cause of the financial crisis.

Global financial crises have revealed flaws in and failures of the current laws governing credit risk and NPLs, and in particular the failure to recognise the systemic effects of bad debts on financial markets. This research argues that at least in Thailand the effective legal framework for approaches to NPLs can help prevent a banking collapse and so contribute to the stability of the banking system by mitigating risks and facilitating functions of major operators in the banking industry.

Certain questions on regulatory reform in respect of how to manage and prevent the colossal financial damage that NPLs can give rise to need to be considered by regulators and stakeholders alike. Financial sectors need to be regulated to bear high credit risk, for if not, this could lead again to a so-called 'credit crunch' and once more induce great vulnerability in national economies. There is therefore a clear need for a well-planned banking and financial supervisory system, a more effective legal framework, and high-quality infrastructure for undertaking global transactions and dealing with NPLs.

In the initial stages of the research, it is established that no law directly regulates NPLs in Thailand, whether in respect of their prevention, management, or reduction. Instead, existing regulations mostly stipulate the prevention of NPLs by requiring banks to have buffers — capital adequacy and loan loss provision (hereafter 'LLP')[12] — for losses both predictable and unpredictable arising from credit risks. These buffer mechanisms are designed to mitigate risks of banks becoming insolvent and thereby ensure the efficiency and stability of the banking system. Although capital requirements and LLP do not directly govern NPLs, these regulations aim to lower losses and to deal with defaulted loans. These are similar objectives to those of the regulatory systems

[11] Lex Rieffel, *Restructuring Sovereign Debt: The Case for* Ad-Hoc *Machinery* (Washington: Brookings Institution Press 2003) 43–44.

[12] A loan loss provision (LLP) is an expense that is reserved for defaulted loans or credits.

governing NPLs to which this research refers.[13] Thus, this research will determine that LLP and capital charges are rules governing NPLs indirectly.

The International Accounting Standards Board (IASB) set out accounting standards on how banks should recognise and provide for credit expected losses provision according to the International Financial Reporting Standard 9 – Financial Instruments (IFRS 9). This impacts upon countries' policies for recognition, classification and measurements of financial liabilities, impairments of financial assets and the regulatory treatment of accounting provisions. Moreover, the Basel Committee on Banking Supervision (BCBS) has established a capital framework for the prudential regulation of banks under the Basel III.

According to these requirements, IFRS 9 does not constitute specific recommendations and / or an appropriate legal framework for applying the expected credit loss model; there is no specific, set method for managing this complex expected credit loss evaluation.[14]

What is more, there are capital requirements for dealing with NPLs. Thus, the guidance and recommendation of international standards on the risk management regulation and legal measures in dealing with the NPLs are broad and in many respects not specific enough for countries to implement practically.

Nonetheless, IFRS 9 provides valuable standards regarding a three-stage impairment model, while Basel I, II and III set a risk-weighted approach and calculation for financial assets. However, the implementation of international standards in domestic law may have limitations and also entail unintended, undesired consequences.

[13] Credit risk measures prominently include LLP and capital requirements, intended to deal with NPLs. In this research, both mechanisms are referred to as NPL regimes /approaches.

[14] International Accounting Standards Board (IASB), 'IFRS 9 Financial Instruments' Project Summary (July 2014) 14. *See* also Price waterhouse (PwC), 'IFRS 9: Expected credit losses' INT2014-06 (August 2014) <https://www.pwc.com/gx/en/audit-services/ifrs/publications/ifrs-9/ifrs-in-depth-expected-credit-losses.pdf> accessed 3 February 2021.

This research will claim that the design and structure of such regulation require a systematic discussion of how best to combine and implement international standards with domestic Thai regulation for optimal effectiveness.

As already mentioned, the approaches to dealing with NPLs in Thailand are mainly governed by LLP and capital requirements. Since these mechanisms implement international standards within Thailand's banking regulations, the question is whether the regulatory frameworks on NPLs in Thailand, adopting as they do international standards, solve the problems caused by NPLs. In other words, do the regulatory measures achieve their objectives, and, if yes, what consequences are there in applying those tools?

A central theme of this research concerns regimes governing NPLs; it is necessary therefore to take account of the credit-risk measures of banks in managing and dealing with NPLs. In particular, the literature and scholarly debate on LLP and capital requirements for the management of NPLs must be carefully considered.

This opening chapter (Section 2) contextualises NPLs with respect to global financial crises, before (Sections 3 and 4) setting out the research questions and hypothesis,as well as (Section 5) the methodological framework underpinning this project. It explores the possibility of implementing international standards on LLP and capital requirements to improve Thailand's NPL regimes. This reflection identifies some key aspects, notably the extent to which the reception of extra-national norms can create unforeseen, unintended impacts in the banking sector. It further addresses the need to enhance the new institutional framework by applying reflexive law to the governance rules for NPLs. The next section presents a discussion of the 2007-09 global financial crisis.

1.2 Contextualisation of the Global Financial Crisis

The 2007-09 Great Financial Crisis – as it is also referred to – happened as a result of various market and regulatory failures. In terms of reasons underlying the financial

crisis, Davies[15] has claimed that there is no agreement on its principal causes; nevertheless, he finds 39 separate origins ranging from grasping investment bankers to incompetent borrowers, tardy regulators, and prejudiced central bankers. Claessens and Kose[16] argue that financial crisis is characterised by diverse phenomena that include disruption of financial intermediation, occurrence of balance sheet problems, and substantial changes in asset prices and credit volume. Moreover, it is arguable that the global financial crisis may have been due to the debt-driven property and consumption bubbles.[17] Since the US economy was at the start and heart of the crisis, Stephen Lubben has argued that the insolvency of Lehman Brothers sparked off symptoms of contagion and accelerated a critical loss of confidence during the global financial crisis.[18]

Since the 2007 onset of the crisis, it has been increasingly recognised that financial services (and not just capital flows) have rapidly become global, and that financial markets are highly interconnected among multiple countries. Major market participants are global companies such as Citigroup, HSBC, and Deutsche Bank. Moreover, financial innovation, through securitisation,[19] created homogenous behaviour among financial institutions.

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[15] Howard Davies, *The financial crisis: who is to blame?* (Polity Press 2010).

[16] Stijn Claessens and Ayhan Kose, 'Financial Crises Explanations, Types and Implications' (2013) IMF Working Papers 13/28, 4.

[17] Yilmaz Akyuz, *Playing with Fire: Deepened Financial Integration and Changing Vulnerabilities of the Global South* (Cambridge University Press 2017) 5 and 27.

[18] Stephen Lubben, 'Systemic Risk and Chapter 11' (2009) 82 Temple Law Review 433, 439.

[19] The securitisation process include to the various financial institutions such as banking entities, SPEs, mortgage brokers, credit rating agencies and other shadow banking players. Securitisation process is the process of repackaging and structuring various assets into tranches, which are rated and sold to investors based on the credit ratings labelled on each tranche. In securitisation, a company with an overall B rating with AAA-rated assets on its books might be able to raise funds at an AAA rather than a B rating by securitising those assets, which make the securitisation able to shift the risk contained in the assets to a third party.

This homogeneity of financial institutions generates systemic risk[20] that in 2007-09 brought down the whole system, necessitating widespread government intervention and support.[21] As a result, the financial system of each country is connected with the others, which leads to transmission of positive and negative effects between countries.[22] The risks are global in nature: a problem in one country can quickly affect several and then many others. However, laws and regulation are predominantly national, especially so for developing countries such as Thailand. For these reasons, Mads Andenas and Iris Chiu argue, it is necessary to have legal reforms in response to what is becoming an increasingly globalised banking industry, and to reassert regulatory power to provide financial stability in response to systemic risk.[23]

One of the key lessons from the crisis of 2007-2009 is that without good policies and regulation, the market could be dysfunctional, replete with conflicts of interest and with risks that could lead to markets' inability to address severe externalities.[24] Lessons from the weaknesses and loopholes of pre-crisis policies and financial regulation can be used to improve current financial regulation. Rethel and Sinclair[25] affirm that the need for improving prudential regulation in the banking sector has received extensive attention among policy makers and academics following the most

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[20] Systemic risk involves the financial system, a collection of interconnected institutions that have mutually beneficial business relationships through which illiquidity, insolvency, and losses can quickly propagate during financial distress. Source of systemic risk is the contagious effect of institutional failure in financial sector. It signals the vulnerabilities and stress in the general economy. See Mads Andenas and Iris Chiu, *The Foundations and Future of Financial Regulation: Governance for Responsibility* (Routledge 2014) 30-39.

[21] On herd behaviour and contagion, *See* Stephen Connelly, 'When Overseeing becomes Overlooking: the post-GFC Reconfigurations of International Finance' (2016) 16 Journal of Corporate Law Studies 403-435.

[22] Setting international regulatory standards for hedge funds.

[23] Mads Andenas and Iris Chiu, *The Foundations and Future of Financial Regulation: Governance for Responsibility* (Routledge 2014) 38.

[24] John Cioffi, 'After the Fall: Regulatory Lessons from the Global Financial Crisis' in David Levi-Faur (ed), *Handbook on the Politics of Regulation* (Edward Elgar 2011), 642.

[25] Rethel Lena and Timothy Sinclair, *The problem with banks* (Zed Books 2012) 74.

recent global financial crisis (GFC). Altman et al.[26] corroborate this by arguing that this shift in focus on regulation has been spurred by the fact that banks tend to act imprudently during economic swings by deviating from best practices. Moreover, Tan[27] notes that the GFC elevated the importance of improving approaches to dealing with failures that arise out of international economic law and governance. Thus, there is a clear need for a more pre-emptive approach to regulation in banking markets to assist banks to manage risk in the financial system.

Economic cycles are a recurrent phenomenon that affects businesses in different sectors. It has generally been perceived that the procyclicality of banking operations was a principal root cause of the global financial crisis.[28] The practices and behaviour of financial firms can indeed magnify the impact of economic cycles. Owing to the periodic nature of those cycles, Claessens and Kose argue that firms can mitigate the negative effects by adopting more effective prudential regulation.[29] Procyclical bank capital regulation is largely associated with an acceleration in the occurrence of economic booms and busts.[30] According to Minsky[31] in his financial instability hypothesis[32], 'over periods of prolonged prosperity, the economy transits from financial relations that make for a stable system to financial relations that make for

[26] Edward Altman and others, 'The link between default recovery rates; theory, empirical evidence and implications' (2005) 78 The Journal of Business, 2203 and 2204.

[27] Celine Tan, 'Shifting Sands: Interrogating the Problematic Relationship Between International Public Finance and International Financial Regulation' in Marc Bungenberg and the others (eds) *European Yearbook of International Economic Law 2016* (Springer 2016).

[28] Wezel and others 'Dynamic Loan Loss Provisioning: Simulations on Effectiveness and Guide to Implementation' (2012) IMF Working Paper WP/12/110, 4-6.

[29] Stijn Claessens and Ayhan Kose, 'Financial Crises Explanations, Types and Implications' (2013) IMF Working Papers 13/28, 4.

[30] Rafael Repullo and Javier Suarez, 'The Procyclical Effects of Bank Capital Regulation', (2013) 26 The Review of Financial Studies, 452, 483.

[31] Hyman Minsky, 'The Financial Instability Hypothesis' (1992) The Jerome Levy Economics Institute Working Paper No. 74, 8.

[32] Minsky's financial instability hypothesis is a theory of the impact of debt on system behaviour and incorporate the manner in which debt is validated.

an unstable system. The hypothesis holds that business cycles of history are compounded out of i) the internal dynamics of capitalist economies, and ii) the system of interventions and regulations that are designed to keep the economy operating within reasonable bound.' It can be concluded that in the economic upturn, business entities tend to increase their profits that accelerates the recession. In case of banking industry, the cyclicality emanates from banks' underestimation of risks that increase during the boom but lead to the incurring of massive losses during the subsequent downswing.[33]

Banks act imprudently during periods of boom, for example, by lowering the level of credit standards with the objective of increasing their level of loans.[34] Conversely, they then tighten credit standards in periods of economic recession when an increase in the volume of loans issuance is critical in achieving economic recovery.[35] Additionally, the burst of the housing market bubble in 2007-08 and the subsequent occurrence of the sovereign debt crisis triggered stakeholders in the banking sector to consider how less effective accounting frameworks can result in credit risk myopia and cyclicality.[36] The question is, then, how to deal with this economic cycle and its attendant procyclicality?

According to the UK's House of Lords Select Committee on Economic Affairs, the problem of procyclicality in the banking sector can be solved through regulation.[37]

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[33] Claessens and Kose (n 29).

[34] Morris Goldstein and Philip Turner, 'Banking Crisis in Emerging Economies: Origins and Policy Options' (1996) BIS Economic Papers No. 46 – October 1996 Bank for International Settlements, 12-13.

[35] ibid.

[36] Charles Goodhart, Markus Brunnermeier, Andrew Crocket and Avinashi Persaud, 'The Fundamental Principles of Financial Regulation' (June 2009) Geneva Reports on the World Economy International Center for Monetary and Banking Studies, 1.

[37] Select Committee on Economic Affairs, 'Banking Supervision and Regulation' (2009) The Authority of the House of Lords, 2nd Report of Session 2008–09, 25. <https://www.publications.parliament.uk/pa/ld200809/ldselect/ldeconaf/101/101i.pdf> accessed 18 June 2017.

Andritzky and others[38] argue that there are possible options that can be applied in mitigating cyclical economic tendencies. Galli and Pelkmans underline that regulation within the banking industry is essential for ensuring coordination and rationalisation of economic activities. This obligates businesses to operate more efficiently.[39] In the UK, the Governor of the Bank of England is of the opinion that the main problem regarding banking supervision before the financial crisis was the lack of a macro-prudential policy tool to deal with pro-cyclicality.[40] After the crisis, the UK government paid more attention and used a macro-prudential policy tool to counter the cyclicality of the banking sector.[41]

Counter-cyclical LLP has been widely discussed as it is one of the macro-prudential instruments capable of limiting the procyclicality of the banking sector. The IMF's investigation shows that it can smooth provisioning costs over the credit cycle and decrease the probability of bank default.[42] An effective LLP framework should incorporate these concepts to tackle risk and externalities. Ozili[43] emphasises that it is widely accepted that some of the regulatory measures such as the treatment of NPLs and LLP have become a key driver of cyclicality and consequently amplify the business cycle. Furthermore, there is general consensus on reducing procyclicality through a regulatory framework, as can be seen from the Basel III countercyclical capital buffer.[44] This is important because it shows that regulatory system on LLP and

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[38] Jochen Andritzky and others, 'Policies to Mitigate Procyclicality' IMF Position Note IMF SPN/09/09 (International Monetary Fund May 2009) 2.

[39] Galli Giampollo and Pelkmans Jacques, *Regulatory reform and competitiveness in Europe; vertical issues* (Edward Elgar Publishing 2000) 296.

[40] Victoria Saporta, 'The role of macroprudential policy' (2009) Discussion Paper Bank of England, 5.

[41] The Financial Secretary to the Treasury, 'The Financial Services Bill: the Financial Policy Committee's macro-prudential tools' (September 2012) HM Treasurer Cm 8434, 12-13.

[42] Wezel and others (n 28) 5 and 65.

[43] Peterson Ozili, 'Bank loan loss provisions research: A review' (2007) 17 Borsa Istanbul Review, 144-163.

[44] Basel Committee on Banking Supervision, 'Basel III: A global regulatory framework for more resilient banks and banking systems' (December 2010) <https://www.bis.org/publ/bcbs189_dec2010.pdf> accessed 9 November 2020.

capital requirements may well be the answer to dealing with procyclicality in financial markets.

Another important point to consider is that due to the present global pandemic of Covid-19 and the growth in sovereign indebtedness in certain parts of Africa, Europe and Asia, there is widespread concern that the world may be poised for another collapse to mirror the last global financial crisis that began more than ten years ago.[45] In several ways the situation looks as fragile now as it did at the time of the subprime catastrophe. Global income continues to fall because of business insolvency, the commodity prices collapse, and economic slowdown. Unemployment rates are higher than in the period before the GFC. Another question is whether the world economy will be able to avoid financial turbulence and ongoing, repeated growth-collapse in the 21st century. It is now, consequently, critical to seek a solution to protect economies from mounting loan delinquencies and the debt overhang from NPLs. In this regard, the BCBS (Basel Committee on Banking Supervision) and the FSB (Financial Stability Board) encourage the use of regulatory measures to reinforce the countercyclical capital buffer — under current international standards, including Basel III – to absorb losses and maintain financial stability in this globally stressful period of Covid-19.[46]

Having provided an overview of the global financial crisis, the nature of economic cycles, and the trend of post-crisis reform (particularly in respect of macro-prudential measures), the next section presents this study's hypothesis and research questions.

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[45] IMF, 'The Great Lockdown: Worst Economic Downturn Since the Great Depression' IMF Press Release NO. 20/98 (March 2020) < https://www.imf.org/en/News/Articles/2020/03/23/pr2098-imf-managing-director-statement-following-a-g20-ministerial-call-on-the-coronavirus-emergency> accessed 10 January 2021; Angel Gurría, OECD Secretary-General, 'G20 Finance Ministers and Central Bank Governors' Virtual Meeting' , OECD (31 March 2020) <http://www.oecd.org/economy/2nd-extraordinary-g20-fmcbg-virtual-meeting-paris-march-2020.htm> accessed 10 January 2021.

[46] Regulation Asia, 'BCBS, FSB Support Use of Capital, Liquidity Buffers to Maintain Stability' 23 March 2020. <https://www.regulationasia.com/bcbs-fsb-support-use-of-capital-liquidity-buffers-to-maintain-stability/> accessed 10 November 2020.

1.3 Hypothesis and Research Questions

NPLs are a feature of (i) the accounting standards relating to provisioning under IFRS 9 and (ii) the regulatory standards of capital requirements under the Basel Capital Accords. The rationale for banking regulation of LLP and capital requirements under the Financial Institution Business Act (FIBA) of 2008 was noted at the beginning of new banking regulations, so as to enhance the financial stability of the Thai banking system.

The objective of this research is to find out whether current banking regulations serve their designated, intended functions efficiently within Thailand. Discussion of meaning and intention is central to this thesis because the efficiency[47] of mechanisms for the treatment of NPLs is reliant upon asset quality assessment, drawing a line to show where and when banks' apparent assets become non-performing or bad loans. In order to prevent a bank collapse resulting from an excessive level of NPLs, it is essential to have a clear understanding of the scope of prudential tools and legal frameworks for treating NPLs that can be considered in the broad concept of banking supervision, banking and financial law, and secured transaction law.

My **primary hypothesis** is that the Thai financial regulatory system is unable to function effectively to prevent instability arising from NPLs because of an inappropriate transplant both of international standards and private law innovations into the context of the Thai financial system. This results in particular from:

(a) IFRS 9 and TFRS 9 due to the nonfit of international accounting standards on LLP with the specificities of the Thai financial sector;

(b) Basel II and III, the Business Financial Institution Act, Banking Regulation on Capital Requirements and Provisioning due to the inappropriate

[47] In this research, the term 'efficiency' is identified in the sense of 'functional efficiency' (i.e., as in Julia Black's description and definition). In the literature, the concept of efficiency can be regarded as serving the functions of law/rules concerned with the functions of the financial system.

implementation of international prudential standards on NPLs withing the Thai banking regulatory regime;

(c) The Business Security Act 2015 due to the incompatible legal transplantation of a 'floating charge' into Thai law via the Business Security Act 2015.

If the primary hypothesis is established, I further assess whether the correlation between secured transactions law and prudential regulation could bridge the gap between credit promotion and financial stability. My **subsidiary hypothesis** is that unless there is appropriate amendment of the Business Security Act 2015 to improve the uptake of Thai floating charges, it is unlikely that this form of security will be used within the Thai financial sector and so any purported benefits of this legal concept will not in fact accrue.

In order to establish the primary and subsidiary hypotheses, the four main questions addressed by this research are as follows:

1) Can legal frameworks for managing NPLs – i.e., loan loss provision (LLP) and capital requirements - contribute to the diminishing and / or prevention of the threats of NPLs to financial stability, which are evidently linked to a higher ratio of NPLs? In what ways do loan loss provision (LLP) and capital requirements help to solve the problems of high levels of NPLs on banks' balance sheets? (Chapter 3,4)

   This research will show that it is critical to have legal frameworks on NPLs to enhance banking stability. Initially, it will show the link between LLP, capital requirements and banks' profits reporting in the balance sheet and income statement. In particular, this research will show how these mechanisms can contribute to the prevention of the high level of banks' NPLs.

2) Does the implementation of international standards to the Thai banking regulation on LLP and capital requirements have unintended and unwanted consequences? (Chapter 5)

This research we will see that the implementation of international standards in banking regulation can have adverse effects on the banking industry. There are limitations that arise out of from governmental efforts to increase financial stability towards a more international standard level by increasing provisioning and capital charges that the current practices of banks in respect of LLP and capital requirements not only fail to address the systemic risk of the international financial system, but also exacerbate its negative distributive outcomes to the banking sector.

3) What can dynamic legal functionalism tell us about the current defects in the Thai NPLs regime, in terms of problems and solutions? (Chapter 5)

This research adopts dynamic legal functionalism to show that the current banking regulation implementing international standards causes problems in the practices of banks in terms of the application of new rules in calculating LLP and capital requirements, and the new classification of bank assets on NPLs, since there is no clear guidance on how to apply those new standards to banks' business risk models.

4) Whether the floating charges can decrease of banks' LLP and capital charges and whereby solve problems of NPLs in Thailand? (Chapter 6)

This research will show that in the field of prudential regulation secured transactions law could bridge the gap between credit promotion and financial stability. However, floating charges may be incompatible with the Thai civil law-oriented legal system and its business practices in terms of the application and the enforcement of court judgments. Although the Business Security Act 2015 is legislation intended to transplant floating charges into the Thai civil

legal system, it is unlikely that floating charges will be used as collateral to solve problems brought about by a high level of NPLs - unless there are appropriate adaptation, skillful practitioners, and the requisite confidence in the enforcement of court judgments.

In seeking answers to these research questions, this study combines detailed analysis of the functional aspects of legal frameworks in respect of the management of NPLs with thorough examination of law and development aspects, included for clearer understanding of the outcomes of such legal approaches.

Over and above the principal objects of research (LLP, NPLs and related collateral) the scope of this thesis is limited as follows: (i) to Thai law and such international standards as have a bearing on the Thai banking system; (ii) to the development of Thai banking law and regulation since the Asian financial crisis.

With the aim of further closely examining the abovementioned research questions, this thesis explores how notions about the treatment of NPLs - namely LLP, capital requirements, and collateral, have evolved and been broadened, through a discussion of literature and theory, and of accounting principles and practices. Moreover, this thesis concentrates on examining how those tools have been applied in Thailand in response to the Asia financial crisis, both in the global and the IMF contexts, as well as their impact on banking stability and economic development in the post-Asia financial crisis years.

A central objective of the research is to examine the present legal mechanisms for addressing the problems of NPLs in order to demonstrate the need for several changes designed to enhance regulations for dealing with banks' NPLs before a financial crisis can arise. In tackling these questions, this thesis assumes that a special legal framework for NPLs is required. Thus, the examination seeks to demonstrate that reform of the NPLs framework is to be preferred as a solution for assisting economic growth and maintaining banking stability.

In addition, the thesis provides an analysis of collateral with the purpose of reducing NPLs in bank lending business through a careful study of decided cases. Deeper collateral analysis on floating charges can be expected to show the interaction between collateral and capital charges, which can reduce credit risk. The analysis of the role of floating charges is designed to facilitate understanding of the regulatory tools that are needed to regulate banks' NPLs. What is more, theoretical analysis can provide an effective assessment of this tool in its use as a response to major financial crisis.[48] On the one hand, such an analysis can provide an assessment first of whether this increases capital flows to the domestic market and second of its impact on a sustainable economy in the contexts of law and development. On the other hand, it can also provide grounds to justify the necessity of adjustments to the application of this tool. The next section presents the methodology of this thesis.

1.4 Methodology and Methods

1.4.1 General methodological discussion: legal functionalism and its critics

This research focuses on the regulatory framework for NPLs with particular attention paid to LLP and capital requirements. It examines whether the regulatory frameworks governing NPLs can mitigate credit risk and prevent bank failures. It also considers whether the current system enhances banking stability while considering banks' costs and profits. I adopt the legal functionalist methodology, but in so doing I integrate aspects of what are commonly considered two other and separate methodologies: reflexive regulation and legal transplantation. This choice requires some explanation.

Naïvely, one can describe functionalism as a theory that understands law as teleological - that is, as something more or less fit for purpose.[49] The question then

[48] Although in the origins of the floating charge in the UK, this tool is designed to escort merchants in doing their trade and business in ancient times, the floating charge has been introduced as a legal mechanism to attract capital into developing countries in the aftermath of the Asia Financial Crisis.

[49] Leon Duguit, 'The Law and the State', (1917) 31(1) *Harvard LR*, 24; Ralf Michaels, 'The Functional Method of Comparative Law,' in Mathias Reimann & Reinhard Zimmermann (eds), *The Oxford Handbook of Comparative Law* (OUP 2007) 339, 343.

arises as to precisely what that purpose is, and most critically, who or what determines that purpose. As functionalism tends towards *Régulationist* accounts, we begin to have a sense that the function the law fulfils is nothing other than ensuring its continuance (or if you prefer, 'reproduction'). As part of that role, law must also reproduce itself, or, as Peer Zambansen puts it:

> Functionalism in law describes the way in which the flexibilization and modernization of formal law, in reaction to an increasingly complex social environment, made up of competing interests, claims and contestations, takes place if law is to retain a steering function in the trials of society.[50]

Nevertheless, the functionalist reduction of law solely to its purpose is not without serious criticism. Michele Graziadei has argued,[51] for example, that legal functionalism suffers from a strange contradiction: on the one hand the theory's obvious debt to sociological functionalism requires the legal functionalist to take into account a vast quantity of 'facts' if one is to explain the social environment within which the law is functions; on the other hand, many legal functionalists have wished to impose a narrow boundary on their analyses, thereby replicating the traditional isolationism of formalism and jurisprudence. Graziadei admits, however, that this restriction is not inherent to legal functionalism, and scholars have in recent years been prepared to step beyond self-imposed confines to study civil procedure in its civil and political context, or the concept of *bona fides* with its notion of conscience.

A related problem, highlighted by John Merryman[52] and subsequently by Michele Graziadei, is that:

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[50] Peer Zumbansen, 'Law and the Welfare State: Formalism, Functionalism and the Ironic Turn of Reflexive Law' (2008) 56 American Journal of Comparative Law, 769-805.

[51] Michele Graziadei, 'The Functionalist Heritage' in Pierre Legrand and Roderick Munday (eds), *Comparative Legal Studies: Traditions and Transitions* (Cambridge University Press 2003) 109-110.

[52] John H. Merryman, *The Civil Law Tradition* (2nd edn, Stanford University Press 1985) 101.

> The functional method brackets whatever is found in between the 'facts' and their 'legal consequences' as reconstructed in operative terms. This is often noticed by scholars who object that functional comparisons are too rule-based or too rule-centred. The same concern suggests that such bias in favour of a rule-centred treatment of the law obscures the larger picture, which the notion of 'legal culture' evokes.[53]

Legal functionalism is at risk of conveying a picture of the law out of context and remote from life. Perhaps most damningly, legal functionalism has replaced the universalist, hierarchical origin of law that characterises formalism with a law that is no less abstract from social facts - social facts that stand against a definite, if narrow set of positive norms. Why should law be privileged over other normative orders as an object of study for the legal functionalist? The answer, often implicitly, recurs as part of a combination of formalist justification for what law is, and academic tradition.

Again, though, legal functionalism has not stood still and is aware of the risk of its methodological reduction. To this end, we find legal functionalists, particularly those pursuing comparative studies, strongly integrating diversity into the methodology, and seeking to grasp aspects of 'culture'. The most pertinent result for the purposes of this thesis is that legal functionalists have availed themselves of a more mixed-methodologies approach, with a view to capturing the social 'facts' within which law functions.

To take just one instance, functionalism focuses on the functions of law without considering unveiling elements that shape the law, whereas the legal formant theorists provide insightful understanding of laws by examining what has made the law as it is.

Rodolfo Sacco,[54] for example, in his theory of 'formants' – a theory of how norms having the functional status of laws arise from non-positivistic sources – draws on and

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[53] Graziadei (n 51) 110.

[54] Rodolfo Sacco, 'Legal Formants: A Dynamic Approach to Comparative Law', (1991) 39 Am. J. Comp. L. 1, 343.

is very much open to the excellent legal pluralist literature. Michele Graziadei likewise argues[55] that Watson's legal transplants theory[56] has much to teach functionalism, starting with the descriptive fact that legal systems borrow norms from other systems – an observation that ostensibly calls into question the purported ability of law and / or society to generate just the functioning norms that society requires to regulate its own reproduction.

This research recognises the limits of the functional approach to analysis of the legal framework in Thailand. As functionalists themselves admit, there are deficiencies in the functionalist approach which are highlighted by legal transplants theory and reflexive law. A main criticism of the functionalist approach is that it does not extend to the context of law that is transferred from other jurisdictions, in terms of the compatibility and feasibility of the borrowed rule or law. It provides neither a principle to be used for the analysis of cultural and traditional difference, nor any criterion for the successful adaptation of foreign law.

I argue that functionalism is capable of integrating legal transplant theory, or at least the following aspects of it:

(a) Nothing prohibits us from understanding that a society, understood in legal functional terms as a legal system functionally oriented to a social context, should form a subset of a wider transnational society (or set of societies). Thus if we draw a border around our society and regard this border as nevertheless a porous membrane, then it seems correct to admit that a society should be able to incorporate norms from 'outside' if these outside norms meet a functional demand on the 'inside'. To argue otherwise risks sliding into a positivism which legal functionalism does not need.

[55] Graziadei (n 51) 118-125.

[56] Alan Watson, *Legal Transplants* (2nd edn, University of Georgia Press 1993).

(b) If legal functionalism is open to non-positive norms, or at least sources of norms, it should be able to accommodate the variety of routes by which law is transplanted, be it (i) by treaty or (ii) by something much more amorphous but nevertheless documented by transplants theorists: *prestige*,[57] where a social group within a country adopts a law perhaps to 'modernise,' 'liberalise' or – critical to this thesis – gain access to international capital.

Following these dynamic trends in legal functionalism, I propose to augment that methodology by using complementary methodologies which, strangely, confer the benefit of unlocking the full potential of legal functionalism by cutting through its positivistic survivals. Legal transplants will be one such complementary theory.

Now, it is interesting to note that reflexive lawyers have spoken approvingly of Watson's legal transplants theory, just because it can explain legal transfers in a time of increasing globalization and fragmentation of national legal cultures.[58] In a sense, one might argue that while reflexive law shared functionalism's critique of legal formalism, reflexive law was perhaps a purer functionalism much as Niklas Luhmann moved beyond Talcott Parsons and followed the logic of functionalism to its sometimes surprising conclusions. Thus, it was the reflexive lawyers who understood that the law – as autopoietic social system – could be its own end and thus function for itself. An advantage of this closure of law and various other social subsystems was that the questionable functionalist dualism of law and social context could be reconfigured so that law's context was actually other autopoietic subsystems, each one providing an 'environment' for law. Such a move provides several answers to criticisms already levelled at functionalism:[59]

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[57] Gianmaria Ajani, 'By Chance and Prestige: Legal Transplants in Russia and Eastern Europe', (1995) *43 Am. J. Comp. L.* 93

[58] Gunther Teubner, 'Legal Irritants: Good Faith in British Law or How Unifying Law Ends Up in New Divergences', (1998) 61 *MLR* 11.

[59] Here I draw on the insights of Peer Zumbansen regarding the history of functionalism and reflexive law in his 'Law after the Welfare State: Formalism, Functionalism and the Ironic Turn of Reflexive Law' (2008) 56 (3) *American Journal of Comparative Law*, 769-805.

By defining the environment proactively as definite subsystems capable of sociological identification (rather than an amorphous 'society') reflexive law was immediately sensitive to non-traditional sources of norm formation, or at least influence, for it could be said that the law now functioned to serve a plurality of interests including its own:

(a) By appreciating law's self-production, the constraints of positivism could be removed, and non-traditional and emerging forms of law could be identified: notably for this thesis, forms of self-regulation.

(b) As noted above, and specifically by Günther Teubner,[60] the reflexive interpretation of law is ready made to cut through the traditional jurisdictional borders of legal functionalists, thereby being open to the interaction between a particular legal subsystem and subsystems of an increasingly globalized world (without however collapsing back into the 'romanticism' of legal cultures that bedevils legal transplants theory).

Although the functionalist approach offers a means of regulatory analysis of its consequences, this approach has limitations - what it lacks is a solution to the problem of regulation that fails to serve its objective. Reflexive law draws on some regulatory strategies that the law should adopt and develop. In particular, reflexive law is normative in that it suggests better legal systems (that is, reflexive ones) can be adopted.

Taking up the call for a dynamic legal functionalist theory, I propose to draw on several of the insights of the reflexive turn particularly in my engagement with regulation and self-regulation of NPLs.

[60] Gunther Teubner, 'Legal Irritants: Good Faith in British Law or How Unifying Law Ends Up in New Divergences', (1998) 61 *MLR* 11.

My overall approach then, is to deploy a dynamic functionalist theory which integrates the insights particularly of reflexive lawyers (who share certain traits with functionalists) and legal transplants theorists (who have described several legal realities to which traditional functionalism has been blind). Functionalism thus remains the dominant methodological paradigm but neither at the expense of explanatory power nor in the service of ideological commitment to one school of thought over another. The methodologies I have identified form a coherent whole and, most importantly, are adequate to the research object to be studied. In other words, the study of NPLs demanded that I draw on a more nuanced ranged of methodological resources.

From the preceding discussion, I have explained *in principle* why I have adopted a dynamic legal functionalist approach, necessarily augmented by legal transplants theory (to aid description of cross-border influences) and reflexive law (to support the integration of legal transplants theory within functionalism, and to aid prescription of efficient regulatory mechanisms). Having discussed the limitations of the functionalist approach and why I will be using mixed methodologies, the next section presents the fundamental scope of all theories that are used to study NPLs regime in banking regulation, and how those methodologies are applied in this thesis.

1.4.2 The deployment of methodologies in this thesis

As noted above, the research object demands that legal functionalism be dynamically augmented by reflexive law and legal transplants theory as appropriate. It is therefore helpful to identify just those areas where the supporting methodologies have played a particularly important role.

1.4.2.1 Functionalism, Legal Transplantation and Reflexive Law

This section sets out the fundamental scope of the theories of functionalism, reflexive law and legal transplantation theory as applied to the object of this research.

Functionalism is defined as an approach that is used to assess an action or social process in terms of its consequences. In general and as its name suggests, functionalism focuses on functions, or the role of something that fulfils in a system as a whole,[61] it is based on the premise that all aspects of society, institutions, and roles — serve a purpose for the survival of the society in which they function. Initially, a functionalist would evaluate a thing by observing its functions and assessing its outcomes in relation to society.[62]

Although functionalist theory has emerged from within the social sciences, it borrows scientific knowledge of biology in the functions of organs within the body to clarify relationships within the social system, comparing the organs of a body to a society. Durkheim argues that it is certainly possible to achieve an understanding of social facts by drawing on their composition, which comprise structures and forces. His functionalism has two essential sets of interacting components, and through these relationships it is possible to understand his arguments on society that structures are comprised of (i) law and (ii) institutions. To understand how this corresponds with social needs, institutions are established to perform functions and maintain social structures. We can see that Durkheim's argument is embedded in the concept of society's operation being dependent on the relationship between institutions and laws.

If we were to compare society in this theory to its financial system and seek to pin down what they have in common, we may find that social structure and financial institutions' functions are critical to the existence of that system and to society. This is important because it shows that to regulate a financial system, it is critical that the financial institutions should perform their functions to stabilise their structure in the financial system and critical too that we need tools that regulate the operations of those

[61] Janet Levin, 'Functionalism' (2018) The Stanford Encyclopedia of Philosophy (Fall 2018 edition) <https://plato.stanford.edu/archives/fall2018/entries/functionalism/> accessed 22 September 2020; José Lozano-Gotor, 'Functionalism' in Anne Runehov and Lluis Oviedo (eds) *Encyclopedia of Sciences and Religions* (Springer 2013).

[62] Talcott Parsons, *Social System* (1951).

institutions. In this research it is, therefore, argued that banking law and regulation should assist financial institutions to perform their functions. However, two questions then arise: what are the functions of banking regulation (which will be discussed in the following section), and are there any particular factors worth considering in the analysis of banking regulation of NPLs?

In any system (as a whole), there is constituted a smaller system called a 'society' or 'subsystem'.[63] Each system/subsystem relies on support from other systems Unlike Durkheim, who sets social elements inside a structure, and refers to other parts of society as institutions and laws, Talcott Parsons, in his functionalism of the role theory, develops Durkheim's works and introduces the fundamental functions that are operating with other subsystems / societies.[64] His concept of roles emphasises the importance of norms and values in Parsonian 'normativist functionalism'.[65] It must have a sufficient accordance with the requirements of its role system, positively in the fulfilment of expectations and negatively in abstention from too much disruption. He has been associated with duty in forms of regulation since the time he proposed the theory of roles. Regulation is thereby related to the theory of functionalism. Parsons[66] explains that roles are norms and values:

> Roles are, from the point of view of the functioning of the social system, the primary mechanisms through which the essential functional prerequisites of the system are met.

It can be seen that Parsons focuses on the role of units in the system as the tool to formulate the system since the roles are necessary to the formation of the system and the subsystems are not independent of each other. This is important because it indicates correlation between the system and other subsystems that is critical to solving problems occurring in a subsystem, including analysis of the subsystem of the

[63] Talcott Parsons, *The Structure of Social Action*: Vo II. (1937).

[64] Talcott Parsons, *The Social System* (1951).

[65] Talcott Parsons, *Actor, Situation and Normative Patterns* (1939).

[66] Parsons, *The Social System* (n 64) 115.

economy in relation to its other subsystems. If one wants to solve a problem, it is insufficient if only one subsystem is examined; rather, the system and other subsystems need to be studied. If we were to compare the system in Parsonian theory to the financial system and identify what they have in common, the financial system could be regarded as a system that consists of other subsystems such as law, the economy, and finance. Therefore, the analysis of banking regulation's functions cannot be conducted without taking into consideration its relationship with other elements in the system, which include finance and social stability.

Since the focus of this research is on the functions of banking regulation of the Thai NPLs regime, I conceptualise these processes at the broadest level of abstraction by drawing on the framework developed in the work of Steven Schwarcz (2016) and Julia Black (2012).

This thesis borrows from the methodology adopted by Schwarcz in his study of financial systems' regulation. As we have seen above, a functional approach is a highly useful framework for analysing the efficiency of the legal framework on NPLs and for identifying factors for well-functioning regulation. In this thesis I will use Schwarcz's methodology to analyse the functions both of LLP within the banking system, and of NPLs regulation. Particularly appealing is the manner in which Schwarcz conceptualises the functions of the financial system and financial regulation in designing the legal framework.

Schwarcz posits that financial regulation should serve the functions of financial system the function of financial regulation itself. While the financial system is dynamic and always in its state of cyclicality, financial regulation should be tied to functional components of the financial system, called 'functional regulation', rather than the financial architecture and the past crisis that is called 'traditional regulation'.[67] He argues that the failures of a crisis are unlikely to repeat themselves and that functional

[67] Steven Schwarcz, 'Regulating Financial Change: A Functional Approach' (2016) 206 Minnesota Law Review 1441, 1446-1447.

regulation could embrace changes and be more adaptable to address unforeseen problems more adequately than traditional regulation whereas traditional regulation is unlikely to be adaptive, contradicting the nature of a financial system that is dynamically changing.[68] It may be concluded that Schwarz's functional approach emphasises the functions of the financial system. Therefore, if the functions of law are crystallised, it is likely that enforcement will achieve its aims.

In terms of the functions of laws and financial systems, Schwarcz[69] found in his study of financial change that the functions of financial regulation are to:

(i) correct market failures and facilitate financial institutions in performance of their functions; and
(ii) protect the financial system's ability to function as a network.

The former is referred to as micro-prudential regulation and the latter is referred to as macroprudential regulation. In his arguments, Schwarcz's focus is on the economic functions of the financial system rather than on the institution. He states that

> the underlying economic functions of a financial system are the 'provision, allocation and deployment of capital' and to serve as a network.[70]

That statement illustrates the roles of banks in providing funding to the economy. In this context, it could be argued that banking regulation should facilitate banks in carrying out their functions in allocating capital while regulating banks to mitigate risks in the banking industry in order to balance their trade-off between earning profits and enhancing banking stability. This could be applied in the LLP and capital requirements mechanisms where the regulator and supervisor should design their

[68] Iman Anabtawi and Steven Schwarcz, 'Regulating Ex Post: How Law Can Address the Inevitability of Financial Failure' (2013) 92 Texas Law Review 75, 85.
[69] Schwarcz 'Regulating Financial Change: A Functional Approach' (n 67) 1470.
[70] ibid 1445.

regulatory system to allow banks to smoothly run their business and to protect the financial system from the systemic risk.

Moreover, I adopt the functional approach adopted by Julia Black in her analysis of paradoxes and failures of banking regulation prior to the GFC.[71] Black explicitly employs a functional dimension as a means of explaining the causal link between regulatory strategies, and the failures and paradoxical effects. She emphasises that the functional aspect allows us to understand why a regulation failed and led to unintended consequences.

> The focus here is primarily on the functional, operational side of regulatory governance. This is clearly not the only perspective that could be taken on analysing the crisis, but it is a valid one: regulation is a functional task and much mainstream regulatory literature is highly functionalist in its orientation.[72]

Clearly, there is a need for regulators to understand the functional dimension of regulation. Black's analysis illustrates how financial regulation caused tension and internal contradictions. This is important because the functionalist approach allows us to discover that a regulatory toolkit that is fashionably applied after the financial crisis may not function as anticipated. Therefore, this research directly employs functional methodology[73] to draw up the conceptual tools for NPL regimes as a lens to measure banking regulation on LLP and capital requirements. However, due to limitations of this functionalist approach arising from transplants and reflexive law, I am integrating and reinvigorating functionalism as dynamic legal functionalism, which incorporates

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[71] Julia Black, 'Paradoxes and Failures: 'New Governance' Techniques and the Financial Crisis' (2012) The Modern Law Review, 1037-1063.

[72] ibid.

[73] Ralf Michaels, 'The Functionalist Method of Comparative Law' in Mathias Reimann and Reinhard Zimmermann (eds), *The Oxford Handbook of Comparative Law* (Oxford University Press 2006) 339; Geoffrey Samuel, *An Introduction to Comparative Law Theory and Method* (Hart Publishing, 2014); Michele Graziadei, 'The Functionalist Heritage' in Pierre Legrand and Roderick Munday (eds), *Comparative Legal Studies: Traditions and Transitions* (Cambridge University Press 2003).

the notion of borrowing from legal transplants theory, and the functioning norms of reflexive law that lead to self-regulation of NPLs regimes.

1.4.2.2 Augmenting functionalism with legal transplants theory

As noted above, another way I augment functionalism is by adopting certain aspects of legal transplants theory to explain the influences of extra-systemic regulatory and financial structures on the Thai banking system. Considering the contexts of banking regulation under NPLs regimes — the LLP and capital requirements developed mainly through borrowing from international standards - legal transplantation theory provides the contexts for cultural difference, the feasibility of legal borrowing, and law and development for the regulatory efficient analysis where laws / rules are borrowed. This approach allows us to consider whether foreign law could feasibly apply in emerging countries such as Thailand, and whether there are any unpredicted consequences of that application.

Although there are many contested definitions of legal transplants, legal transplantation entails a broad phenomenon of copying legal concepts, norms, or systems. The terminology of legal transplantation is provided by Watson,[74] who identified transplants as 'the moving of a rule or a system of law from one country to another'. Langer[75] meanwhile describes transplants as the phenomenon of circulating legal ideas and practices. Thomas Carboneau[76] refers to legal transplants in his seminal text on comparative law. Geoffrey Samuel[77] also labels legal transplants as an approach in comparative law. It can be concluded that legal transplantation more

[74] Alan Watson, *Legal Transplants: An Approach to Comparative Law* (2nd edn, University of Georgia Press 1974) 21.

[75] Maximo Langer, 'From Legal Transplants to Legal Translations: The Globalization of Plea Bargaining and the Americanization Thesis in Criminal Procedure' (2004) 45 Harv Int'l LJ 1, 60.

[76] Thomas Carbonneau, Legal Traditions of the World, Sustainable Diversity in Law 'Book Review Patrick Glenn' (1st edn 2000) 48 AM. J. Comp. L.

[77] Geoffrey Samuel, 'All that Heaven Allows: Are Transnational Codes a 'Scientific Truth' or Are They Just a Form of Elegant 'Pastiche'?' in Pier Monateri (ed) *Methods of Comparative Law* (2012 Edward Elgar) 165, 169.

generally is associated with foreign legal systems, norms, practices, standards, legal historical background, culture and the will of people. There are certain terms used interchangeably with legal transplants, namely 'legal transfer', 'legal borrowing', 'legal interventions',[78] and 'reception'.

Legal transplants in this research are defined as 'a legal methodological approach involving borrowing of one's legal norms/rules/standards or system' as it presents the concepts of legal transplantation in applying rules to another legal system. Legal transplantation can be conducted between states, international organisations, and NGOs.

Thailand applies international standards—the Basel Accord (on capital adequacy) and International Financial Reporting Standards (IFRS) 9 (reporting standards on LLP)—to its frameworks of financial system supervision:

(i) banking regulations on capital requirements of financial institutions applied the Basel III framework to Thai commercial banks and

(ii) banking regulations on LLP applied the financial reporting standards of IFRS 9.

Capital requirements and accounting standards are set by the Bank for International Settlement (BIS) and the IFRS Foundation, both of which are of course international organisations. Therefore, the Thai capital requirements and financial reporting standards for the Financial Institution Act 2007 are, in their very nature, according to Watson[79] and Nelken[80] a legal transplant of a foreign legal concept into Thai law. Therefore, the implementation of international standards in banking regulation on

[78] David Nelken, 'The Meaning of Success in Transnational Legal Transfers' (2001) 19 Windsor YB Access Just 349.

[79] Watson, Legal Transplants: An Approach to Comparative Law (n 74) 29.

[80] Nelken, 'The Meaning of Success in Transnational Legal Transfers' (n 78) 349.

NPLs regimes is regarded as legal borrowing in legal transplantation theory. This demonstrates that the theory of legal transplantation is of relevance to the assessment of banking regulations, and it could be used as a supplement to the functionalist approach in assessing functions of banking regulation imposed on the financial system and whether it serves the economic functions.

Because of the way in which these rules and standards influence the Thai banking sector, it makes sense to begin substantive analysis of the NPL regime by discussing the manner of their reception into Thailand. However, legal functionalism has difficulty in accounting for the transfer of norms between social contexts from the Global North to countries such as Thailand.

The implementation of such standards presents multiple problems for legal functionalism as originally conceived:

(a) these standards, especially certain accounting standards, may lack legal force and may even by the product of self-regulation, thus falling outside the traditional idea of law;

(b) adoption of such standards as positive laws within a national legal system may be driven not by the functional needs of either law or society, but through lobbying by the financial sector who wish to open up that society more to international capital flows;

(c) it is a curious conceit to imagine that international standards are truly international. They may be developed in the Global North and then become standards for societies that had no say in their production. Functionalism would then suggest that these standards cannot function as laws in for example Thai society – an interesting polemical position but a position not borne out if one accepts transplantation.

In this regard, legal transplantation theory explains the possibility and the impact of adaptation of certain international standards to the Thai banking system. The concept of transplantation has been used for a critical argument about international standards

—IFRS 9 and the Basel standards, adopted by Thailand. The initial assumption is that there are some unintended and unwelcome consequences arising from importing international standards into Thailand's NPLs regimes.

As I have argued, it is therefore appropriate to dynamise legal functionalism with insights from legal transplants theory without however romanticising the role of Thailand's legal culture. In the next section, this research conducts a review of theoretical perspectives on the determinants of successful transplantation of international standards, followed by the experience of previous banking regulation transplants in the chapter thereafter.

1.4.2.3 Augmenting functionalism with reflexive law

Regarding reflexive law, the function of law is to reproduce / communicate with the autonomy of other sub-systems of society requiring adaptiveness and compatibility of its own elements to and with the environment of another system. When the law reproduces itself, or is communicating with other systems, according to Teubner it considers the environment / contexts of other subsystems and society.

Reflexive law is a legal self-restraint mechanism.[81] It focuses on the correction of institutions that function as a self-regulatory system. The concept of 'government to governance' has become thoroughly widespread in many industries—to illustrate, corporate governance applied in the UK under the Company Act 2006.

Niklas Luhmann[82] argues that reflexive law relates to autopoietic or self-referential systems, perceiving law as an autonomous subsystem of the whole societal system.

[81] Gunter Teubner, 'Substantive and Reflexive Elements in Modern Law' (1983) 17 Law and Society Review, 239.

[82] Niklas Luhmann, 'Some Problems with Reflexive Law', in Gunther Teubner and Alberto Febbrajo (eds), *State, Law and Economy As Autopoietic System* (Giuffre 1992) 389-412.

Teubner[83] states that reflexive law[84] contains within it the concept of the self-reference that 'law becomes a system for the coordination of action within and between semi-autonomous social subsystems'. This approach views self-regulation by organisation norms and procedure as the coordination of internal change—the law has to adapt to its own elements and functions and be an external variable with other autonomous communication networks, presenting the legal system as a closed and an open system. Indeed, reflexive law prescribes such self-regulation as the best way of achieving positive organisational change. [85]

It is clear that law facilitates self-reproduction by the self-regulation mechanism that is adaptative to its environment and to needs from outside. This provides the solution for any law that fails to serve its functions and needs to be amended. Adaptation to the environment of a sub-system in reflexive law is similar to functionalism in this characteristic. It is agreed that the relation between reflexive law and autopoietic law stresses the law's self-referential reproduction, which supports the self-regulatory explanation that law is truly a form of communication.

Another important aspect of reflexive law is that it shifts government intervention into the capacity of market actors to reproduce themselves by adaptation to new challenges with other sub-systems. Although the regulator and the banking supervisor remain the primary norm-generators, reflexive law proposes a self-regulatory mechanism for

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[83] *See* Gunter Teubner, Evolution of Autopoietic Law in Teubner (ed) *Autopoietic Law: A New Approach to Law and Society* (1988 Berlin: de Gruyter); Gunter Teubner, *Law As An Autopoietic System* 94, 64-65 (Oxford/Cambridge, Blackwell Publishers 1993).

[84] Teubner proposes a new legal structure called 'reflexive law', which is embedded with neo-evolutionary concepts in the self-restraint character aiming to solve problems of formal law crisis in welfare-regulatory intervention. He seeks to 'transcend controversies between functionalism and critical theory' by proposing a new legal model consisting of models on norm rationality external functions of law and internal structure of law (internal and external variables) that Teubner has developed from works of Nonet and Selznick, Habermas (developed market economy), and Luhmann (autonomous economic system).

[85] Teubner, 'Substantive and Reflexive Elements in Modern Law' (n 81) 242.

shaping the regulatory regime. As noted by Julia Black,[86] the normative basis of reflexive law is to avoid government intervention. Black points out that the substantive values of reflexive law may be normatively acceptable, and that law may have to be reflexive to achieve recognition by other autonomous systems. This is important because this reflexive approach shows that it values market freedom and market demand rather than government intervention.

While the self-regulatory approach emphasises market demand, the law could become problematic and at stake in politics, for example in pressures from powerful actors on conformity of regulations to international standards of financial accounting following the recent financial crisis.[87]

If banking regulations were subject to unreliable players in politics, they could be driven by competitiveness concerns. Consequently, such law could undermine the capacity of national regulators to regulate their banks. One could say that reflexive law embraces the limitations of law since it answers to fluctuations in market activities and shifts the burden of intervention onto market activities.

Having said this, law is expressed in a linguistic form giving guidance to normative behavioural expectations and sets limitation for addressees to determine what is possible in their collective business.[88] Normative expectations step in to set norms to

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[86] Julia Black, 'Constitutionalising Self-Regulation' (1996) 59 *The Modern Law Review*, 24,50.

[87] *See* Matthias Thiemann 'In the Shadow of Basel: How Competitive Politics Bred the Crisis', (2014) 21 Review of International Political Economy, 1203-1239: Abraham Newman and Elliot Posner, 'Structuring transnational interests: the second-order effects of soft law in the politics of global finance', (2016) 23 Review of International Political Economy, Taylor & Francis Journals, 768-798: Mohammad Nurunnabi, 'Auditors' perceptions of the implementation of International Financial Reporting Standards (IFRS) in a developing country' (2017) *7* Journal of Accounting in Emerging Economies, 108-133.

[88] Rolf Weber, 'The role of law in constituting financial markets' (2017) 32 (6) *J.I.B.L.R.* 253, 254.

make it possible to meet social expectations.[89] Thus, the function of law involves the probability of communicating expectations and having them accepted in order to stabilise normative expectations.[90] According to this opinion, the law is designed by setting norms or rules to match social expectations. To achieve such expectations, it is argued that a set of rules and regulations is required to control uncertain outcomes that may emerge from the market.

My primary hypothesis is that Thai banking regulation that adopts international standards fails to perform its function in increasing banking stability. As mentioned above, I argue that the roles of law and financial regulation should provide guidance and norms. When it is unlikely that the law can provide norms that fulfil normative expectation, this research proposes that self-regulation in banks' own practices is an option to be considered for NPLs regimes. Applying functioning norms of Thai banking practices under reflexive law and considering the traditions and culture of Thai banks, this research proposes a regulatory regime to be applied to standard setting for LLP and capital requirements. It will be more flexible and more likely to withstand political pressure. This research, therefore, applies the notion of reflexive law and the idea of self-regulation to NPLs regimes, particularly in an LLP and capital requirements setting, proposing that the setting of standards should rely on banks' own practices in the matter of doubtful debts rather than mainly relying on international standards, something further discussed in Chapter 4. In this way it provides an option for regulators to allow market actors to set norms that potentially meet their demands allowing them to fulfil their roles and thereby increase banking stability. Therefore, reflexive law augments functionalist methodology by suggesting law / regulation functions more efficient for achieving its objectives where it can be more responsive.

[89] Niklas Luhmann proposes that norms produce a higher degree of certainty of expectation than guaranteed by a behavior.

[90] Niklas Luhmann, *Law As A Social System* (1993), 142-143.

1.5 Map of the Thesis

The focus of this research is to examine whether the existing structure of LLP and capital requirements achieves its purposes of enhancing banking stability and lowering risks. Without recognising its purposes, the law might not be serving its aims, which can be conceived as a failure of law that might lead to social distress. Once those functions are settled, the next step is to design the structure of law, and to apply certain strategies for its enforcement. Functions of law are, therefore, essential to the structure and development of banking regulation.

In doing so, I will examine the roles of banking regulation, followed by an analysis of regulatory efficiency. The investigation is of the functions of banking regulation and evaluation of the Thai regulatory system's efficiency and whether it reaches its legal objectives to increase banking stability and serve the functions of the financial system. In particular, the efficiency of the current regulatory system on NPLs and the relationship between banks and the financial system will be examined. Banking practice and analysing bank practice, banking regulation, legislation and scholarly opinion will be explored. Later, this research discusses how banking regulation has an impact on stakeholders and regulated banks, and whether it contributes to banking stability or leads to changes in and to the banking system. This conceptualisation of banking regulation design will provide a continuous thread linking my analysis of NPL regimes operating in Thailand, discussed in the subsequent chapters.

Chapter 1 has provided an overview of credit risk management in banking and has described the increasing impact of NPLs on financial markets and on economic growth in a discussion of whether current NPL regimes aggravate the problems caused by NPLs, or instead increase financial stability. To address these issues, I use a dynamic functionalist approach in seeking understanding of the objectives of regulation and analysing their efficiency in dealing with banks' NPLs more effectively. I augment that methodology through reference to reflexive law, facilitating my adoption of functionalist theory. I critically examine the legal transplantation approach to discuss how the concept of NPLs regimes extracted from international standards has evolved over time in the Thai national regulatory system—with particular emphasis on certain

drawbacks in the current regulatory framework of Thailand in respect of LLP and capital requirements.

Chapter 2 explores legal transplantation in banking regulation. It contributes to the research question of whether the implementation of international standards to Thai banking regulation of LLP and capital requirements has unintended and unwanted consequences. With the aim of examining the implementation of international standards in the Thai regulatory framework, Chapter 2 not only contributes to precedents of legal transplantation under banking regulation, but also elucidates the feasibility of transplanting international accounting standards and capital requirements.

Chapter 3 argues that NPLs trigger financial crises, in particular regarding bank lending where debtors are in default their loans turn bad. It focuses on the necessity to have mechanisms to deal much more effectively with NPLs, with particular attention given to consistency in defining NPLs. In this context, account is taken of asset qualification system and the problems of NPLs.

Chapter 4 considers the implementation of NPL approaches specific to LLP and capital requirements. This chapter explains why and how these approaches could mitigate credit risk and reduce the potentially very damaging impacts of NPLs.

Chapter 5 contributes to an analysis of the NPL-governing regime in Thailand that overtly demonstrates the downsides of implementing international standards in the Thai regulatory system with regard to understanding LLP and capital-requirement instruments in banking regulation and the limited scope of measures, in order to examine how international standards drafted in the Global North have an impact on the interests of the Global South.

Chapter 6 provides a critical analysis of the functions of secured transactions law, with particular regard to floating charges, in a case study intended to mitigate risk in terms of collateral. It contributes to the analysis of whether floating charges can solve

problems arising from a high NPL ratio in Thailand. An assessment of the secured transaction law regime on NPLs is provided through the lens of a legal-transplant viewpoint.

Chapter 2: Legal Transplantation Theory in Banking Regulation

2.1 Introduction

The discussion of legal transplantation theory in Chapter 1 elaborates on the foundations of legal transplantation and how this theory can be used to augment any functionalist account of banking regulation in a jurisdiction such as Thailand. It underlines the definition and the criticism of the possibility of legal transplants. This research aims to examine the regulatory governance that borrowing international standards and foreign law and whether this legal technique could lead to the development in the banking industry and enhance financial stability. It is necessary first to provide a review of the academic literature on the application of legal transplantation theory to banking regulation, particularly in the enrolment of international standards, since the Thai legal framework on LLP and capital requirements adopts the international standards of the IFRS 9 and the Basel II, III. Therefore, this chapter demonstrates how legal transplants theory can be applied to regulating the financial system in Thailand, and further it examines if there is any possible application of legal transplants in banking law.

My main argument is that determinants of the possibility of legal transplantation are the compatibility of each foreign rule to the receiving nation's legal culture as well as external forces that brought about the law, other than the legal system itself. Unless one considers the recipient jurisdiction's legal culture, economy and society, this research argues that the transfer of rules to that jurisdiction cannot be achieved. Legal transplants integrate foreign systems into an often very different financial culture. Hence, legal transplantation requires the prediction of the functional outcomes of the transplanted law in order to justify its use.

The transfer of foreign rules into local financial regulation is not confined only to the need to correct failures from the recent financial crisis and the unique of financial architecture of each country but covers other dimensions regarding the consequences

of applying such banking regulation and how that serves the functions of the whole financial system. Failures do not always repeat themselves in other crises.[91]

The primary hypothesis of this thesis is that borrowing international standards and foreign law into banking regulation could exacerbate vulnerabilities and create unintended consequences, including weakening economic growth, for the primary reason that these transplanted rules typically decrease funding from commercial banks to markets. Nevertheless, legal transplantation theory provides an understanding of the implementation of foreign rules. Applying legal transplantation theory to banking regulation is therefore needed in formulating, enacting, and enforcing banking law.

2.2 Legal Transplants in Banking Regulation

The Methodology and Methods section of Chapter 1 discusses legal transplantation theory in general, contemplating the feasibility of legal transplantation. Although it is argued that laws specific to one country cannot always readily be transplanted to another[92], there exists evidence that such law can be transplanted, for example in the history of the colonial era. This research argues that it is possible to transplant foreign rules, but the success of that transfer is based on the nature of the adaptation and on certain other conditions. Since this research focuses on banking regulation of LLP and capital requirements, understanding of international legal borrowing in this field is critical to effective analysis of the efficiency of NPLs-governing regimes (see Chapter 5). The successes and failures in the transplantation process can reveal consequences of this regulatory technique in banking law. The early literature has found that there is application of legal transplantation in regulating financial system in the aftermath of the global financial crisis. This section, then, examines precedents in legal transplanting of new financial architecture and whether it is feasible to borrow

[91] Schwarcz, 'Regulating Financial Change: A Functional Approach' (n 67).

[92] *See* Otto Kahn-Freund 'On Use and Misuse of Comparative Law', 37 *M LR* 1 (1974); John Allison, 'A continental distinction in the common law: a historical and comparative perspective on English public law' (Oxford University Press 2007); Ann Seidman, Robert Seidman and Thomas Waelde, 'Making Development Work: Legislative Reform for Institutional Transformation and Good Governance' in lphen aan den Rijn, (Kluwer Law International 1999).

international standards from international organisations to reform domestic banking regulation in the Global South.

Underlying principles of the new global financial architecture include increasing stability of the international financial system and mitigating systemic risk. Post-2008 international financial law is mostly developed by the G-20, the Financial Stability Board (FSB), the Basel Committee on Banking Supervision (BCBS), and the IMF.[93] Banking regulation and supervision have been reformed through augmenting and strengthening supervisory structures and by the replacement and enhancement of international standards. Consequently, there has been an adoption of international standards in financial law in Thailand's domestic banking laws. As mentioned in Chapter 1, actors in the legal transplantation include the international organisation. Therefore, legal transplants have been employed as mechanisms to develop international financial law by introducing standards, codes, and principles to reassure adequate supervision, core principles of bank supervision of LLP, and rules/standards for capital adequacy.[94]

International financial law has been developed through international institutions, for example, the IMF, the FSB, the BCBS and the IASB. The principal coordinating bodies of those international entities are mainly comprised of organisations of the Global North[95], while the actors in the implementation of international financial law include regulators from the Global South. Questions raised here are how legal origin becomes critical and how much it impacts upon domestic banking laws since these rules/standards adopted originate from international organisations that are part of more powerful states? Therefore, this research focuses on the feasibility of the legal transplantation of new international financial law to so-called emerging countries.

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[93] Ross Cranston and others, *Principles of Banking Law* (3rd edn, The Oxford University Press 2018).

[94] Ross Cranston. 'A Theory for International Financial Law?' (2006) 18 Student Bar Review 1-12.

[95] The G-20 now comprises the G-7 countries (Canada, France, Germany, Italy, Japan, the UK, and the US) and the biggest emerging economies. The main coordinator body of these institutions in the international financial development is the G-20 that it is powerful in the FSB, the IMF and the BCBS. The details of the relationship will be discussed in Chapter 4.

Although La Porta and Lopez-de-Silane[96] argue that transplanting financial laws can automatically alleviate emerging economies and help them achieve a higher growth rate within a shorter span of time, there are concerns that arise due to standards of foreign borrowing. As mentioned above, international standards are established by international bodies that are driven by the fiscal policies of developed countries.

Regarding the legal transplantation of international financial law in emerging countries, it is critical to assess whether those rules/standards/principles can be successfully implemented within national jurisdictions. Achieving this new global financial architecture, however, presents immense challenges in those emerging national economies. Woods[97]points out the considerable and remarkable differences between jurisdictions. The application of international banking supervision and regulation without sufficiently insightful guidance must inevitably entail unintended effects, and in extreme cases may well result in ineffective laws. The adoption of international standards in financial law may therefore lead to seriously adverse effects. Giovanoli claims that without the application of a well-designed international framework, these regulations can have limited effects at best and be described simply as "soft law".[98]

However, Cranston[99] emphasises his concerns about less visionary and even blind transplant of the standards, codes and principles of new international financial law – as he terms it: 'neo-colonial domination'. This is important because from another aspect, emerging countries are forced politically to apply standards[100] of new financial law in the establishment of which they have limited participation. Unlike efficiencies

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[96] Rafael La Porta and Florencio Lopez-de-Silanes, 'The Economic Consequences of Legal Origins', Seminar in Law & Economics, (2007).

[97] Philip Wood, *Principles of international insolvency* (Sweet and Maxwell 2007), 10-12.

[98] Mario Giovanoli. 'A New Architecture for the Global Financial Market: Legal Aspects of International Financial Standard Setting.' International Monetary Law-Issues for the New Millennium, (2000) 5.

[99] Ross Cranston. 'A Theory For International Financial Law?' (2006) 18 Student Bar Review 1, 6-9.

[100] This issue will be further discussed in Chapter 5.

of family law and criminal law that have been successfully transplanted internationally,[101] financial law is more problematic. How could the Global South ensure that the application of such principles would be compatible with and advantageous to their financial systems, which are in key respects tremendously different from developed countries in terms of the financial architecture of institutions.

Considering now the monitoring of international standards, the IMF set the BCBS aiming at ensuring compliance with and investigation of the level of implementation of the new capital requirements to ensure that the new governance of banking supervision requirements has been widely and properly applied globally rather than having to pay too much attention to the consequences of implementation of the Basel III in emerging economies.

Therefore, less insightful reproduction of foreign financial models has immensely affected the application of standards and its purposes of ensuring their continuance. That is because a state does not always make these changes of its own autonomous volition, but partly as a result of international political pressure from more powerful states and indeed private financial actors. For emerging economies, the underlying principles of implementation are to develop their own, unique, local-national banking supervision to reach and match international standards to gain more confidence from the global financial community and to attract more international foreign investment in order to boost their economy. The more successful transplants have been correctly, comprehensively concerned with properly applying the association between transplanted law and its importing and exporting environments.[102] Furthermore, Zweigert and Kotz find that 'the style of a legal system may be marked by an ideology, that is, a religious or political conception of how economic or social life should be

[101] John Jupp, *'Legal transplants as tools for post-conflict criminal law reform: justification and evaluation'* (2014) 3 *Cambridge Journal of International and Comparative Law*, 381-407; Ross Cranston. 'A Theory For International Financial Law?' 18 (2006) *Student Bar Review* 1, 10.

[102] Hideki Kanda and Curtis Milhaupt, `Re-examining Legal Transplants: The Director's Fiduciary Duty in Japanese Corporate Law' (2003) 51 *American Journal of Comparative Law* 889.

organized'.[103] Thus, the transplanting in financial laws may vary from country to country based on social norms, the nature of the financial system, the economy, and other local-national factors.

2.3 Challenges for Legal Transplants

Evidence of legal transplants can be seen at a global level. Michaels[104] argues that the process of legal transplants requires both 'formalization and standardisation'. As mentioned above, Legrand has theorised about the importance of socio-cultural factors in legal systems[105] and similarly, in the time of globalisation, one of the biggest challenges to the legal-transplantation system in banking is to be 'context-specific' since they can only be effective as long as they remain sufficiently and fittingly 'local'.[106] Furthermore, globalisation itself can be identified as one of the challenges to legal transplants, as it has had a significant impact on transplanting laws from one country to another.

In emerging countries, particularly in South-East Asian nations such as Thailand, legal transplants face special challenges not least because the main political objective in these countries – i.e., that of economic progress - often takes precedence over social welfare.[107] Thus, laws are often transplanted to liberalise the economy while they often

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[103] Charles Yablon, 'The Indeterminacy of the Law: Critical Legal Studies and the Problem of Legal Explanation' (1984) Cardozo Law Review 917.

[104] Ralf Michaels, 'One size fits all – On the mass productions of legal transplants' in Günter Frankenberg (ed), *Order from Transfer: Comparative Constitutional Design and Legal Culture Law* (Edward Elgar 2013) 58.

[105] Pierre Legrand and John Merryman, '*Comparative Legal Studies: A Dialogue'* (1999) The American Journal of Comparative Law.

[106] Michaels (n 104) 3.

[107] *See* Helen Xanthaki, 'Legal Transplants in Legislation: Defusing the Trap' (2008) 57 The International and Comparative Law Quarterly, 659, 662.

forgo asymmetric interests between the adopter and the originator countries.[108] Legrand thus claims that legal transplants are impossible,[109] finding that legal transplants should theoretically be aimed at benefit for society and not primarily for economic advances.

There is an assumption that it is feasible to transfer financial regulation the readily welcoming and easily accepting reception of one country from another or others. Freund contends that laws can be successfully transplanted if the country they are being transplanted into fulfils certain, relevant factors of political ideology and power structure,[110] which La Porta and Lopez-de-Silanes argue involve entailment of political will to transplant and enforce laws from other countries.[111] In such a scenario, the legal transplantation of rules and regulations may not be fully voluntary. Financial needs of emerging countries are a factor in the success of adopting laws from other countries. Having said that, an important question is raised as to whether that transplanting is genuinely enhancing banking stability in the Global South.

While globalisation and capitalism pose challenges to international transplants of financial law, these are also among the most significant factors that are causing development in transnational ability to bridge gaps between law and culture. In a more globalised world, more countries and their cultures are interacting with each other, so that western influences can be seen in Asian countries and vice-versa. Legrand's contention that legal transplants must consider local cultural attributes aligned through

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[108] Jean Morin and Edward Gold, 'An Integrated Model of Legal Transplantation: The Diffusion of Intellectual Property Law in Developing Countries' (2014) 58 International Studies Quarterly 781, 783 ; Celine Tan, 'Navigating new landscapes Socio-legal mapping of plurality and power in international economic law' in Amanda Kessaris (ed), *Socio-Legal Approaches to International Economic Law: Text, Context, Subtext* (Routledge 2012) 21-26.

[109] Pierre Legrand, 'The Impossibility of 'Legal Transplants'' (1997) 4 Maastricht Journal of European and Comparative law, 114.

[110] Otto Kahn-Freund 'On Use and Misuse of Comparative Law', (1974) 37 M LR 1.

[111] Rafael Porta and others, 'Investor protection and corporate valuation' (2002) 57 *Journal of Finance*, 1147.

globalisation processes and imported laws can be seen to be gaining more acceptance at the local-national level.[112] As globalism creates new, international cultural and social norms, developed countries often tend to take advantage of these norms to create powerful political and economic institutions at the global level.[113] International organisations, including in particular the IMF and the World Bank, hold impressively substantial global power when it comes to international trade and finance.[114] Similarly, the Basel laws impact upon the banking sector throughout the world. Thus, it is critical to investigate their influence and impacts on the Global South's regulatory systems and their banking stability.

In the context of implementation of international standards of LLP and capital requirements in the era of globalisation, the challenges for legal transplants also include the lowering of asymmetrical power distribution.[115] Laws favouring developed countries are transplanted into these developing nations to attract foreign direct investments, which boost the economy yet without recognising unintended consequences from such reception.

2.4 Conclusion

Following the 2008 global financial crisis, legal transplants have been employed as a legislative tool to bring about post-crisis financial law to deal more effectively and safely with systemic risks. New financial architecture has been introduced and developed globally through international organisations. It has been shown that the principal mechanism driving development of the international financial law has been legal transplantation. Yet, the possibility of the successful adoption of international standards into national jurisdictions – especially among emerging countries – remains doubtful. This research suggests that legal transplantation in financial law needs to be

[112] David Gerber, 'Globalisation and legal knowledge: Implications for Comparative Law, 950.

[113] ibid.

[114] Brian Tamanaha, 'Understanding Legal Pluralism: Past to present, local to global' 375.

[115] Pierre Legrand, 'The Impossibility of Legal Transplants' (1997) 4 Maastricht Journal of European and Comparative Law, 114-115.

attended by considerable care, due to problems occurring from the adoption of international financial law, particularly in the adaptation to the systems of receiving countries' financial environments.

Having presented precedents of international legal transplantation in banking regulation, the next chapter examines NPLs in detail.

Chapter 3: Non-performing loans

3.1 Introduction

The previous chapter explains the theoretical framework for legal transplantation of financial regulation which leads naturally to an analysis of the NPL regulatory system presented by this thesis. The attempt to examine the application of legal transplantation in banking regulation is imperative in this thesis in that it demonstrates how international standards/rules have been transplanted into Thailand's banking regulations. The analysis shows that the concept of transplanting in financial law should continue to be probed because it involves political interference and can cause unintended and unwelcome consequences.

Since the central theme of this research is non-performing loans and their related legal framework, the necessity of having an effective regulatory framework dealing with NPLs due to their impact on economic growth and banking stability is established at the outset. This research argues that it is critical to have a regulatory framework to deal with NPLs. Otherwise, the presence of weak supervisory practices and legal systems related to NPLs may lead to bank failures and a new financial crisis. In this regard, this chapter employs the methodology of dynamic legal functionalism (in part, augmented by legal transplants) in examining NPLs, in particular their roles within the financial system and how they trigger the economic functions of commercial banks.

Most significantly, this chapter deals with the recognition of NPLs and efforts to harmonise the definition of NPLs. It takes into consideration the IMF and The Bank Committee on Banking Supervision (BCBS)' attempts to agree upon a universal definition of NPLs. The other terms used to refer to NPLs – non-performing exposure (NPE) and non-performing asset (NPA) - are also examined. The recognition of NPLs triggers certain regulatory duties to risk mitigation in a timely manner. Understanding the recognition of NPLs will enable us to better situate legal framework for NPLs and its functions to better prevent a future banking crisis caused by high accumulation of NPLs. Hence, the regulatory aspect that relates to the recognition of NPLs will be examined in the following chapter.

As we shall see, NPLs are recently perceived as a cause of vulnerabilities and a threat to financial systems, which undermine core functions such as financing to the real economy. NPLs are one of the key determinants of banks' profitability and stability because the level of NPLs affects bank lending behaviours and bank internal risk management, which are provisioning and capital charges. That is to say, NPLs not only play a role in banks' economic functions in providing capital but NPLs can also cause disruption in the banking industry.

This Chapter will show that a high level of NPLs decreases banks' liquidity by lowering their capital, which in turn can lead to bank failures and impede the functions of financial markets. As has been observed, NPLs harm banking stability and can cause bank insolvency. Although NPLs are reported in banks' balance sheets as micro-prudential, they have an effect on macro-prudential matters in banks' resolutions and on their overall business finance cycle.

In this Chapter we will see that it is commonly held that NPLs have played a key role in policymaking on economic growth and banking stability, providing policy-makers and regulators with an assessment of the probability of default of main bank assets on loans in an asset-quality system, which plays a unique role in information disclosure and asymmetries for reserves and capital charges.

An asset-quality system is designed to measure the qualities of banks' assets, ranging from good to defaulted loans. NPLs are assessed within an asset-quality system that is heterogeneous. The general view is that NPLs are bad loans that are in default when they are more than 90 days past due, or likely to be ultimately unpaid.

However, there is no universal definition of NPLs, which hinders their recognition and management, as well as the collaboration of setting provisioning standards and capital requirements that require the quantity of defaulted loans in the risk calculation for an

application of these risk management mechanisms.[116] Increasing national credit growth and GDP mainly based on capital requires systemic development planning, including effective risk management tools in policy-making processes.

The next section provides an overview of the nature of problems caused by NPLs and of the financial crisis, as well as the level of NPLs.

3.2 Background of Non-Performing Loans

3.2.1 The Financial Crisis and NPLs

The global financial crisis of 2007-09 was the result of various market and regulatory failures. Through financial innovation and securitisation, and interconnectedness between financial institutions, this generated systemic risk[117] that later resulted in the collapse of significant financial institutions as well as money and debt market failures. The crisis has been blamed largely on the inadequacies of regulatory and legal mechanisms in financial markets.[118]

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[116] Rodrigo Olivares-Caminal and Andrea Miglionico, 'Non-performing Loans: Challenges and Options for Banks and Corporations' in Platon Monokroussos and Christos Gortsos (eds), *Non-Performing Loans and Resolving Private Sector Insolvency: Experiences from the EU Periphery and the Case of Greece (*Palgrave Macmillan Studies in Banking and Financial Institutions 2017).

[117]Systemic risk involves the financial system, a collection of interconnected institutions that have mutually beneficial business relationships through which illiquidity, insolvency, and losses can quickly proliferate during financial distress. A major source of systemic risk is the contagious effect of institutional failure in the financial sector. It signals the vulnerabilities and stress in the general economy. *See* Mads Andenas, Iris Chiu, *The Foundations and Future of Financial Regulation: Governance for Responsibility* (Routledge 2014) 30-39.

[118] For instance, Vukovic has argued that the crisis in the United States is a result of the policymakers making legislation and regulations under the influence of interest groups and the lobbying activities of the finance industry. *See* also Vuk Vukovic, 'Political economy of the US financial crisis 2007-2009' (2011) 35 *Financial Theory and Practice* 91.

It is argued that there is a nexus between bank failure, the financial, crisis and NPLs.[119] Reinhart and Rogoff[120] argue that NPLs can be used to mark the beginning of a banking crisis. This is supported by Bholat, who claims that bad loans are the cause of many crises.[121] Put simply, when NPLs exceed banks' assets, the situation can lead to bank failure. In the same vein, Woo mentions that non-performing assets[122] increased after the Asian Financial Crisis, testing the capacity of GFC policymakers to deal effectively with asset management infrastructures.[123] At this stage, it could perhaps be concluded that NPLs correlate very closely and connectedly to financial crisis because the increase of NPLs usually occurs as a result of that crisis – and that NPLs are themselves the cause of the crisis.

NPLs are perceived as banks' bad assets that generate zero income and are to be written-off in that taxation year. However, a critical aspect is that NPLs' impacts are not limited to banks but can spread to other financial institutions and to their linkage to the financial crisis. The increase of NPLs is a recurring feature of financial crises.[124] Many studies on the causes of bank defaults document that failing institutions usually feature a higher volume of problem loans prior to failure, and that asset quality constitutes a statistically significant predictor of insolvency (Berger and DeYoung,

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[119] Andrew Campbell, 'Bank insolvency and the problem of nonperforming loans' (2007) 9 *Journal of Banking Regulation* 25.

[120] Carmen Reinhart and Kenneth Rogoff, 'From financial crash to debt crisis', NBER Working Paper Series, No. 15795 (2010).

[121] David Bholat and others, 'Non-performing loans at the dawn of IFRS 9: regulatory and accounting treatment of asset quality' (2018) 19 *Journal of Banking Regulation* 33-54.

[122] According to the IMF, non-performing assets (NPA) are debt instruments, loans and bonds, whose obligors are unable to discharge their liabilities as they become due. Therefore, the NPL is part of the NPA in this sense.

[123] David Woo, 'Two Approaches to Resolving Nonperforming Assets During Financial Crises' (2000) IMF WP/00/33, 4 < https://www.imf.org/external/pubs/ft/wp/2000/wp0033.pdf> accessed 24 April 2019.

[124] David Bholat and others (n 121) 33-54.

1997).[125] It is observed that the banking sector worldwide experienced a sharp increase in NPLs during the financial crisis of 2008-09. In the course of the GFC, significant financial institutions were closed, including the Louisiana Bank in the USA, due to an excessive level of NPLs and because the bank was unable to comply with provisioning for bad debts.[126] This points out the linkage between banks, the financial crisis, and NPLs. In this case, banks could not comply with provisioning as the mechanism for expected loss during any downturns. As a result, the increase of NPLs caused banks to become insolvent forcing them into restructuring. Even though there are different causations of different financial crises, the one common feature that every crisis has shared is a significant increase of NPLs.[127]

Since NPLs are loans that are unpaid when they became due, they can cause bank solvency problems. Goodhart states that bank imbalances occur when banks do not maintain sufficient liquid assets to meet their liabilities when they fall due; therefore, banks may become illiquid and so legally insolvent.[128] At the regional level, for example, the overall trend of NPLs in the Eurozone banks significantly increased as a result of the GFC.[129] The high level of NPLs after the financial crisis showed the inability of the euro-area banking system to deal with NPLs.[130] The large stock of non-

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[125] Allen Berger and Robert DeYoung, 'Problem loans and cost efficiency in commercial banks' (1997) 21 *Journal of Banking and Finance* 849.

[126] Rodrigo Olivares-Caminal and Andrea Miglionico, Non-performing Loans: Challenges and Options for Banks and Corporations in Platon Monokroussos and Christos Gortsos (eds) *Non-Performing Loans and Resolving Private Sector Insolvency* (Palgrave Macmillan 2017) 17.

[127] Anil Ari, Sophia Chen, and Lev Ratnovski, 'The Dynamics of Non-Performing Loans During Banking Crises: A New Database' (2019) IMF Working Paper WP/19/272, 4.

[128] Charles Goodhart, *The Central Bank and Financial System* (Basingstoke, MacMillan, 1995) Ch 17.

[129] Konstantinos Nikolopoulos and Andreas Tsalas 'Non-performing Loans: A Review of the Literature and the International Experience' in Platon Monokroussos and Christos Gortsos (eds) *Non-Performing Loans and Resolving Private Sector Insolvency Experiences from the EU Periphery and the Case of Greece* (Palgrave Macmillan Studies in Banking and Financial Institutions 2017) 48.

[130] 'Resolving Europe's NPL burden: challenges and benefits, Keynote speech by Vítor Constâncio, Vice-President of the ECB, at an event entitled 'Tackling Europe's non-performing loans crisis: restructuring debt, reviving growth' organised by Bruegel, Brussels, 3 February 2017.

performing loans in several euro-area periphery economies is a legacy of the recent crisis that needs to be addressed in a resolute and coordinated manner in order to establish the conditions for a sustainable recovery.[131]

In a similar pattern, the subsequent financial crisis in Cyprus demonstrates one of the trajectories of NPLs.[132] In the case of Cyprus, Bholat and the others[133] claim that due to the weak legal framework and the lack of macroprudential regulation, banks collapsed. This implies that NPLs can harm a bank's portfolio, affecting its financial position and leading to insolvency. This illustrates that a higher level of NPLs can and indeed do increase the possibility of banks' collapse and consequent systemic financial crisis. Since NPLs can trigger colossal failure in the global financial system, regulators need to determine functions of banking regulation in dealing with NPLs. These regulatory aspects will be discussed in the next chapter.

Drawing examples from these crises that occurred in the USA, Europe and the wider Asia Region, there is a common determinant during the financial crisis: the very significant increase of NPLs. Since this is the case, this research argues that policymakers and regulators should include NPLs in their regulatory designs and as an objective to fully monitor, manage and prevent the worst effects of NPLs if one would prefer to have a stabilised financial system and banking stability. A well-designed legal architecture for NPLs can place barriers along, if not completely block at least this road to widespread bank collapse and another banking crisis.

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[131] Council of the EU, 'Council conclusions on Action plan to tackle non-performing loans in Europe' Press Release 459/17 (11 July 2017). According to the European Commission's Third Progress Report on the reduction of non-performing loans and further risk reduction in the Banking Union states that 'Yet a truly sustainable solution for the remaining NPL problem in Europe depends on putting further effort into innovative and collaborative approaches. Some are already emerging in the market, as comprehensive partnerships have been taking shape between different market participants, for instance between banks and specialised third-party servicers. This increasingly allows them to share knowledge and information. In this way, banks and other market players are able to make further strides in digitalisation and platform initiatives.' European Commission (Brussels, 28 November 2018), 5.

[132] Bholat and others (n 121) 33-54.

[133] ibid 33.

Dealing with private sector insolvency in the aftermath of the international financial crisis of 2008-09 has been a major challenge for policymakers, investors, and economic agents affected by remedial policies that have been applied. The ECB notes that one of the key lessons from the financial crisis and the experience of many jurisdictions with high NPL levels is the need for all stakeholders to be proactive and prepared before NPLs reach levels that are too high.[134] Ozili argues that banking sectors with greater regulatory capital and liquidity experience fewer NPLs and that higher levels of NPLs are positively associated with the banking crisis.[135] Based on this fact and arguments, this research argues that policies and good management of bad debts are required to prevent another major, worldwide financial crisis. Thus, the current challenge for policymakers is the question of how best to manage NPLs on bank balance sheets both before and after a financial crisis.[136]

3.2.2 The Level of NPLs

A main research goal of this research is to question the efficiency of the NPLs regulatory regimes in Thailand by considering the level of NPLs in Thailand. To examine whether the regulatory framework has worked to prevent a critically high levels of NPLs, I refer to Bank of Thailand data, Figures 3.1 and 3.2 show the overall gross NPLs in Thailand existing between 2007 and 2020. The evidence is drawn from the Bank of Thailand (BOT) to show a rise of credit risk from loans of Commercial Banks in Thailand. In the following we also need to understand the Bank of Thailand asset class called the Special Mention Loan ('SML'). The SML is defined as loans overdue the principal or interest payments more than one month but not exceeding 90

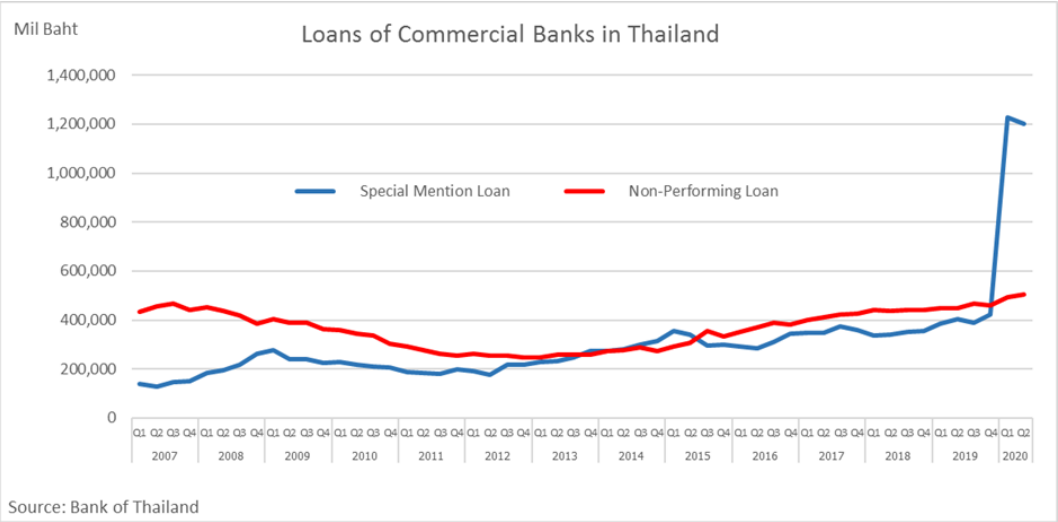
[134] ECB, 'Stocktake of national supervisory practices and legal frameworks related to NPLs' June 2017, 3. <https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.stock_taking2017.en.pdf> accessed 24 April 2019.

[135] *See* Peterson Ozili, 'Non-performing loans and financial development: new evidence' (2019) 20 *The Journal of Risk Finance*, 59-81.

[136] European Commission, 'Quarterly Report on the Euro Area' Vol 16, Institutional Paper 049 (European Union, 2017) 5.

days that requiring special caution.[137] The guiding thread of this section is the consideration of data that suggest potential for a build-up of credit risk in the form of the Bank of Thailand asset class called the Special Mention Loan ('SML') particularly in 2020.

Figure 3.1 Source: The Bank of Thailand



[137] Section 5.2.2 of the Notification of the Bank of Thailand No. FPG. 5/2559 Re: Regulations on Asset Classification and Provisioning of Financial Institutions.

Figure 3.2 Source: The Bank of Thailand

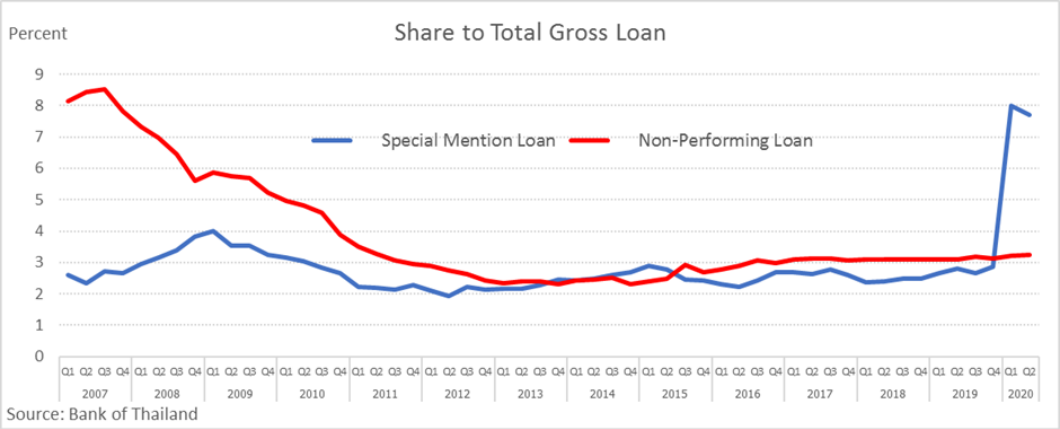


Figure 3.1 shows the overall outstanding credit of commercial banks in Thailand divided by staging between 2007 and 2020 in quarters. Looking at Figure 3.1, in 2007 we see a clearly defined trend of growth in gross NPLs. It should be noted that between 2007 and 2008 NPLs grew rapidly to a peak exceeding 400,000 million baht in 2007 at the start of the GFC in 2008, before dropping to below 400,000 million baht in 2008 and continuing to plummet to 250,000 million baht in 2014.

More specifically, for the five-year period after 2015 to the present year ending 2020, we see a fluctuation and small increase in NPLs' overall value to slightly above 300,000 million baht. The fact that Thailand did not suffer much impact from the financial crisis, as we see later in chapter 5, will be used to analyse the regulatory design of Thailand in its NPL regimes adopting international standards—specifically issued to cope with problems occurring out of the crisis, whether in truth they suit the Thai banking market.

However, as is clear from Figure 3.2, although during that period the NPL ratio is shown at between 3.0% and 3.5%, we can see signs of the emergence of NPLs which suggests that the government should pay attention to this cautionary figure. Special mention loans underwent quite a leap from 2.9% to 8.0% in 2020 in the totality of

gross loans, similarly to the loans of commercial banks in Thailand represented in Figure 3.1. What do this data tell us apart from a message of caution about NPLs?

Although the NPL ratio remained stable from 2015 until 2019, special-mention loans reached a peak of 8.0% in the same period. Compared to gross NPLs during the GFC, which stood at 8.5% in 2007, this number hints at the potential of NPLs to do damage and even devastate. Given that these data for special-mentioned loans become NPLs later, the effects could have been even worse, as in the crisis period. This is important because the preventive measures before default loans become losses could prevent the emergence of NPLs. Given the fact that the special-mentioned Loans reached their peak, this implies that NPL numbers may increase dangerously further. Without laws dealing with the special-mentioned loans, it is possible that another financial crisis can again arise. It is important to reconsider the existing regulatory framework to deal with the emergence of NPLs in the whole process, not only when loans become losses, but there should be measures to manage loans that have the probability of becoming losses. If one waits until bank assets become NPLs, things may well become too late. The current tools that Thailand has adopted from international accounting standards include lifetime provision for expected losses. However, as it is in the grey area of loans that have not yet become losses (or 90 days past due), these new tools - which have been applied since early 2020 without specific guidance on how and when loans become the Special mentioned loans – it could amount in practice to double standards. Here the evidence of increasing bad loans, and the uncertainty of systemic risk and credit risk, suggest we should be questioning the effectiveness of NPL regulatory regimes in Thailand, particularly in terms of (i) a certain blindness to special mention loans (ii) confusion over the boundary between performing and non-performing loans.

Next, this research discusses the level of NPLs in wider regions that include the European and Asian continents to demonstrate the impact of NPLs at the global level. In doing so, the ratios of bank NPLs to total gross loans (%) in thirteen selected countries in Asia and Europe have been collected and displayed in the table below. The data on the level of NPLs was collected from the World Bank database and all data stated to be my own are drawn from this one dataset. The principal reason for this

is to demonstrate the impact of NPLs on the GFC and that the level of NPLs after the recession was not always lower in all countries. This trend is evident for these selected countries. In Table 3.1, the data was collated between 2007 and 2017 showing the level of NPLs. It shows that in the aftermath of the GFC the overall NPL gross loans ratio increased in all countries as expected and continued decreasing between 2008 and 2011, before rising in 2013 onwards in certain countries such as Greece, Cyprus, Italy and Croatia. Notwithstanding, the figures show a correlation between NPLs and the 2008-09 financial crisis. Particularly, the trend of NPLs after the recession was not always lower in all countries. Table 3.1 shows the persistent high level of NPLs between 2009 and 2018 in certain regions. However, in some EU countries, it shows that the stock of NPLs is highest during the GFC and then persistently remained high after the GFC.

NPLs as a % of total gross loans, 2007-2017

Countries	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Greece	..	4.7	7.0	9.1	14.4	23.3	31.9	33.8	36.6	36.3	45.6
Cyprus	..	3.6	4.5	5.8	10.0	18.4	38.6	45.0	47.7	48.7	40.2
Italy	5.8	6.3	9.4	10.0	11.7	13.7	16.5	18.0	18.1	17.1	14.4
Croatia	4.8	4.9	7.7	11.1	12.3	13.8	15.4	16.7	16.3	13.6	11.2
Romania	2.6	2.7	7.9	11.9	14.3	18.2	21.9	13.9	13.5	9.6	6.4
Spain	0.9	2.8	4.1	4.7	6.0	7.5	9.4	8.5	6.2	5.6	4.5
Thailand	7.6	5.6	5.2	3.9	2.9	2.4	2.3	2.3	2.7	3.0	3.1
Indonesia	4.0	3.2	3.3	2.5	2.1	1.8	1.7	2.1	2.4	2.9	2.6
Belgium	1.2	1.7	3.1	2.8	3.3	3.7	4.2	4.2	3.8	3.4	2.9
Germany	2.7	2.9	3.3	3.2	3.0	2.9	2.7	2.3	2.0	1.7	1.5
Malaysia	6.5	4.8	3.6	3.4	2.7	2.0	1.8	1.6	1.6	1.6	1.5
Singapore	..	1.4	2.0	1.4	1.1	1.0	0.9	0.8	0.9	1.2	1.4
United Kingdom	..	1.6	3.5	4.0	4.0	3.6	3.1	1.7	1.0	0.9	0.7

Table 3.3 Source: World Development Indicators Series : Bank nonperforming loans to total gross loans (%)

Table 3.3 shows that while the NPLs trend of six of 13 countries mainly in Asia gradually lowered after 2013, the relative size of NPLs of seven countries in Europe (Greece, Cyprus, Italy, Croatia, Romania, Spain, and Belgium) rose and reached the peak in 2017. The level of NPLs was between 18- 45% which indicates a large number of NPL's to the total number of loans. The figures for gross NPLs of those seven countries in 2017 are higher than before the GFC in 2007 as the impact of the sovereign and banking crisis. The high level of NPLs on banks' balance sheets during the crisis, remaining persistently high in some countries, leads to unresolved NPL problems. This suggests that the problems attending NPLs have remained after the GFC, particularly in European countries. Thus, to prevent the emergence of recurring and serious NPL problems, and to address issues with existing NPLs, there is a need to examine and strengthen regimes regulating NPLs.

In the next section, I seek to explore the function of NPLs within the financial system, and the correlation between NPLs and banking instability. The exploration places particular emphasis on the impact of NPLs on banking stability, and consequences macro-prudential regulation.

3.3 Roles of NPLs in the economic functions of banks and in financial systems

As mentioned in Chapter 1, this research applies functionalism as its overarching methodology. Functionalism is used to assess an action in terms of its consequences, focusing on its functions or the roles carried out within it. Schwarz argues that in regulating a changing financial system, there should be focus on the underlying economic functions of the financial system – which are financing and providing capital – because the financial regulation will be adaptable and effective when experiencing change. Another function of the financial system is to serve as a network within which underlying economic functions can be conducted; thus, regulation should be designed to protect the financial system's ability to function as a network by mitigating the systemic risk. Since this research questions whether banking regulation of NPLs: loan loss provision (LLP) and capital requirements, can mitigate the threat of NPLs to

financial stability, it is helpful to understand how NPLs function within the financial system.

Therefore, this section presents the roles of NPLs in three aspects. It first focuses on the financial system aspect, which relates to NPLs as an economic fact, and on the roles of NPLs that they play in the financial system relating to the economic functions of commercial banks in financing. It addresses the nature of banking business and the risks that could be exposed by NPLs in commercial banks. Second, it takes into account the relationship between economic growth and the problems of NPLs, before third, assessing the key challenges that have emerged from the financial crisis for NPL-related macro-prudential tools

3.3.1 NPLs and Economic functions of Commercial Banks in Financing

In the financial system, banks are one of the key financial market participants as intermediaries between savers and borrowers. Commercial banks accept deposits from customers and lend money to make a marginal profit by way of an investment.[138] Lending to business is regarded as one of the important functions of a bank through which it gains profit, provides liquidity to the market and enhances the flow of credit in the economy.[139] In the Australian case of *Commissioners of the State Saving Bank of Victoria v. Permewan Wright & Co. Ltd.*, Issacs J explained the essence of banking business as:

> the collection of money by receiving deposits upon the loan, repayable when and as expressly or implied agreed upon, and the utilisation of money so collected by lending it again.[140]

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[138] Peter Ellinger, Eva Lomnicka, and Richard Hooley, *Ellinger's Modern Banking Law* (4th edn, Oxford University Press 2009) 69-70.

[139] Douglas Diamond and Raghuram Rajan, 'Liquidity Risk, Liquidity Creation, and Financial Fragility: A Theory of Banking' (2001) 109 Journal of Political Economy 287.

[140] *Commissioners of the State Saving Bank of Victoria v. Permewan Wright & Co. Ltd* (1915) 19 CLR 457, 471.

This case shows that the traditions of banking business are deposit-taking and lending. As such, loans and lending are the 'main courses' of business to banks – their meat and drink.

According to Goode (2016):

> A loan is a payment of money to the debtor, or to a third party at the debtor's request, by way of financial accommodation upon terms that the sum advanced, with any stipulated interest, is to be repaid by the debtor in due course.[141]

Bank loans are contracts between a creditor and a debtor – that is, between a lender and a borrower. Generally, the credit agreement is a promise of repayment of the principal and interest. The doctrines applying to loans are the law of contract. Under English law, a contract is executed correctly if the legally agreeing parties complete all obligations stipulated in the agreement. In the case of a bank loan, for example, this might mean that the debtor has repaid the principal and interest in the loan on time and in full. Although banks review an application for a loan by considering the creditworthiness of the borrower and profitability of the transaction in the bank's approach to loans, it is not always the case that parties can perform their obligations. For that reason, banks face credit risk.

In lending activities, banks are exposed to various types of risk: market risk, systemic risk, and credit risk. IMF studies have shown that banks are prone to imbalances and instability due to credit risk and the properties of illiquidity.[142] Schinasi argues that the financial sector performs as a facilitator providing wealth and growth to the real economy by allocating resources and risks.[143] When a borrower is unable or unwilling to repay, banks suffer from credit risk as loans become losses. The ECB regards credit

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[141] Roy Goode, *Goode on Commercial Law*, edited by Ewan McKendrick (5th edn, Penguin Books 2016) 625.

[142] Garry Schinasi, 'Defining Financial Stability' (2004) IMF Working Paper WP/04/187, 9. <https://www.imf.org/external/pubs/ft/wp/2004/wp04187.pdf> accessed 3 February 2019.

[143] ibid.

risks and a high level of NPLs as key risks in euro-area banks. This indicates that NPLs can likely impact further unofficial distress remaining within the system. Any banking crisis has at its roots in bad lending and investment decisions. The most important part of a bank's balance sheet is the quality of the asset portfolio. The credit risk and an excess of NPLs can lead to bank instability. Therefore, risk mitigation and risk management in banks' lending process are one of the essential mechanisms for dealing with NPLs.

3.3.2 Economic Growth and the Financial System

As mentioned in the introduction, NPLs in the financial system have negative effects on banking status at the microeconomic level. This section focuses on the relationship between NPLs and macroeconomic indicators. It aims to discuss NPLs' impacts on economic growth and the banking system in order to raise concerns to policy-makers to consider mechanisms appropriate for dealing with NPLs.

It is argued that the problems attached to NPLs are critical because they are not only concerned with private commercial banks but also linked to the economy and its banking system. There is a nexus between NPLs, banks' profitability, and economic growth. Espinoza and Prasad[144] argue that lower economic growth and higher interest rates trigger an increase in NPLs, and their studies show that there is a positive relationship between lagged credit growth and NPLs. This shows that economic conditions could trigger impacts on asset quality. In other words, economic slowdown tends to increase bad loans since high interest rates and shortfall of finance hinder the capacity of debtors to make repayment. Having said that, interactions between NPLs and economic growth are vast and diverse.

[144] Raphael Espinoza and Ananthakrishnan Prasad 'Nonperforming Loans in the GCC Banking System and their Macroeconomic Effects' (2010) The IMF Working Paper WP/10/224.

A common finding is that stocks of NPLs can lower the capacity of a bank to lend, and thus reduce economic activity.[145] As mentioned earlier, banks face credit risk, and in many jurisdictions, when NPLs increase, banks are required to raise LLP and capital requirements as risk management tools to mitigate expected and unexpected losses.[146]Provisioning is an accounting deduction, and it is made when there is an impaired loan.[147] Therefore, when the NPL level increases, it requires banks to raise LLP substantially; this can result in a decrease in banks' capital. That is, the lower net income affects the bank's capital.[148] In short: the higher the NPLs, the higher the LLP required, and the less capital there is available for lending.

Furthermore, there is a correlation between NPLs and banks' income. The IMF[149] points out that NPLs lower bank profitability since banks are required to raise provision. Similarly, the European Commission states that there is a correlation between bad loans and banks' profitability.[150] That is, when provisions are made on

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[145] Alexander Plekhanov and Marta Skrzypińska, 'Cross-border spillovers from reducing non-performing loans' (2008) European Bank for Reconstruction and Development Working Paper 4.

[146] Woo (n 123) 4; David Bholat, Rosa Lastra, Sheri Markose, Andrea Miglionico and Kallol Sen, 'Non-performing loans: regulatory and accounting treatments of assets' Bank of England Staff Working 594, 3.

[147] NPLs are impaired when the expected amount of repayment that banks will receive is lower than the agreed amount to be repaid.

[148] *See* Allen Berger and Robert DeYoung, 'Problem Loans and Cost Efficiency in Commercial Banks' (1997) 21 *Journal of Banking and Finance* 849; William Keeton and Charles Morris, 'Why do banks' loan losses differ? (1987) 72 *Economic Review* 3; Vincente Salas and Jesus Saurina, 'Credit Risk in Two Institutional Regimes: Spanish Commercial and Saving Banks' (2002) 22 *Journal of Financial Services Research* 203.

[149] Shekhar Aiyar and others, 'A Strategy for Resolving Europe's Problem Loans' (2015) IMF Staff Discussion Notes No. 15/19, 9 < https://www.imf.org/external/pubs/ft/sdn/2015/sdn1519.pdf> accessed 24 April 2019.

[150] Andrea Resti, 'Provisioning Policies for non-performing loans: How to best ensure a 'clean balance sheet'? Economic Governance Support Unit, Directorate-General for Internal Policies of the Union In-depth Analysis Requested by the Econ committee, European Parliament (October 2017); Vítor Constâncio, Vice-President of the ECB, 'Keynote Speech: Resolving Europe's NPL burden: challenges and benefits' (Brussels, 3 February 2017) <https://www.ecb.europa.eu/press/key/date/2017/html/sp170203.en.html> accessed 13 August 2020.

the asset deduction side, this lowers net income. The more impaired loans are, the lower the profits become in a bank's income statement. In the same vein, a high ratio of NPLs, net of provisions, increase regulatory capital requirements. Due to the regulatory capital ratio being calculated based on the Risk-Weighted Asset (RWA) under the Basel Conventions, higher levels of NPLs require a greater amount of capital because of the higher risk-weighting for impaired assets.[151] Consequently, NPLs reduce banks' capital available for their activities such as term lending, financing receivables, and issuing letters of credit. Therefore, banks can lend less to businesses because of NPLs, hampering economic growth. Although NPLs on banks' balance sheets are a matter of asset quality of individual banks at the microeconomic level, NPLs lower bank lending as the source of finance to businesses. As a result, NPLs have adverse macroeconomic effects on economic growth. Since the source of finance becomes limited, businesses and investment can be impaired.

In the aftermath of the financial crisis, the high levels of NPLs exacerbate recessions by lowering economic activities since loan performance is related to the success or otherwise of the economic cycle. In times of bust, losses increase, including for example increase in unemployment, and negatively determining credit and economic growth. Many NPLs are caused by the defaulting of companies on credit agreements. When loans are past due, the debtor or the lender is in default to the bank. Companies become insolvent and close, while banks collapse when liabilities are above assets. The increase of NPLs affects bank stability. Thus, companies and banks lay off employees. Without new capital and sources of finance, the economy slows down.[152] The above analysis leads to the conclusion that the increase of NPLs does not only have the negative impact on bank stability as banks may collapse at the microeconomic level, but it also affects economic growth at the macroeconomic level.[153] Since an excess of NPLs can lead to bank collapse and harm the functions of the banking

[151] Shekhar Aiyar and others (n149) 10.

[152] Iris Chiu and Joanna Wilson, *Banking Law and Regulation* (Oxford University Press 2019) 2-3.

[153] European Central Bank, Guidance to banks on non-performing loans (2017) 5.

system, thereby causing a financial crisis, it is crucial for policymakers to pay scrupulous attention to their approaches to dealing with NPLs.

The financial system is prone to instability and crisis that have the potential to disrupt financial activity. Macro-prudential supervision is defined as systemic risk monitoring. The macro-prudential approach is to have an overall picture of risk in the financial system as a whole.[154] The recognition of the importance of the macro-prudential approach has increased the need for supporting data to identify risks emerging in the whole financial system. In acquiring accurate information for risk analysis, transparent and consistent tools are essential in applying this approach. Subsequently, there is now a greater academic and expert consensus on the need to create legal mechanisms and accounting treatment that foster greater financial stability, enhance economic growth, and minimise risks to the economy. I now turn to this consensus.

3.3.3 Key Challenges from the Financial Crisis and NPLs on Macro-Prudential Tools

The GFC raised countries' concerns over the efficacy of monetary policy tools, supervision, and prudential measures in controlling the effects of the crisis. Goodhart points out that the GFC in 2008 brought about a reconsideration of financial regulation.[155] Claessens and Kose affirm that financial crisis is characterised by diverse phenomena such as disruption of financial intermediation, the occurrence of balance sheet problems, a substantial change in asset prices, and credit volume.[156] Similarly, Tan notes that the GFC of 2008 increased the importance of improving

[154] Claudio Borio, 'Towards a macroprudential framework for financial supervision and regulation?' BIS Working Papers No 128 (Monetary and Economic Department, February 2003) 2-3.

[155] Charles Goodhart, 'Financial regulation' in Sylvester Eijffinger and Donato Masciandaro (eds), *Handbook of Central Banking, Financial Regulation and Supervision: After the Financial Crisis* (Edward Elgar Publishing Limited 2011) 348.

[156] Claessens and Kose (n 29) 4.

approaches in dealing with failures that arise within international economic law and governance.[157]

Adenas and Chiu claim that the GFC has profoundly changed the framework of banking and financial regulation across the world.[158] In particular, rather than focusing on individual soundness of business entity, macro-prudential supervision has become a key concern of financial legal frameworks globally since that time.[159]

Pre-crisis, authorities focused on the soundness of banks individually rather than the whole system. After the crisis, it became clear that existing macro-prudential supervision was insufficient. The leading international institutions in macro-prudential supervision, such as the IMF, the G20 and the BIS introduced reports and papers on financial stability. Naudé argues that since the domestic financial system depends on global financial architecture, there should be reform of that financial architecture for their financial development.[160] Goodhart opines that pre-crisis there was lack of macro-prudential supervision and tools.[161] In systemic risk analysis, macro-prudential supervision tools require a range of information collected from financial institutions. However, the analysis of systemic risk could be obstructed by lack of transparency.

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[157] Celine Tan, 'Shifting Sands: Interrogating the Problematic Relationship Between International Public Finance and International Financial Regulation' in Marc Bungenberg and others (eds), *European Yearbook of International Economic Law 2016* (Springer 2016).

[158] The pre-crisis regulatory themes are self-regulation and market-based concepts. Financial regulation aims to facilitate transaction and liberalise financial sector rather than regulate market. The aftermath of the crisis, the deregulation and pre-emptive governance have been incorporated to the regulation. There is more emphasis on financial stability objective. See Mads Andenas and Iris Chiu, *The Foundations and Future of Financial Regulation: Governance for Responsibility* (Routledge, 2014) and Emilios Avgouleas, *Governance of global financial markets: the law, the economics, the politics* (Cambridge University Press, 2012).

[159] Mads Andenas and Iris Chiu, *The Foundations and Future of Financial Regulation: Governance for Responsibility* (Routledge 2014) 416.

[160] Wim Naudé, 'The financial crisis of 2008 and the developing countries' (2009) World Institute for Development Economics (WIDER) Discussion Papers No. 2009/01, 12.

[161] Charles Goodhart, *The Regulatory Response to the Financial Crisis* (Edward Elgar 2009).

Although NPLs on banks' balance sheets concern the asset quality of individual banks at the microeconomic level, it is crucial for policymakers to pay attention to their approach to dealing with NPLs since NPLs can harm the functions of banking systems and thereby the financial stability of those banking systems.[162] Wignall, Atkinson and Roulet[163] argue that the timely measures is important because NPLs can lead to bank collapse and, thereby, to financial crisis. Although there are both national and international efforts to mitigate the rise in NPL levels, it has been more than a decade since the GFC and yet NPLs remain a highly significant problem. Thus, there has been a development of NPLs-related regulation/supervision and standards after the GFC to ensure the financial stability. The IMF, the FSB/BIS [164] provide the regulatory framework for financial institutions with objectives to have the better regulation and supervision of financial markets to prevent another crisis. This demonstrated that it is agreed explicitly that NPLs are important and that post-GFC reform is required. Therefore, this should raise concerns about a policy-based legal solution to mitigating the risks that accompany NPLs.

The next section explains why the definition of NPLs is important, in terms of transparency, for financial stability in the banking sector.

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[162] Aiyar and others (n 149) 8.

[163] Adrian Wignall, Paul Atkinson and Caroline Roulet, *Globalisation and Finance at the Crossroads The Financial Crisis, Regulatory Reform and the Future of Banking* (Palgrave 2018).

[164] See, for example, Raphael Espinoza and Ananthakrishnan Prasad, 'Nonperforming Loans in the GCC Banking System and their Macroeconomic Effects' Working Paper 2010 WP/10/224; Basel Committee on Banking Supervision, 'Guidelines Prudential treatment of problem assets – definitions of non-performing exposures and forbearance', Basel Committee on Banking Supervision (2016); Patrizia Baudino and Hyuncheol Yun, 'Resolution of non- performing loans – policy options' FSI Insights on policy implementation No 3 October 2017, the Bank for International Settlements; Patrizia Baudino, Jacopo Orlandi and Raihan Zamil, 'The identification and measurement of non-performing assets: a cross-country comparison', FSI Insights on policy implementation No 7, (April 2018).

3.4 Recognition of NPLs

This section will discuss the definition of NPLs, and efforts towards a universal definition of NPLs, as well as an asset quality system. It will give a brief introduction to NPLs and why NPLs in the banking sector have become a concern for national supervisors and international institutions: the BIS, the IMF and the World Bank, from a macro-prudential perspective.

3.4.1 Definition of NPLs

At a glance, the definition of NPLs seems to be simple as it is generally defined as bad debts that are past due for more than 90 days.[165] NPLs are generally defined as happening when principal or interest are past due, based on the number of days past due, or when the borrower is experiencing significant financial difficulty, based on the probability that the borrower cannot repay. Bholat and others have shown that many jurisdictions classify loans as non-performing when the debtor has not made their scheduled payments for at least 90 days.[166] According to Bloem and Gorter,[167] the criteria defining NPLs used by authorities are quantitative criteria (e.g., the number of days of overdue scheduled payments) and qualitative nouns (such as availability of information about the client's financial status, and management judgment about future payments). Notwithstanding the similar criteria on past-due and default of loans, the differences on dates that count as past due can give rise to remarkable changeability.

The definition of NPLs is critical to banks' financial reporting. Supervisors, investors and stakeholders consider the level of NPLs as an indicator of banks' business quality and repute.[168] Loans are a bank's main assets. Those assets will be categorised in 'an

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[165] Patrizia Baudino, Jacopo Orlandi and Raihan Zamil, 'The identification and measurement of non-performing assets: a cross-country comparison' Financial Stability Institution (FSI) Insights on Policy Implementation No 7 (2018).

[166] Bholat and others (n 121) 22-25.

[167] Adriczcm Bloem and Cornelis Gorter, 'The Treatment of Nonperforming Loans in Macroeconomic Statistics' (2001) The IMF Working Paper WP/O l /209.

[168] Larry Meeker and Laura Gray, 'A note on non-performing loans as an indicator of asset quality' (1987) 11 Journal of Banking & Finance, 161-162.

asset quality system' to reveal a bank's asset qualities. Generally, classification of assets includes performing and non-performing ones. NPLs, as the classification of banks' assets in 'non-performing', become the main indicator of banks' asset quality, or the credit risk to which banks are exposing themselves.[169]

Although that definition appears straightforward, it is still controversial among different jurisdictions. Those criteria need evidence to prove that there is a defaulted loan, and that requires the judgment of banks and authorities on whether there is exposure for an NPL. The definition of NPLs does vary in different nations' jurisdictions. There is no globally accepted definition of NPLs in the banking and financial sector.[170]

Nevertheless, there are cases where there are loopholes in the numbers of dates since the default of the debtor in financial reporting; thus, the NPL ratios of banks reported in the balance sheet appear lower than they should.[171] This is important because it misleads investors, and banks could dodge implementing LLP and capital requirements set out by supervisory authorities. In banking supervision, a lack of universal definition causes an asymmetry problem, leading to arbitrage and resulting in an ineffective implementation of accounting standards on LLP and the capital requirements, since the definition of NPLs is critical to banks' financial reporting. In this regard, there is an effort both at the international level and regionally to set a universal definition of NPLs to be globally used. Owing above all to the increasing

[169] Katia Hulster, Raquel Letelier, Valeria Garcia, Loan classification and provisioning: Current practices in 26 countries' World Bank Overview paper (August 2014) 7; Ljube Olevski, Non-performing loans and profitability indicators: The case of the Republic of Macedenia, (2017) 4 Journal of Contemporary Economic and Business, 5.

[170] Bholat and others (n 121) 20.

[171] James Wahlen, 'The nature of information in commercial bank loan loss disclosures' (1994) 1 The Accounting Review, 455.

level of NPLs, there is a strong and purposeful effort to address existing NPLs and prevent the re-emergence of an excess of NPLs.[172]

3.4.2 Efforts to Bring Consistency to Defining NPLs

The definition of NPL is a key to consistency in supervision regarding the application of the measurement, accounting treatment, management, and writing-off of NPLs. That is because NPL recognition is required to assess risks exposed to banks and classify asset quality. However, a lesson learnt from the GFC was that the inconsistency of systems used by banks for asset classification, provision and risk-weighted assets increased the uncertainty for risk assessment management in banking supervision, given that supervisor authorities were left either without information or with incomparable information about NPLs.[173]

We have an effective NPL strategy can be when the size of NPLs is recognised through internal bank procedures and reporting. The banking supervisor performs its task by monitoring banks from their financial reports. Specifically, NPLs are regulated through the reports of banks' balance sheets and the asset quality system. However, the underestimation of the level of NPLs may cause problems when it is too late to recognise the extent of the risk and / or damage that they represent. Moreover, there could be a difference in reporting when the bank under supervision sets its internal reporting rules differently from supervision compliance's. At this stage, transparency of information is an issue at the international level because banks tend to want to increase their profits rather than act on macroeconomic concerns about the instability

[172] Basel Committee on Banking Supervision, 'Prudential treatment of problem assets – definition of non-performing exposures and forbearance' (2017); European Central Bank, 'Guidance to banks on non-performing loans' (2017); European Central Bank, 'Stocktake of national supervisory practices and legal frameworks related to NPLs', (June 2017); Anil Ari, Sophia Chen, and Lev Ratnovski1, 'The Dynamics of Non-Performing Loans During Banking Crises: A New Database' (2019) IMF Working Paper WP/19/272, 4-5.

[173] Basel Committee on Banking Supervision, 'Guideline Prudential treatment of problem assets – definitions of non-performing exposures and forbearance' (2016).

of the financial system. Therefore, supervisory authorities aim to ensure the compliance of regulation for the safety and soundness of financial markets.

Because of an increasing level of NPLs in the current global financial system, there are serious concerns about the lack of internationally comparable definitions of NPLs among international standards-setters.[174] There are a few guidelines from the latter. This section will examine that guidance and extract the most common understanding of NPLs from the various definitions, to obtain a general if not universally applicable definition for the purposes of this thesis.

The IMF launched the System of National Accounts 1993 (1993 SNA) and a subsequent working paper series to deal with the challenges of defining NPLs. This reflects the problems of the lack of an NPL definition as to when to classify loans as bad loans in order to conform to accounting standards: the separate *accounting treatment* of NPLs. In fact, the 1993 SNA and other international statistics manuals do not themselves stipulate NPLs' criteria either. During that time, countries have relied on administrative or commercial accounting conventions.

Pursuant to the IMF working papers and reports, the criteria for classification of NPLs are 90 days past due and the unlikely-to-pay (UTP); however, the IMF definition also allows national authorities to apply discretion on their quantitative criteria for the assessment of UTP.

A definition of such loans, summarised from Chapter 4 (Accounting Framework and Sectoral Financial Statements), paragraphs 4.84 of the IMF's *Compilation Guide on Financial Soundness Indicators 2004*[175] (the FSI Guide) is:

[174] Bholat and others (121) 5.

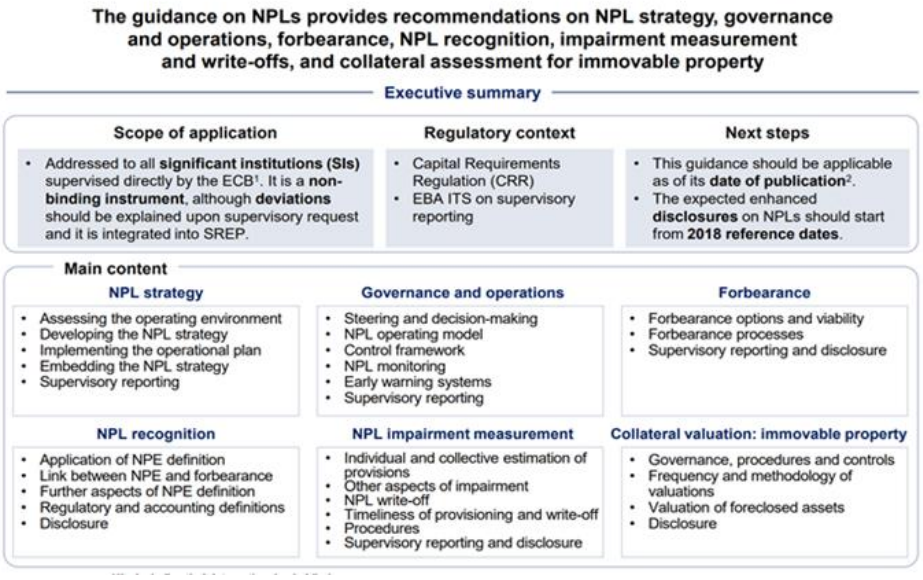
[175] The IMF, 'Compilation Guide on Financial Soundness Indicators' (July 2004). <https://www.imf.org/external/np/sta/fsi/eng/2004/guide/index.htm> accessed 2 May 2019.

To improve the cross-country comparability of data, the Guide recommends that loans should be classified as NPL when payments of principal and interest are past due by three months (90 days) or more, or interest payments equal to three months' (90 days) interest or more have been capitalized (reinvested into the principal amount), refinanced, or rolled over (that is, payment has been delayed by agreement).The 90-day criterion is the time period that is most widely used by countries to determine whether a loan is nonperforming. In addition, NPLs should also include those loans with payments less than 90-days past due that are recognized as nonperforming under national supervisory guidance-that is, evidence exists to classify a loan as nonperforming even in the absence of a 90 day past due payment, such as when the debtor files for bankruptcy. Indeed, the Guide regards the guideline of 90-days past due as an outer bound and does not intend to discourage "stricter" approaches. The loan (and other assets) amount recorded as nonperforming should be the gross value of the loan as recorded on the balance sheet, not just the amount that is overdue.

With regards to defining NPLs, the IMF sets the criteria for days past due as 90, or unlikely to pay. It is generally accepted that these are signs of problem loans and the possibility that the borrower will breach their payment obligations. Moreover, the IMF definition states that it could extend to fewer than 90 days in cases where there is a reason to believe that the borrower will not make a repayment. This flexibility could assist banking supervisors to set stricter standards on the classification of NPLs, which it is argued could ensure banking stability in terms of expected losses. However, it is up to each regulator whether to stipulate additional criteria for NPLs.

At the regional level, the European Union has paid more attention to the reduction of NPLs and launched guidelines on the meaning of NPLs, such as the European Banking Authority (EBA) Standards and the ECB Guidelines. Even here though, there is no universal definition of NPLs.

Executive Summary The guidance on NPLs



Source: ECB (2017)

Figure 3.3

Although these international and regional institutions have developed their respective guidance within the context of internally consistent financial statement frameworks, collaboration on the consistency of definition of NPLs has not been successful either at the regional or international level. However, there has been a constant effort to solve NPL-related problems in the real economy in EU countries. At the regional level, European Union administration has paid more attention to the reduction of NPLs. The European Central Bank (ECB) has launched action plans to cope with problems of NPLs and launched guidelines on the meaning of NPLs.[176] Moreover, the European Banking Authority (EBA), an important institute in banking, issued its EBA standards on supervisory reporting on forbearance and non-performing exposures.[177]

[176] ECB, 'Guidance to banks on non-performing loans' (March 2017).

[177] EBA, 'The EBA's Guidelines on the management of non-performing and forborne exposures' (October 2018) (EBA/GL/2018/06, EBA NPE Guidelines).

Given that different identifications of NPLs in various jurisdictions hinder the effectiveness of banking supervision and regulation on sound banking, many institutions give guidance by means of other terms: NPE and NPA. The aim of promoting these new terms is to harmonise the quantitative and qualitative criteria applied to loan classification of NPLs.

3.4.3 Terminology of NPE and NPA

Given the lack of a universally agreed definition of NPLs, other terms have been developed, namely: non-performing exposure (NPE) and non-performing asset (NPA). These terms are commonly used by international institutions: the IMF, the BCBS, the EBA and the ECB, to set up their standards with an objective to harmonise recognition and definition of NPLs. The Basel Committee on Banking Supervision (BCBS) has developed its guidance on non-performing exposure (NPE) within the context of internally consistent financial statement frameworks.

Moreover, since 2016, the definition of an NPA has been introduced in different EU members' jurisdictions. It should be noted that currently the criterion for designating a loan as 'non-performing' is that the debtor is 'unlikely to pay' (UTP), yet that depends largely on the discretion of banks.[178] As a result, authorities and banks are able to change the definition over time.

Given that different identifications of NPLs in various jurisdictions hinder the effectiveness of banking supervision and regulation of sound banking, many institutions give guidance by means of other terms: NPE and NPA. The aim of promoting these new terms is to harmonise the quantitative and qualitative criteria applied to loan classification of NPLs.

[178] Rodrigo Olivares-Caminal and Andrea Miglionico, 'Non-performing Loans: Challenges and Options for Banks and Corporations', 18.

3.4.3.1 Terminology of Non-performing Exposures

There is also lack of conformity in postulation of an NPE definition. The common definition of NPLs has become a priority of the EU Commission. In the EU, a set of standards for regulatory reporting purposes has been introduced as a hard law called 'Regulation (EU) No 680/2014[179] (FINREP)' and Capital Requirements Regulation (CRR). The ECB considers the levels of NPE of banks to be a benchmark of its supervision.[180]It is noted that the ECB Guidance to banks on NPLs[181] (ECB Guidance) uses the terms NPLs interchangeably with NPE. The terms of 'non-performing exposures' is defined in FINREP[182] as follows:

> non-performing exposures shall be those that satisfy any of the following criteria:
> (a) material exposures which are more than 90 days past due;
> (b) the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral, regardless of the existence of any past due amount or of the number of days past due.

It can be seen that the criteria of exposures to be non-performing includes the duration of more than 90 days past due and unlikely-to-pay.

Objectives include ensuring consistency and comparability of financial information so that a coherent reporting framework can be established on the basis of a harmonised set of standards – a set of standards that includes all related implementing technical standards required by Regulation (EU) No 575/2013 in a single regulation institutions' reporting requirement.

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[179] Commission Implementing Regulation (EU) No 680/2014 of 16 April 2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council.

[180]Marcus Evans, 'Non-Performing Exposures' (2016) Financial Service, KPMG, UK. <https://home.kpmg.com/xx/en/home/insights/2016/02/non-performing-exposures-fs.html> accessed 7 May 2017.

[181] The ECB, 'Guidance to banks on non-performing loans' (March 2017).

[182] Paragraph 213 of Part 2 of Annex V to Commission Implementing Regulation (EU) No 680/2014.

Institutions should provide granular and uniform data on sectoral breakdowns and significant counterparties of exposures in order to provide supervisory authorities with information on institutions' financial situation and potential systemic risks.

The EBA ITS introduced template-specific entry where reporting requirements are based on quantitative thresholds to ensure a smooth transition to common supervisory reporting. A Member State shall submit the information specified in Annex III on a consolidated basis, according to the instructions in Annex V Reporting on Financial Information.

Under Article 178 of the CRR, EU member countries are bound to comply with the EBA ITS regarding the definition and classification of NPLs.

3.4.3.2 Terminology of Non-performing Assets

Drawing attention to the NPE and NPA guidelines will gain more understanding of the definition of NPLs as they all have significant delineations of what counts as 'non-performing', particularly, the key criteria of 90 days past due and unlikely-to-pay (UTP).

There are efforts to harmonise the definition of NPLs through the definition of NPAs. NPAs are associated with problem loans as well as credit risk and losses. Meeker and Gray[183] argue that NPAs indicate the quality of assets held by banks. Since loans are the main assets of a bank, the NPA definition includes loans that are non-performing.

The BCBS has been instrumental in developing accounting and prudential practices through its conference, working paper and reports on the capital requirements of the Three Pillars in international financial markets. Over the years, the BCBS has progressively developed the guidelines on NPA. The BCBS has launched guidelines on non-performing assets (NPAs) by the Financial Stability Institute (FSI).

[183] Meeker and Gray (n 168) 161.

This includes BCBS guidelines on sound credit-risk assessment and the valuation of loans. It is not only a sound asset-qualification system that is significant in the supervision of prudential treatment of capital requirements and loan loss provision (LLP), but also in arriving at a reliable definition of NPLs.[184]

The BCBS claims that the prompt identification of NPAs through the role of prudential regulation facilitates the recognition of problem assets on bank balance sheets that in turn impact on bank earnings and regulatory capital. Accordingly, the BCBS has launched guidelines on NPAs by the Financial Stability Institute (FSI) of the BIS).[185]

The BCBS's definition of non-performing assets:

Definition	The BCBS identification and measurement of NPA
Non-performing	(i) all exposures that are 'defaulted' under the Basel framework (P. 452)
Defaulted under P.452 of Basel II	a default is considered to have occurred with regard to a particular obligor when either or both of the two following events have taken place. • The bank considers that the obligor is unlikely to pay its credit obligations to the banking group in full, without recourse by the bank to actions such as realising security. • The obligor is past due more than 90 days on any material credit obligation to the banking group. • In the case of retail and public sector entities obligations, for the 90-day figure, a supervisor may substitute a figure of up to 180 days for different products, as it considers appropriate to local conditions. In one-member country, local conditions make it appropriate to use a figure of up to 180 days also for lending by its banks to corporates; this applies for a transitional period of five years.

[184] Patrizia Baudino and Hyuncheol Yun, 'Resolution of non-performing loans – policy options' (2017) FSI Insights on policy implementation no 3, 6. < https://www.bis.org/fsi/publ/insights3.pdf> accessed 2 May 2017.

[185] ibid 8.

Definition	The BCBS identification and measurement of NPA
Non-performing	(ii) all exposures that are credit-impaired (in the meaning of exposures having experienced a downward adjustment to their valuation due to deterioration of their creditworthiness) according to the applicable accounting framework.
'Credit-impaired' under the IFRS 9 Appendix A.	Under IFRS 9, a financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired include observable data about the following events: (a) significant financial difficulty of the issuer or the borrower; (b) a breach of contract, such as a default or past due event; (c) the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession that the lender would not otherwise consider; (d) it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; (e) the disappearance of an active market for that financial asset because of financial difficulties; or (f) the purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.
Non-performing	(iii) all other exposures that are not defaulted or impaired but nevertheless: (a) are material exposures that are more than 90 days past due; or (b) where there is evidence that full repayment based on the contractual terms, original or, when applicable, modified (e.g. repayment of principal and interest) is unlikely without the bank's realisation of collateral, whether or not the exposure is current and regardless of the number of days the exposure is past due.

Table 3.2

First, under BCBS Guidelines, the definition of NPAs on 'non-performing' borrows concepts of 'defaulted' and 'impaired' from the Basel Convention and accounting standards. 'Impaired exposures' are those that are considered 'credit-impaired' under the accounting standards in the IFRS 9 Appendix A and the US GAAP. According to the BCBS, exposures are non-performing based on these two main criteria, namely past due and unlikely to pay under prudential standards and accounting standards.

The BCBS focuses on the qualitative criteria for identifying non-performance. Additional terms are explained as follows:

Past due	an exposure where any amount due under the contract (interest, principal, fee) has not been paid in full at the date when it was due. An exposure should be considered past due from the first day of missed payment, even when the amount of the exposure or the past-due amount, as applicable, is not considered material.
Material	an exposure that hits the materiality threshold in force in a given jurisdiction as defined by supervisors. Nonetheless, a bank needs to have a categorisation process in place for all exposures. The materiality threshold should be applied by reference to an aggregated exposure or past-due amount determined by supervisors that is connected with the counterparty's debt and not the bank.
Unlikely full repayment	an exposure where full repayment of principal and/or interest by the counterparty is unlikely without relying on the bank's realisation of collateral or risk mitigants, even when it is not past due or has been past due for less than 90 days. For these exposures, paragraph 453 of Basel II provides examples of possible indicators of unlikeliness to pay. The likelihood of repayment could also be assessed through a comprehensive analysis of the financial situation of the counterparty, using all inputs available, including but not limited to: (i) patterns of payment behaviours in past circumstances; (ii) new facts that change the counterparty's situation; and (iii) financial analysis.

Table 3.3 Qualitative criteria for non-performance.

These definitions of criteria in what amounts to 'non-performing' show core similarities in the meanings of 'defaulted, not-paid in full and past due'. However, the BCBS provides non-exhaustive lists on 'unlikely-to-pay (UTP)' and leaves room for discretion. It is noted that the BCBS, again relied on UTP and on paragraph 453 of Basel II. It can be seen that the BCBS recognises the need to harmonise the NPA definition and measurements: it recommends the application of the BCBS Guideline to the NPA frameworks.[186]

Meanwhile, the Financial Stability Institute (FSI) of the Bank of Settlement (BIS) has conducted a study of NPA identification and measurement practices in Asia, the EU, South and Central America, the Caribbean and the US. Those practices include prudential requirements, accounting rules, regulatory requirements and supervisory practices. Their study found that there is a significant difference in NPA identification across jurisdictions. In fact, there is no uniform definition of NPAs. These findings echo the lack of a universal definition of NPLs. The FSI paper shows that whereas some jurisdictions in the EU have a formal NPA definition, under the EBA ITS, the majority of Asian countries do not have a formal NPA definition. However, despite recognising the need for one, the FSI paper does not provide a standardised definition of NPA. Once more there is a clear, perceivable need for a harmonised definition of NPLs at the international level.[187]

3.4.4 Reflecting on the function of NPLs definitions

At this beginning of this chapter, I argued that NPLs had a (negative) systemic function within the national and indeed transnational financial system. Consequently, the identification and monitoring of NPLs by banks and their supervisors has been regarded as increasingly critical to financial stability. For this reason, norms pertaining to NPLs perform a key stability function within the modern supervisory system for banks. The discovery then, in the previous section, that such a key index of bank health

[186] ibid.

[187] ibid 8.

is neither universally defined, nor consistently applied, is a matter of concern. As discussed, one cannot have confidence in such a signifier if banks and supervisors in good faith disagree on the meaning of 'NPLs' and consequently present inconsistent information to each other, the market, and even themselves.

In Chapter 1, I noted a number of limitations with the methodology of legal functionalism, and this finding highlights one such deficiency: that the ostensible function played by a norm may be just that: apparent. Rather, the norm in question may in fact function as a cipher coveted by members of a social system because it (overly) simplifies complex risk. This after all is one of the key teachings of Luhmann's theory of autopoiesis, particular when applied to risk and financial markets – faced with chaos, the market settles on a language which both represents but also radically simplifies reality, and market participants develop a functional attachment to this representation (at the expense of reality). Given that when we speak of NPLs we are actually speaking of a variety of overlapping definitions[188], the boundaries of which are obscure and/or discretionary, it can hardly be claimed that the NPLs – as regulatory term of art – in fact functions as a perfect representation of bank health. Given the current definitional status, it can at best function as a rough approximation. Yet even then the approximation is highly individual – given the different understandings applied even in the same jurisdiction, a comparison between banks would be haphazard. The result indeed strongly suggests that the NPL at least plays a dual role: it functions to represent an apparently scientific measure of bank health, in which market actors place their faith, even it functions poorly as a rigorous and reliable measure of comparative bank health.

Reflexive law tells us that if we are to improve the behaviour of regulated actors, then we can do so by requiring these actors to have regard to themselves i.e., put in place procedures whereby actors must review and understand their functions within a given

[188] Julia Black, 'Says who?' liquid authority and interpretive control in transnational regulatory regimes' (2017) International Theory 1,

system.[189] Surely though, if actors are to make desirable decisions about future actions, their reflections must be based on reliable and comparable information. At a minimum, it should not be the role of regulators to provide poorly designed representations of risk, for markets can do that on their own (and perhaps better).

In view of this, the attempt with IFRS9 to further standardise the definition of NPLs with respect to LLP is to be welcomed. Before I consider this, it makes sense to investigate the other key term in this field – LLP.

3.5 Conclusion

This chapter has demonstrated the nature and functions of NPLs within financial markets. With regards to the roles of NPLs and the economic functions of banks, this research argues that there is a correlation between NPLs and banks' profitability and stability. Banks are exposed to credit risk due to their banking business features in lending. There is plentiful evidence to show that the emergence of NPLs links to banks' imbalance and failures. NPLs decrease banks' profitability, which directly impacts upon banks' capacity in granting loans. With more limited sources of finance to businesses, economic growth is inevitably lowered. Thus, NPLs have a negative impact on the economic growth at the macroeconomic level.

Moreover, a high level of NPLs can lead to widespread financial crisis. Nevertheless, the data on the overall gross NPLs between 2007 and 2020 in Thailand indicates that the government should pay attention at this cautionary fact. Consequently, the banking supervision and the international organisations raise concerns to improve approaches in macro-prudential supervision tools in response to financial crisis. To address this problem, banks apply risk management tools, which are LLP and capital requirements. The question is whether this toolkit is appropriate to and effective for all countries. This point will be discussed in the following chapters.

[189] Teubner, 'Substantive and Reflexive Elements in Modern Law' (n 81) 239.

Regarding recognition of NPLs, although NPLs are generally defined as exposures that are defaulted on for more than 90 days, its definition is still controversial among different jurisdictions. Those criteria need evidence to prove that there is a default in loans on which there is required a judgment. Since NPLs are important to financial reporting to banking supervision, it is evident that it is critical to have cooperation to set a universal definition of NPLs. There are other terms created to address the failure on setting standards for NPLs: the non-performing exposure (NPE) and non-performing assets (NPAs). However, when international organisations such as the IMF and the BCBS attempt to set standards for the criteria of NPLs - default, past due, and unlikely-to-pay - through their guidance, they are subject to obstructions in domestic application, given their potential to provide harmonisation of an NPL- definition. Moreover, even though in the European Union, the EBA provides the EBA ITS to set criteria for harmonised recognition of NPLs, the collaboration on the consistency of such definition of NPLs has not been successful either at regional or at international level. Hence, there is still no universal definition of NPLs. While this chapter mainly examined NPLs' recognition, the next chapter discusses NPLs' regulatory systems on LLP and capital requirements.

Chapter 4: Approaches to NPLs: Loan Loss Provision and Capital Requirements

4.1 Introduction

As Chapter 3 has elaborated, the scale of problems attached to NPLs and the risks posed by NPLs to financial markets can affect bank stability and, in turn, lead to a decline in economic growth. Financing is one of banks' primary operations and is regarded as their main economic function; but banks are exposed to credit risks due to the failure of the borrowers to make a repayment, which leads to non-performing loans. NPLs can harm banks' stability and cause bank failure, and for those compelling reasons it is critical to have risk management mechanisms to mitigate risks in a cycle of loans. Banks need to identify and manage credit risk because it may affect banks' financial performance and profitability and lead banks back into the crisis. To manage the risk of NPLs, banks need a mechanism to mitigate those risks.

This chapter begins with an overview of the key developments in approaches to NPLs, taking into consideration the concept and functions of Loan Loss Provisioning (LLP) and capital requirements and how they have been applied to supervision of financial system in Thailand. As this research adopts a dynamic functionalist methodology to examine banking regulation on NPLs and ask whether it contributes to the prevention of the threat inherent in a high level of NPLs. For that purpose, the regulation that relates to the recognition of NPLs will also be examined.

Unlike the NPL concept, which is a product of bank regulators and standard-setting bodies, the LLP concept arose from banks and banking practice themselves. Indeed, LLP is the much older notion, and reflects the settled commercial practice that a businessperson who deals with credit (be it loans or trade credit) may make provision for debts that may not or will not be settled. Such a practice is of particular importance for other capital providers, who on reviewing a firm's balance sheet must be sure that assets such as loans do in fact have the stated value. If they do not, a *provision* should be made in the accounts reflecting the expected loss of value (as an expense).

The role of LLP is as a banking mechanism designed to mitigate credit risk from NPLs by setting aside provision to cover estimated expected losses of Gross NPLs.[190] It is also referred to as 'the precautionary motive' for holding money to meet contingencies they cannot yet anticipate or expect.[191] With regard to the self-regulatory function, LLP arose from the behaviours of banks regulating themselves, and this behaviour continued to be a self-regulatory source for norms.[192] Interestingly, the idea that banks determine their LLP for doubtful debts and that these determinations become norms should not be taken for granted. Instead, we may fruitfully consider the self-regulatory background of LLP by adopting functionalist and self-regulation theory. In this regard, Section 2.2 of this chapter analyses the major criticisms of LLP in terms of their self-regulatory function through reflexive law.

In this Chapter following questions will be addressed: (i) whether the LLP is adequate and timely; (ii) how the LLP and banks' capital address and/or solve the problems caused by NPLs; (iii) what the LLP approaches in banking practices are; and (iv) what the advantages and disadvantages are of these approaches. Discussion of the role of NPL methodologies has the benefit of analysing the difficulties of banking supervision and will enable regulators to deal with procyclicality more effectively, which in turn contributes to the stability of the banking sector. Therefore, this chapter identifies issues arising in LLP processes, banking regulation concerning accounting standards, and prudential regulation.

It is worth noting that this thesis perceives LLP and capital charges' as 'ex-ante methods' for reducing the risk exposure attending NPLs before the emergence of NPLs. The doctrines pertaining to provisioning and the Basel capital requirements, therefore, are different from other mechanisms that deal with NPLs in the process *after* write-off, such as bank resolution and enforcement of collateral. The main difference between ex-ante methods on NPLs and other methods (hereinafter called 'ex-post

[190] David Bholat and others (n 121).

[191] David Begg and the others, *Economics* (10th edn, McGraw-Hill Higher Education, 2011) 435.

[192] Vichan Rittirong, *The Current Accounting in Practice* (1987) 3.

NPLs resolutions') lies in the nature of risk mitigation method and timeframe of banks in dealing with bad debts. This is important to point out because in Chapter 6 this research proposes security as a solution to address the problems of NPLs in Thailand.

4.2 Banks' Loan Loss Provision Practices and Capital Requirements

It is a generally accepted notion that the deterioration of economic and social conditions that many countries have experienced in the last several decades in times of economic recession have resulted from NPLs[193] Nevertheless, this thesis raises questions regarding what constitutes sufficient LLP and capital charges.[194]

Banks lend money to customer and exposed to credit risk. To mitigate risks, banks set aside a specific amount of provision and capital to cover losses on banks' loan portfolio. Broadly speaking, this provision is the amount of principal that is not expected to be recovered from debtors whereas capital requirement is calculated under the risk-based framework to cover losses.

In this section, the main issues are the functions of banks' own LLP practices and capital requirements in their treatment of NPLs. There has been remarkably slow progress on such key issues for bank soundness and stability, particularly given that the barrier to a mechanism to mitigate credit risks continues to be a long-standing issue in effective policy design. Ozili and Outa[195] write that there is an association between LLP and economic fluctuations, accounting, regulatory treatment of LLP, and macroeconomic policies. Provisioning and capital charges have played a long and established role in financial markets in mitigating risks in the loan cycle, providing investors with an assessment of the relative probability of default and so write-down of bank assets. LLP requires banks to set aside provision to cover expected losses to

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[193] *See* Ch 1.

[194] This thesis perceives LLP and capital charges as the ex-ante methods for reducing the risk exposure of NPLs.

[195] Peterson Ozili and Erick Outa, 'Bank loan loss provisions research: A review' (2017) 17 *Borsa Istanbul Review* 144, 159.

mitigate NPLs risk on banks' balance sheets. Therefore, this thesis highlights the importance of a regulatory framework in managing exposure and risks of NPLs in a timely manner.

4.2.1 How approaches to NPLs work: Functions of Provisioning and Capital Requirements

Banks lend money to customers and so are exposed to risks. In doing business when it is unable to collect the payment from the debtors, banks will apply accounting treatment of provision for doubtful debts to prevent the bankruptcy. Provision[196] is the action of business in which business entity reserves money for future losses due to non- payment of debtors.[197]As a result, banks have the safeguard from the future loss since the bad debts expenses are recognised in the period before they are uncollectable. However, the doubtful debts or the impairment could change in the future. Therefore, it required the critical estimation of banks.

LLP has been under the close attention of regulators and supervisors owing to its effects on bank performance and stability. Investors and analysts take LLP as an indicator to determine a bank's stability in regard to its lending.[198] As indicated earlier in this chapter, LLP is regarded as a mechanism for dealing with NPLs.[199] In this way,

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[196] The provision means an amount set aside out of profits in accounts of an organisation for a known liability or for the diminution in value of an asset (Oxford Dictionary of Finance and Banking, 2014).

[197] In dealing with the doubtful debt, the business entity will estimate the doubtful debts and report it in a balance sheet as a contra current asset account called 'Provision for Doubtful Debts or Allowance for doubtful accounts. The doubtful accounts will be expensed out by debiting doubtful debts expense account and crediting allowance for doubtful accounts. This method is also known as 'allowance method'. The methods to estimate the doubtful debts are to calculate from the percentage of receivables and percentage of sales. By using this method, the doubtful debts are estimated before the debts actually become impaired.

[198] George Benston and Larry Wall, 'How should banks account for loan losses' (2005) 24 *Journal of Accounting and Public Policy* 81.

[199] LLP applies when banks allocate their provisioning to mitigate expected losses and thereby reduce the amount of NPLs.

bank stability and liquidity are secured against the risks of uncollected loans. Therefore, banks' LLP plays a crucial role for bank stability and soundness.

A bank's LLP is reported in the income statement as the monetary amount of expenses reserved for existing defaulted loans. As such, while debtors are shown as a capital asset as at a certain, the income statement will show an LLP expense, with the result that the net income for the period is reduced and the profit/(loss) stated on the balance sheet is modified accordingly. LLP is also referred to as 'the precautionary motive' for holding money to meet contingencies a bank cannot yet expect.[200] In addition, reserves requirements are defined as 'a required reserve ratio is a minimum ratio of cash reserves to deposits that banks are required to hold'.[201] LLP is, therefore, considered as a precautionary measure and a risk management mechanism designed to cover estimated expected losses.

Considering provisioning and Capital Requirements in terms of their functions in the financial system, although they are both viewed as risk management tools, these two mechanisms operate quite differently. LLP is a financial risk management tool, applying accounting rules based on accounting standards, to prevent expected losses, whereas capital is regulated by prudential supervision. The former is designed to tackle expected losses and the later to strengthen the bank against unexpected losses[202], particularly those arising from systemic failures or macroeconomic effects. In this respect, the principle of provision and capital charges are regarded as risk management mechanisms for the bank lending activities.

The table below displays the interrelation of approaches to NPLs under the Basel Framework.

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[200] David Begg and the others, *Economics* (10th edn, McGraw-Hill Higher Education 2011) 435.

[201] ibid 443.

[202] Giuliano Castellano and Marek Dubovec, 'Credit Creation: Reconciling Legal and Regulatory Incentives' (2018) 81 Law and Contemporary Problems, 63-64.

Table 4.1 Basel regulation, LLP treatment and capital adequacy under the Basel Accord.

	Basel I	Basel II	Basel III
Loan Loss Provision	LLP accounts for 1.25% of risk-weighted assets in Tier 2 capital, although bank regulators can exercise discretion to exceed the 1.25% limit to meet the regulatory needs of the banking industry in its country.	Basel II gave banks significant discretion in calculating regulatory capital and the provisioning model anticipates loan losses before they materialise.	LLP is determined based on the 'expected-through the cycle loan loss provisioning system' This system anticipates expected losses. Bank managers have significant discretion in the determination of provisioning estimates under the Basel III.
Capital Adequacy Requirements	Bank regulatory capital is at 8% of risk-weighted assets. At least 50% of required capital is included as Tier 1 capital, while 2% of risk-weight assets is required to be common equity.	Regulatory capital is set at 8% of risk-weighted assets under Pillar 1.	Tier 1 equity capital must be at least 4.5% of risk-weighted assets at all times, and total Tier 1 capital must be at 6% of risk-weighted assets at all time.

Source: adapted from Ozili and Outa 'Bank loan loss provisions research: A review' (2017) 17 *Borsa Istanbul Review*, 144, 148.

Table 4.1 shows the development of LLP treatment and its interaction to capital charges. It demonstrates the functions of LLP and capital requirements pertaining to international standards. Basel III, after the 2007-2008 GFC, introduced the expected

credit loss[203] into LLP treatment. Expected loss model is designed for the earlier recognition of loan losses in response to the crisis. It can be seen that both mechanisms: provisioning and capital requirements are of relevance to banks' cycle of loan and asset quality ratios because of the setting of LLP: gross LLP ratio, and capital charge relied on the size of NPLs under banks' assets classification system. The banking regulation of LLP is directly related to the recognition of NPLs as it triggers certain regulatory duties. Under the functionalist approach regulatory aspect, the function of banking regulation on LLP is to mitigate risks from expected loss. The LLP setting depends on losses/NPLs ratios. For this reason, the asset classification system has an impact on the national LLP standards setting.

In the same vein, capital requirements operate as a buffer to unexpected loss – calculated and determined by the RWA – and the function of Capital Requirements is to reduce losses that may occur from NPLs. In this context, the banking regulation of capital requirements function to correct failures that impair the ability of banks to properly perform their economic functions and to protect the financial system's ability to operate as a network by mitigating risks.[204]

The following will demonstrate this in detail by focusing on the UK. The regulatory regime in UK designates specific rules that are intended to apply the EU directives and international standards on the NPLs approaches. Due to Brexit, in which the UK left the European Union with effect at 11pm on 31 January, the following discussion is technically outdated. However, as at the time of submission the UK continues to apply equivalent rules grandfathered into UK law under the European Union (Withdrawal Agreement) Act 2020 (as amended).

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[203] In the accounting standard, two models are being widely used to measure future credit losses: Incurred Loss Model and Expected Loss Model. The incurred loss model will be used to estimate credit losses that actually have the evidence to be impaired while the expected loss model will be more subjective to the cash flow. *See* European Financial Reporting Advisory Group, FEE Impairment of Financial Assets The Expected Loss Model, December 2009.

[204] Schwarcz, Regulating Financial Change: A Functional Approach (n 69).

In the UK, the regulatory framework for capital requirement is applied to UK-based banks, with its framework formerly embodied in EU law based on Basel III standards.[205] Banks established in the UK are required to hold regulatory capital of risk-weight asset under the Capital Requirements Regulation (CRR) and the Capital Requirement Directive (CRD).[206] Moreover, the UK complied with IFRS under EU laws. This yields the analysis of comparison between IFRS and Basel III. There are two types of provisions: the specific provision and general provision.[207] In response to IFRS, specific provision is created after the occurrence of a credit impairment event. General provision is created for loan portfolios that are not subject to a specific provision where the portfolio consists of loans with similar features.[208] However, due to the sometimes vague or imprecise nature of some accounting rules, banks in the UK have substantial discretion in deciding their provisions both specific and general.[209] While LLP is a main pillar of IFRS 9 and GAAP (previously in IAS 39) capital requirements are the principal pillar of the third Basel Convention. These international accounting standards and prudential regulations set rules on bank risk management.

As we have seen following the urging of G20, accounting standard setters replaced the provision model to better manage expected losses, for the sake of financial system stability. After the financial crisis, the credit losses regime on incurred loss has been criticised to a critical change and a new impairment model has been innovated by

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[205] Marc Farag, Damian Herland and Dan Nixon, 'Bank capital and liquidity' (2013) Topical articles Bank of England.

[206] Jan Putnis, Benjamin Hammond and Nick Bonsall, United Kingdom in Jan Putis (ed), *The Banking Regulation Review* (5th edn Law Business Research 2014) 866.

[207] Kees Camfferman, 'The Emergence of the 'Incurred-Loss' Model for Credit Losses in IAS 39' (2015) 12 Accounting in Europe 1-2; Zoltan Novotny-Farkas, 'The Interaction of the IFRS 9 Expected Loss Approach with Supervisory Rules and Implications for Financial Stability' (2016) 13 Accounting in Europe, 197-198.

[208] Stefan Hlawatsch and Sebastian Ostrowshi, Economic Loan Loss Provision and Expected Loss (2010) BUR 133.

[209] Darren Pain,'The provisioning experience of the major UK banks: a small panel investigation, (2013) Bank of England Working Paper no. 177.

International Accounting Standards Board (IASB). This new model replaced IAS 39 is called IFRS 9. Expected Loss Model has been incorporated in IFRS 9.

In summary, then, LLP has become a key feature of accounting standards and determining of actual banking practice on provisioning for bad debts. At its heart LLP is the reflection of a bad debt as an expense that offsets the 'paper' asset value of a credit. A traditional part of banking practice, LLP has to a degree become a norm, not least as a result of Basel III, which has financial stability as its object. The principles of Basel III are mediated to banks via (i) accounting standards such as IFRS9 and (ii) national or regional bank supervisory regimes. However, when we come to the detail of the matter, we see that LLP is determined on a cyclical expected loan loss basis, with banks given a wide discretion to determine provisioning measures.

A fine example of self-regulation one might say, and particularly apt given that LLP has its origins in self-regulation. Yet one might be concerned about the wide discretion on provisioning, particularly when it is to be combined in the regulatory context with a definition of NPL – a definition which we have shown is problematic, and itself subject to wide interpretation and conflicting practices. LLP mechanism discretion thus combines with the discretion to define NPLs, doubling the potential for a loss of faith in the nexus of LLP and NPL as indices of bank health.

This then is the basic outline of LLP and its function, its general relationship to the defined NPL concept and to global financial regulation and standards. I now turn to consider the specifics of LLP in the Thai context.

4.2.2 Banks' Own Practice in Thailand: NPLs Treatment as Provisioning for Doubtful Debts

This section examines standards-setting in the phase leading up to the financial crisis which the banking supervision did not adequately tighten regulation to the financial architecture or to international standards.

Prior to the financial crisis, banks established in Thailand were not legally required to set aside LLP.[210] The accounting treatment of LLP used to be voluntary— i.e., banks were determining their own LLP. In this respect, LLP arose from the behaviours of banks regulating themselves, and this behaviour continued to be a self-regulatory norm.[211]

However, when the financial crisis occurred, Thai regulators empowered banking supervisors to set the regulatory LLP requirements.[212] In this regard, the regulatory system on LLP has been changed from the self-regulatory to positive regulation. Later, the banking supervision, the Bank of Thailand (BOT), has implemented international standards within banking regulations on provisioning.[213]

The reasons for government/banking supervision in adopting international standards (or the *ad hoc* toolkit) are the regulatory failures that triggered the financial crisis, and every framework has been grinding and polishing its own particular lens through which it perceives, traces and assesses country-specific catastrophes and tragedies of its financial system and markets.[214] A hallmark of these efforts is the growing concerns about systemic risks in the globalised financial system and about enhancing systemic financial stability.[215] The border-crossing aspects of financial transactions have been the driving forces of global regulatory changes and of newly emerging forward-looking measures in the LLP.[216] However, I will argue that one form of change does not suit

[210] Rittirong (n 192) 95.

[211] ibid (173)

[212] Pakorn Vichyanond, *Non-Performing Loans (NPL) and Debt Restructuring in Thailand* (2002 Thailand Development Research Institute) 32.

[213] Bank of Thailand Notification No. 54/2551 Re: Guideline for Calculation of Credit Risk for Commercial Banks.

[214] Black, 'Paradoxes and Failures: 'New Governance' Techniques and the Financial Crisis' (n 71) 1063.

[215] *See* more details in Chapter 4.

[216] Peterson Ozili, Arun Thankom, 'Income smoothing among European systemic and non-systemic Banks' (2018) 50 The British Accounting Review 539.

every jurisdiction's financial infrastructure status, at least not without specific adaptations to its implementation are required.

The question arises whether states should respect the autonomy of banks to make their own rules and determine provisioning. Should banks be subjected to LLP principles set by the state and required to act prudentially? This research will explore self-regulatory theories, legal functionalism, and reflexive law to answer these questions. Focusing on functionalism as the key methodology, this research aims to illuminate the links between legal functionalism and the self-regulatory approach by revisiting the literature of functionalism. It is suggested that before assessing the present legal framework on NPLs and answering these questions, an essential first step is to understand the self-regulatory approach.

4.3 The Self- Regulatory Approach and LLP

This section examines the concept of the self-regulatory approach and the self-regulatory functions of LLP. The overview aims to set out a clear definition of self-regulation to enable a more accurate analysis of the Thai regulatory framework designed for LLP, which forms reflexive law— one of the three methods of research underpinning this thesis.

As mentioned, banks were not legally required to set aside LLP prior to the enactment of the Commercial Bank Act. It was voluntarily for banks setting aside provisioning to mitigate the risk of NPLs and determining their LLP ratios.[217]

Self-regulation is not a new concept, and its doctrine has been applied in different industries, including financial services, advertising, and professional occupations: lawyers, engineers, and accountants.[218] Generally, self-regulation is where the regulatory function is performed by a group or person and is defined as an individual's

[217] Rittirong (n 192).

[218] Roger Bergh and Michael Faure, 'Self-Regulation of the Professions in Belgium' 11 (1991) International Review of Law and Economics 165-182.

or a group's regulation of its or their own conduct.[219] Black[220] proposes a definition of self-regulation as follows:

> ..Self-regulation is used to mean variously soft law, collective arrangements that may be non-legal, and/or entail no government involvement, bilateral arrangements between firms and the government, unilateral adoption of standards, the involvement of industry in rule-formation, neo-corporatist arrangements in which the collective shares in the state's authority to make decisions about standards of conduct, monitoring, and enforcement, but in which the relationship with government may vary, and/or in which those other than the persons being regulated may play a role (auditors, stakeholders).

Black perceives self-regulation in the collective sense of a group of individuals, particularly one sharing economic interests, regulating themselves. It can be seen that from her perspective, self-regulation means the market participants' power to regulate themselves in their own system with the capability to alter their regulation to current circumstances. It permits a dynamic structural change in accordance with the system's own criteria. Moreover, she points out a regulatory function performed by the group or person as the essence of self-regulation.

In the Thai context, Sumantakun[221], the former Vice-Secretary of the Office of the Council of State in Thailand, argues that any definition of self-regulation has three features. First, regulation has to originate from the volition of its member(s). Second, the regulation contains a solution process for problems and remuneration for damages. Last, it is dependent on the state or within the framework designated by the state.

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[219] See also Anthony Ogus, 'Rethinking Self-Regulation' (1995) 15 Oxford Journal of Legal Studies.

[220] Julia Black, 'Decentering Regulation: Understanding the Role of Regulation and Self-Regulation in a 'Post-Regulatory' World' 54 Current Legal Problems (2001) 103.

[221] Thammanit Sumantakun, 'Legal Mechanisms in the Environmental Law' The Council of State of Thailand. <http://web.krisdika.go.th/pdfPage.jsp?type=act&actCode=189> accessed 4 April 2020.

Regulation through state intervention is costly. Banking regulation could obstruct banks' lending—one of the primary sources of finance to the economy—for example, by fixing a ceiling on provision. In contrast, banks' own norms on provisioning allow banks to adjust their lending and provisioning themselves based on their practices that allow them to employ discretion to use their own models to calculate provisioning needs.[222] Since there is zero ceiling on provision, banks can allocate more money for lending to their customers. As shown in Oyegunle and Weber,[223] emerging economies are promoting self-regulation in their sustainable banking systems to increase financing. In that scenario, there will be more bank lending, and lending that is a best fit for their incomes and risks. It can be seen that applying self-regulatory regimes in banks' provisioning can promote financing. Consequently, economic growth will increase.

Rawlings et al. argue that the self-regulatory approach supports the free market and the flow of financial goods and services.[224] This further contends that self-regulation is in line with the market economy, which is influenced by neo-liberalism, leading to increased efficiency and productivity. Summing up, this view argues that self-regulation tends to improve a nation's economy. Therefore, with regard to LLP regulation, it is further argued that there should be consideration of changing banking practices, relying more on domestic discretion—banks' norms—rather than state intervention, which is shaped mostly by pressures brought by international standards.

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[222] Philip Rawlings, Andromachi Georgosouli and Costanza Russo, 'Regulation of financial services: Aims and methods' (2014) Centre for Commercial Law Studies, Queen Mary University of London.

[223] Adeboye Oyegunle and Olaf Weber, 'Development of Sustainability and Green Banking Regulations— Existing Codes and Practices Report No. 65' Centre for International Governance Innovation (CIGI) (2015) 4-8. Accessed April 9, 2020.

[224] Rawlings, Georgosouli and Russo (n 222) 29-33; Anthony Ogus, 'Self-Regulation' in Ogus, Anthony, Emanuela Carbonara and Gerri Geest (eds) *Encyclopedia of Law and Economics* (Elgar Online 1998).

One policy suggestion, by Jean-Claude Trichet,[225]former president of the European Central Bank, supports voluntary regulation. He argues that if banks can prove that they can manage risk better than regulation, banks should develop their own rules and, therefore, there should be development of 'the code of best practices'.

Moreover, the Swiss economy demonstrates new challenges to self-regulation practices in financial markets. Swiss banks each develop their own code of conduct with their regulator, the Swiss Financial Market Supervisory Authority (FINMA).[226] The code of conduct elaborates banking standards applicable to all bank members. Although it is regarded as soft law and is not legally binding, the code positions itself as a law-infused document.

However, the multiplication and growing sophistication of self-regulatory schemes in the financial sector can be attributed in part to sustained criticism of macroeconomic stability,[227] systemic risk, and lack of supervision and accountability. Alan Greenspan, a former US Federal Reserve Chairman,[228] who supported wide-ranging deregulation before the GFC, states that unregulated banking business could be abused and produce financial risk. This shows that without supervision, self-regulation in free markets can lead to phenomenal destruction.

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[225] Carter Dougherty, 'Can banks self-regulate?' *The New York Times Article* (25 January 2008). <bittps://www.nytimes.com/2008/01/25/business/worldbusiness/25iht-wbdavos.1.9497014.html> accessed 22 January 2021.

[226] Markus Staub and Remo Kübler, 'Self-regulation' Swiss Bankers Association

[227] Mark Thomas, 'Why Self-Regulation of financial System Won't Work' *The CBS News* (17 April 2009). <https://www.cbsnews.com/news/why-self-regulation-of-the-financial-system-wont-work/> accessed 22 January 2021.

[228] Edmund Andrews, 'Greenspan Concedes Error on Regulation' (October 2008) The New York Times Article.

Lautenschläger,[229] a former member of the Executive Board of the ECB disagrees with unrestricted self-regulation in the financial system. Instead, she argues that comprehensive regulation and supervision are indispensable for the stability and safe, proper functioning of banks. Although Lautenschläger supports state intervention, her arguments mostly focus on the nature of business cycles in booms and bust as causes of the Asian financial crisis (1997), the GFC (2007-2008) and the European debt crisis, thereby providing examples of the potential ill effects of deregulation. She perceives those financial crises as a recurrent pattern and each as the consequence of deregulation.

Thus, it can be understood that Lautenschläger's understanding is based on the premise that financial crises arise mainly from the lack of sound regulation and supervision. Therefore, from her point of view, to prevent another financial crisis, it is necessary to reconsider the rules both for banks and supervision. They are providing a legal framework that can mitigate risks and allow regulators to make decision in performing their functions that will be beneficial to banks, investors, and regulators.

Given the advantages of using self-regulation for the setting of LLP for banks, it can be concluded that the self-regulatory function of LLP sets norms for banks' practices on NPLs' treatment, serving the economic functions of banks and facilitating their operations by balancing banks' capacity to allocate buffers and by mitigating systemic risk. In these ways, self-regulation eradicates political pressures from processes for setting standards.

[229] Sabine Lautenschläger, a former Member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the Single Supervisory Mechanism, Speech 'Monitoring, regulation and self-regulation in the European banking sector' 21 April 2015 <https://www.ecb.europa.eu/press/key/date/2015/html/sp150421.en.html> accessed 4 April 2020.

4.4 The Trade-offs of LLP

Being booked as an expense, LLP has an adverse impact on banks' earnings and so profits.[230] While banks mitigate risk exposure through provisioning, the trade-off is reduced short-term profits and consequent lower share prices.[231] In accordance with this aspect, Graham Bird argues that the higher the level of profits that a bank makes, the less provision they are willing to set aside.[232] Investors and analysts see LLP as an indicator for determining a bank's stability in respect of its lending.[233]

According to Walter, LLP has been one of the most significant elements affecting banks' profitability since the mid-1980s, when banks throughout the United States had total provision for loan losses of over USD 31 billion, twice the total amount of all bank profits.[234] As a reminder: decisions on the degree of LLP ought to reflect banks' ability to sustain losses and their stability (REF).

Therefore, there are trade-offs between increasing the banks' profitability (more lending) and managing their ability to sustain losses. This leads to key questions about LLP treatment: which methodology should be used to calculate banks' LLP and governed by which regulatory framework.

4.5 LLP processes

Although the LLP mitigate risks for default payment, there is a correlation between LLP and procyclicality in the business cycle. It is widely accepted that some of the

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[230]Eugenie Arturo, Arturo Rodriguez and Alair Tudor, 'Did Commercial Banks use the Loan Loss Provision Account to manage earnings around the 2008 Financial crisis?' (2016) 11 International Journal of Business and Economics Perspectives 25, 27.

[231] Graham Bird, 'Loan-Loss Provisions and Third-World Debt' (1989) Essay in International Finance No. 176 Department of Economics, Princeton University, 14.

[232] Ibid.

[233] George Benston and Larry Wall, 'How should banks account for loan losses' (2005) 24 Journal of Accounting and Public Policy 81.

[234] John Walter, Loan Loss Reserve (1991) *Federal Reserve Bank of Richmond Economic Review* 20, 20-21.

regulatory measures such as the treatment of NPLs and LLP have become a key driver of procyclicality and thus amplify the business cycle. It is argued here that LLPs are often procyclical and can worsen an existing recession. Each individual bank's assessment of the costs and benefits of generating more credit in a boom help them cope with an NPLs problem in a bust.

Procyclicality in the banking sector emanates from banks underestimating risks that increase during boom times but lead to incurrence of substantial losses during times of bust. Banks' behaviours in economies that are considered good and sound can be imprudent, for example by lowering the level of credit standards with the objective of increasing their level of loans. Conversely, banks tend to tighten credit standards in periods of economic recession when an increase in the volume of loan issuance is critical in achieving economic restoration. In addition, in the event of a housing market bubble and a sovereign debt crisis, this leads to consideration of how accounting frameworks can result in credit-risk myopia and cyclicality.[235]

The IMF emphasises that banks tend to underestimate losses during an economic boom which leads to insufficient provision of losses.[236] During the downswing, banks are adversely affected because of a sharp reduction in the level of equity. In such downturns, banks need considerably high levels of capital, which they are barely to afford. As a result of this, Azis (2014) emphasises that banks may be forced to resort to risky assets.[237] This indicates that ineffective application of stipulated regulations might amplify the impact of economic cycles. To mitigate against such occurrences, it is imperative for banks to be prudent in applying diverse regulations, such as optimal management of capital adequacy and liquidity.

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[235] Tugrul Gover, 'Two Giants' Views on Business Cycles: Kalecki vs. Schumpeter' (2019) 1 Economic Alternatives 15.

[236] International Monetary Fund, *Policies to mitigate procyclicality* (Washington DC: International Monetary Fund, 2009) 10.

[237] Azis Iwan and Shin Hyun, Global shock, Asian vulnerability and financial reform (Edward Elgar, 2014) 43.

The next section identifies issues arising from LLP processes. It examines whether the current LLP framework is sufficient to tackle NPLs before a financial/economic crisis occurs. The main issues are (1) provisioning behaviour during fluctuating business cycles and crisis periods, and how procyclical LLPs contribute to systemic risk and financial system instability; (2) the level of LLP discretion: how to estimate the level of provision on current main approaches which are forward-looking model and backward-looking model; (3) dynamic loan loss provision to mitigate LLP procyclicality; and (4) soft laws on accounting standards focusing on bank management's provisioning discretion under different accounting and regulatory regimes.

4.5.1 Discretion on the level of LLP

With regards to loan loss provisioning practices, LLP is based on accounting standards and prudential regulation. Banks set their internal rules based on accounting standards. LLP regulatory provisioning frameworks are based on expected losses (ELs). The LLP framework is regarded as a risk management tool under the macro prudential-regulation and accounting principles enshrined in the international standards established in the IFRS 9 and GAAP. However, as discussed in section 2.1, banks may have an incentive not to draw attention to their NPLs in order to avoid scrutiny as to the level of LLPs raised against them.

The level of LLP depends on the number of NPLs. The higher the level of banks' NPLs, the greater the provisions that are required to cover losses when they mature. Unfortunately, LLP will reduce Tier 1 capital on the asset side of banks' balance sheet. In fact, LLP reduces the value of gross loan portfolios. When banks set the LLP, equally banks will have to increase their capital. The question raised here is how to estimate the level of provisioning and ensure that the discretion arrived at will provide sound banking supervision and banking stability.

Examining discretion on the level of provisioning, one finds that two models of LLP are being widely used to measure future credit losses: (i) the incurred loss model and (ii) the expected loss model. Although IFRS 9 promotes the expected loss model, it is

worth mentioning the former incurred loss model to understand the differences between the two.

According to the European Financial Reporting Advisory Group (EFRAG)[238], the incurred loss model is a:

> model for determining the timing and measurement impairment of financial assets held at amortized cost, where a reporting entry can recognize an impairment loss only if it can evidence that a credit loss has been 'incurred meaning the credit loss is probable, and future expected cash flow losses can be reasonably estimated'.

It apparently shows that this model is used to estimate credit losses that indicate evidence of impairment. In contrast, the expected loss model is more subjective to cash flow. It is the model for estimating future, expected credit losses, and is recognised as an adjustment to the contractual effective interest rate at loan inception.[239]

Before 2020, the International accounting standards (IAS) applied a backward-looking model to LLP.[240] However, backward-looking provisioning failed to recognise losses in good time.

There is one study that shows that the backward-looking model could expand the procyclical effects of loan rate behaviour and of the financial system and shed light on

[238] European Financial Reporting Advisory Group, 'EFRAG's position on the IASB Supplementary Document Financial Instruments: Impairment' (8 April 2011).

[239] European Financial Reporting Advisory Group (EFRAG) and Federation of European Accountants Fédération des Experts comptables Européens (FEE), 'Impairment of Financial Assets: The Expected Loss Model' (December 2019).

[240] IAS 39 IFRS in International Accounting Standard (IAS) No. 39 provided guidance on how loan loss provisions should be established and limits the ability of managers to exercise flexibility in determining the provision (IASB 2003).

the controversies surrounding them.[241] Until recently, the International Accounting Standards Board (the IASB) recognised the 'too little too late recognition' of credit loss from the incurred loss model. As a result, it introduced an 'expected credit loss impairment model' – as requested by the G20 – to timely recognition of loss and promotion of sound and high-quality accounting standards.[242]

The principal criticism of the incurred loss model is that financial institutions have underestimated their NPL level to maximise their profits by avoiding adequate LLP and capital charges to cover bad loans. It is argued by some policymakers that the incurred loss model boosts the pro-cyclical effects of bank capital regulation.[243] That is, banks tend to lend more in healthy economies and less in bad times. This might accelerate procyclical effects by generating credit in a boom, which can damage credit supply in a bust, creating an overhang of NPLs. It is argued that the late recognition of losses in financial reports, under the incurred loss model, was a main causation of the GFC, resulting in adequate provisioning and capital charges.[244] An excessive credit expansion could be used as a warning indicator for future credit risk. For example, in Spain excessive bank loans increased credit risk in the following three to four years.[245]As a consequence, it was too late to recognise losses and there was insufficient provision.

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[241] Roy Zilberman and William Tayler, 'Financial Shocks, Loan Loss Provisions and Macroeconomic Stability' (2015) Economics Working Paper Series 2014/023, The Department of Economics, Lancaster University Management School.

[242] Financial Stability Board 'Improving Financial Regulation' Report of the Financial Stability Board to G20 Leaders (25 September 2009).

[243] Robert Bushman and Christopher Williams, 'Accounting discretion, loan loss provisioning, and discipline of Banks' risk-taking' (2012) 54 Journal of Accounting and Economics 1; Robert Bushman and Christopher Williams, 'Delayed Expected Loss Recognition and the Risk Profile of Banks' (2015) 53 Journal of Accounting Research 511.

[244] Wezel and others (n 28) 4-6.

[245] Vicente Salas and Jesús Saurina, 'Credit Risk in Two Institutional Regimes: Spanish Commercial and Savings Banks' (2002) 22 Journal of Financial Services Research 203.

One of the key discussions among global regulatory bodies and international standard-setters after the crisis concerned how to deal with the procyclical nature of the banking system. It is widely accepted that some of the regulatory measures, such as the treatment of NPLs and LLP, have become a key driver of procyclicality and thus an amplifier of the business cycle.

The GFC of 2007-2008 gave rise to the need for a new trend of accounting standards, the expected loan loss provision model to mitigate problems of the cyclicality of banks' lending. As the banking industry is subject to a variety of international standards aimed at different objectives, inconsistency among these in dealing with impairment of loans needs to be addressed. Banks are required to comply with accounting standards and prudential bank regulation. However, those rules have different objectives. Whereas the accounting standards on financial reporting have general goals in providing financial information to outsider in a transparency manner, prudential regulation aims to maintain bank stability and thereby that of the financial system.

Before the launch of IFRS 9, there was a conflict between the treatment of impairment of loans under the accounting standards and regulatory capital frameworks. While accounting standards such as the IFRS stress the importance of transparency for accounting and tax purposes, capital requirement standards including the Basel Accords stress the importance of safety and soundness of an individual bank, so that there is more emphasis on the stability of the whole banking system in Basel III.

There is a need to strike a balance between these monetary and financial stability objectives. Marked differences in objectives create a conflict in terms of treatment of impaired loans. This conflict is exacerbated when, as was noted above, before IFRS 9, accounting standards appeared to favour the incurred loss model, which requires a bank to provide reserves once actual losses have occurred, while Basel III is in favour of the expected loss model, which requires banks to provide capital in a more pre-emptive manner and to prepare for potential losses even though actual losses have not yet occurred.

A notable conflict arises because building a capital buffer means providing discretion to bank management and this could distort key accounting principles in terms of transparency. In a world with high levels of interconnectivity, change in financial treatment in one country can have implications and spill-over effects in other countries. For example, the Italian government's changes to the treatment of impaired loans during the 'bust' trend allowed Italian banks to reduce reserves in order to stabilise its economy. This seems to be a good, albeit *ad hoc* example of countercyclical measures that require easing of regulations during a period of bust.[246]

Nevertheless, following the GFC it has generally been accepted that banks should adopt forward-looking provisioning for the risk that loans they make are not repaid. The G20 urged accounting standard-setters, such as the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB), to replace the incurred loss model with the expected loss model in financial reporting of issues relating to stability of the financial system. The next section discusses the forward-looking model under IFRS 9.

4.5.2 Newly Trending: The Forward-looking Model

In response to the G20 request to solve the late recognition of losses, the IASB introduced a new standard called the 'expected credit loss' provision model or IFRS 9 in replacement of IAS 39[247] for the 'early recognition of losses.' The current LLP model has been amended to be a forward-looking method intended to result in earlier recognition of losses. It is the matter of the regulatory aspect and the recognition of NPLs, since the time of recognition can trigger both the capacity of banks to activate the buffers and the risk management mechanism.

[246] Bank of Italy, 'Financial Stability Report No. 4' (2012 Banca d'Italia) 48-49.

[247] In response to this request, the IASB and FASB began to work together on the development of new standards for financial instruments. The IASB decided to accelerate its project to replace IAS 39, and sub-divided it into three main phases: classification and measurement; impairment; and hedging. IFRS 9 will cover financial organisations across Europe, the Middle East, Asia, Africa, Oceana, and the Americas (excluding the US).

Owing to the implementation of this new impairment model, the relationship between NPLs and provisions has been changed under IFRS 9. It encourages early recognition of NPLs and adequate provisioning by replacing the actual loss with more effective judgement on provisions estimation. If there is objective evidence for the existence of serious loan impairment, the amount of loss needs to be calculated.[248]

There is a correlation between provisioning and NPLs. The LLP, as the primary risk management tool aiming to mitigate credit risk, is calculated using figures for risk-weighted assets. This underlines how NPL ratios, a recognition of losses and an assessment of credit risk, are critical to the risk-weighted assets calculation for the estimate of provisioning. As made clear in the previous chapter, there is no universal definition of NPLs. This, then, hinders the application of LLP processes and capital charges since the setting of the level of LLP depends on the size of the NPLs. The new model provides the classification and measurement of financial assets guidance that is relevant to the definition of NPLs by classifying loans into three stages[249]— stage 1 performing, stage 2 under-performing, and stage 3 non-performing.

One important question raised here is whether the expected loan loss accounting model has solved the problem of late recognition of impaired loans and mitigate procyclicality in bank lending. If so, this raises two more: does this have any unintended consequences, and why?

With regards to IFRS 9, the new forward-looking model does not indicate a measurement methodology for banks to estimate the amount of LLP. Rather, IFRS 9

[248] Isbel Argimon and others, 'The interplay of accounting and regulation and its impact on bank behaviour: Literature review' (2015) The Basel Committee on Banking Supervision, Working Paper 28, (Bank for International Settlements).

[249] Stage 3 non-performing, under the IFRS 9, is based on changes in credit quality-to make the assessment of changes in credit risk. The key is to determine the level of credit risk on bank assets and whether there is a significant increase in credit risk at the initial recognition and the level of credit risk at the reporting stage. The early recognition of losses is designed to prevent inadequate provisioning to absorb expected losses.

provides discretion to bank managers to determine the amount of LLP. With regard to elastic effect, it is contended here that the forward-looking model could lead to unintended consequences. While forward-looking provisioning is designed to reduce procyclicality by timely recognition of impaired loans, several factors may inhibit banks from doing so. In particular, there are studies showing that LLP is used to hinder earnings. Robert and Christopher[250] argue that the discretionary forward-looking provision practice can be linked to earnings deterioration, risk-taking indiscipline and a reduction banks' transparency[251] inhibiting outside monitoring. Their studies show that implications of discretion in provisioning could lead to negative impact on accounting behaviour in the discipline of bank risk-taking. As such, IFRS 9 can have both positive and negative consequences. Therefore, a manager's discretion on provision ought to be monitored by banking supervision.

Seen in this light, although the new standard allows banks to adjust their LLP to meet the needs of bank regulators, another aspect is that it allows banks more freedom in the ability to manage their earnings.

It seems obvious that an incurred loss model would not generally provide an adequate buffer for future losses because it needs actual losses. However, the new model does not specify the methodology of LLP. Accordingly, the level of LLP discretion on how to estimate the level of provision will be examined to find the assessment to support the forward-looking model and the LLP regulatory framework. This leads to an introduction of the risk management tool, the dynamic loan loss provision that is the combination of forward- and backward-looking LLP which I discuss in the next section.

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[250] Robert Bushman and Christopher Williams, 'Accounting discretion, loan loss provisioning, and discipline of Banks' risk-taking' (2012) 54 Journal of Accounting and Economics, 1 and 15.

[251] Larry Wall and Timothy Koch, 'Bank loan-loss accounting: a review of theoretical and empirical evidence' (2000) 85 Economic Review 1–19 ,15.

4.5.3 Dynamic LLP

Following the GFC of 2007-2008, it has become clear to policy makers that procyclicality increased the effects of the business cycle in the banking sector. It is argued that one of the main causes of the GFC was the lack of a macroprudential approach to absorb shocks and to mitigate macroprudential risk. The Eleventh Geneva Report on the fundamentals of financial regulation[252] specifies that Basel II ignored macroprudential risk. To reduce procyclicality in the banking system, adopting a macroprudential approach has been urged in order to ensure the financial stability. Since the nature of the banking business cycle is procyclical, the aggressive credit lending characteristic of economic upswings can damage credit supply in a bust because of excessive NPLs. Which mechanism might cope better with macroprudential risk and reduce the procyclicality that results from banks' typical lending behaviour in a boom time?

LLP can be a mechanism to alleviate the financing problem faced by countries.[253] According to Quagliariello[254], a director of Economic Analysis and Statistics European Banking Authority (EBA):

> A comprehensive investigation is provided on the issue of the possible cyclical nature of banks' behaviour using a large panel of Italian intermediaries over the period 1985 to 2002. The econometric results confirm that business cycle affects to LLP and NPLs. Their study shows that NPLs and LLP are generally considered to be the main transmission channels of macroeconomic shocks to banks' balance sheets. The effects of macroeconomic shocks on banks' balance sheets…

[252] Markus Brunnermeier and others, 'The Fundamental Principles of Financial Regulation' (2009) Eleventh Geneva Report <https://cepr.org/sites/default/files/geneva_reports/GenevaP197.pdf> accessed 20 June 2017.

[253] Bird (n 253) 28.

[254] Mario Quagliariello, 'Banks' riskiness over the business cycle: a panel analysis on Italian intermediaries' (2007) 17 Applied Financial Economics, Taylor & Francis Journals, 119–138.

It can be seen that there is a relationship among LLP, NPLs and procyclicality occurring in the business cycle. LLP accelerates procyclicality in the business cycle, while an increase in banks' lending can lead to higher levels of NPLs. This is important because it shows that regulation of provisioning could manage behaviours of bank lending and thereby reduce procyclicality.

The new regulatory system on countercyclical banking regulation has been introduced through international fora and national banking regulators. For example, the UK government applied a macro-prudential policy tool to counter the cyclicality of the banking sector after the financial crisis.[255] According to the Select Committee on Economic Affairs, the problem of procyclicality in the banking sector can be solved through regulation.[256] The Turner Review of the Financial Services Authority states that there should be a counter-cyclical capital adequacy regime with capital buffers.[257] To absorb shocks, the macro prudential instruments , such as countercyclical capital and dynamic loan loss provision (abbreviated in the literature as 'DP') have been applied as a cushion during a boom and to mitigate risk exposure during the subsequent downturn.

In this regard, the DP has been newly implemented as counter-cyclical tool to limit procyclicality. The concept of dynamic provision, as a counter-cyclical loan provision, is as a cushion for banks, gradually building a countercyclical loan loss reserve in good times and then using it to cover losses as they arise in bad times.[258] This mechanism

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[255] Katia D'Hulster, Valeria Salomao-Garcia and Raquel Letelier, 'Loan classification and provisioning: Current practices in 26 countries' the World Bank Financial Sector Advisory Center (FinSAC) 2014,6.

[256] Select Committee on Economic Affairs, 'Banking Supervision and Regulation' (2009) The Authority of the House of Lords, 2nd Report of Session 2008–09, 25. <https://www.publications.parliament.uk/pa/ld200809/ldselect/ldeconaf/101/101i.pdf> accessed 18 June 2017.

[257] Financial Services Authority, 'The Turner Review. A regulatory response to the global banking crisis' (2009).

[258] Wezel and others (n 28) 5.

aims to address the cyclical nature of LLP. Oros and Salisteanu[259] claim quite plausibly that banks should apply forward-looking provision during booms and resort to backward-looking provision during downturns. This matter because such a combination of the two models allows banks to have a risk management tool dealing with procyclicality in lending operations in downturns. For example, during the sovereign debt crisis in Europe, banks adopted backward-looking provisioning. Moreover, by applying a forward-looking model in good economic times, it lowers the procyclicality of banks' LLP and earnings, allowing banks to set aside LLP in a more pre-emptive manner and prepare for expected losses although no actual losses have yet occurred.

There is a wealth of literature on dynamic loan loss provision, including many empirical studies. DP is largely associated with countering the occurrence of economic booms and busts. The IMF's report shows that DP can smooth provisioning costs over the credit cycle and decrease banks' probability of default.[260] Wezel, Can-Lau and Columba[261] conduct simulations on dynamic LLP based on US and Uruguay bank data. Their findings reveal that dynamic LLP can mitigate procyclicality in provisioning costs and act as a countercyclical buffer that reduces bank's probability of defaulting. It is therefore argued that LLP frameworks should incorporate these concepts and tackle risk and externalities. However, there are a number of limitations in the implementation of DP. It is argued that DP is unable to prevent exuberance in bank lending to inherently risky sectors of the economy, even though at the margin it likely had only a palliative effect. Wezel and others[262] states that:

> DP cannot fully insulate bank capital from cyclical effects because it does not address the procyclical variation of risk-weighted assets that follow a point-in-time methodology rather than a more desirable through-the-cycle approach. Also, tail

[259] Olivera Oros, Simona Salisteanu, 'Loan Loss Provisioning – A Case Study of Romanian System Smoothing Pro-cyclicality' (2015) 26 *Procedia Economics and Finance*, 461 – 467.

[260] Wezel and others (n 28) 65.

[261] ibid 39-40.

[262] ibid 39.

events cannot be absorbed, as DP is based on expected loss. These circumstances justify the use of countercyclical capital buffer in addition to DP.

Although DP has been widely applied by many countries[263], some countries are not well-oriented to DP. This is because it is still unclear how DP could be effectively implemented in different contexts.[264] Although DP has advantages in reducing procyclicality in the banking sector, there remain certain risks. There is a large and divergent set of practices in setting provisions. Overall, there is no consensus on how or when to change the impairment model from the forward-looking model to another. This creates plenty of room for discretion in the determination of LLP estimates. One possibility is that financial reporting objectives are at risk of being distorted by bank managers and/or national authorities in the application of this new model.

In the era of globalisation, the differences in LLP treatment in country A could have spill over effects in countries B and C. For example, the Italian government's changes to the treatment of impaired loans during the 'bust' trend allowed Italian banks to reduce reserves in order to stabilise its economy.[265] Krügera, Röscha and Scheule[266] argue that authorities may help banks during economic downturns by lowering counter-cyclical capital buffers or changing the treatment of provisioning when banks are close to failure. This seems to be a good, if *ad hoc* example of countercyclical measures that require easing of regulations during a 'bust' trend.

Moreover, DP could cause problems in terms of different treatments that is more advantageous to its own country since it is questionable which authority should make

[263] For example, Spain, China, Italy. The Spanish government adopted the dynamic approach to its banking system in 2008 as the evidence show a success practice of dynamic LLP during the GFC in 2008.

[264] Vincent Bourvatier and Laetitia Lepetit, 'Banks' procyclicality behaviour: Does provisioning matter?' (2007) Journal of International Financial Markets, Institutions & Money, 35, 2.

[265] Bank of Italy, 'Financial Stability Report No. 4' (2012 Banca d'Italia) 48-49.

[266] Steffen Krügera, Daniel Röscha, Harald Scheule, 'The impact of loan loss provisioning on bank capital requirements' 36 Journal of Financial Stability (2018) 114–129.

such decisions. Accordingly, authorities may intervene in banks' LLP levels, claiming necessity in using DP to take advantage from international transactions causing bias to certain nations. Regulating LLP has become a matter for debate among academics and international organisations. Government intervention in the form of financial regulation is required to manage risk in financial systems. Banking authorities have discretion to implement additional regulatory LLP requirements in order to optimally deal with the pro-cyclical effect of economic cycles.[267] The bank regulator will set the amount of LLP using the model or method provided by international standards but would have taken this new model to opt out from the international standards.

Although DP cannot solve all problems occurring from procyclicality in lending activities, nor prevent a credit boom, the IMF supports its application as a tool for countercyclical banking policies. I agree with the IMF that considering the functions of this tool in mitigating risks, policymakers should apply DP with other macroprudential tools to lowering the probability of default and strengthening banks capacity to absorb shocks.

4.6 Conclusion

This chapter has analysed the functions of LLP and capital requirements in the financial system, their role in self-regulation, the development of approaches to NPLs and the role of LLP as part of current banking supervision. A financial report of banks' LLP reflects their weakness in the portfolio to investors and stakeholders. Some banks tend to distort their NPLs in order to avoid the reduction of Tier 1 capital. As mentioned in the previous chapter, a commonly agreed definition of NPLs is critical to the prevention and management of NPLs for these reasons. Therefore, to solve this problem there is a need for regulatory reform that takes a systematic approach in a consideration of both accounting and prudential supervision, since it is involved with a decision-making that affects banks' balance sheets and income statements. Transparency has also become one of the key issues in solving LLP problems.

[267] Olivera Oros and Simona Salisteanu, 'Loan loss provisioning - a case study of Romanian system smoothing pro-cyclicality', 26 (2015) Procedia Economics and Finance 863.

From this analysis we can see the complex, multifunctional position of LLP. On the one hand it serves as a 'bottom up' mechanism of bank self-regulation; on the other it has become a critical component of international and many national supervisory mechanisms, being both codified as 'top-down' regulation set by bodies such as the IASB and Basel Committee, and also posited as a mechanism of market (public choice) regulatory architecture through reporting requirements. But it is also linguistically duplex (so to speak): on the one hand LLP refers to various practices developed individually by banks for handling loan losses and reporting them to investors. As such the term LLP bears no greater weight that signification of sociological facts. Yet on the other hand LLP has become a regulatory term of art, asked to bear the weight of at least some uniformity so that supervisors can claim to be maintaining *standards* (if that word is to have any force), and investors can have faith in claims of purported regulatory compliance. A functional analysis of LLP therefore has demanded a degree of subtlety.

In addition to the functions of regulation, a current legal system based on an overall macroprudential approach tackling NPLs and procyclicality of banking regulation poses a question as to its function in mitigating risks. The architecture of framework on banking laws shows the development of international collaboration on the macroprudential approach. Regulatory reform applied the forward-looking concept in prudential regulation and accounting standards as shown in Basel III and IFRS 9. The new concept has become the main priority in banking regulation since that time. While the forward-looking model has been adopted by countries, dynamic loans loss provision has become a major tool to buffer procyclicality in the banking sector over the period of the credit cycle. However, there are different methods of dynamic loan loss provision.

As noted, the controversies in this area focus mainly on the lack of consistent identification of when to make provision, and the determination of losses since it involves subjective measurement and judgment. Moreover, there are particular issues concerning the interaction of countercyclical capital and provision, and different international standards on capital requirements and provision. Despite the new

requirements, the outcome of this dynamic loan loss mechanism varies from country to country. Almost a decade after its implication, there are loopholes in the legal framework on LLP and Capital Requirements. Therefore, regulatory approaches to mitigating losses by IFRS 9 and Basel III capital requirements require further development.

This analysis leads to the conclusion that the notion of a well-designed risk management process can manage banks' NPLs. Effective management of NPLs requires tools for asset classification to enable financial institutions to manage losses resulting from loan defaults. The lack of a universal definition of NPLs has the consequence of hindering the application of LLP processes and capital charges.
Having considered LLP processes and capital charges by stressing their role in dealing with procyclicality and NPLs, a critical analysis of the NPLs regimes in Thailand through the functionalist approach, reflexive law, self-regulatory approach, and legal transplantation theory is presented in the next chapter.

Chapter 5: NPLs Regimes in Thailand: LLP and Capital requirements

5.1 Introduction

The discussion in Chapter 4 examined how the approaches to NPLs have been designed to tackle the problems of NPLs through the mechanisms of LLP and capital adequacy. It underlines the deficiencies of the current regulatory system and its implications during the business cycle in the banking industry. Regulators have endeavoured to mitigate risk and procyclicality by reforming their prudential regulation and adopting international standards set by the BCBS, the IMF, and the IASB. As shown in the previous chapter, LLP has been changed to a forward-looking model dealing with expected losses, with current regulatory capital requirements partially or fully implementing the principles of the Basel III.

This chapter will explore challenges to approaches to NPLs in the Thai legal context and examine whether the current LLP and capital requirements of banks subjected to international standards could mitigate risks. Our dynamic functionalist methodology (functionalism augmented with legal transplants theory via reflexive law) will guide this analysis. The examination expects to conclude that the implementation of international standards can in turn lead to the unintended, undesirable outcomes of financial instability and impedance of economic functions of the financial system in funding by creating credit-growth ceilings. Moreover, applying international standards in different national settings can cause distortion in another macro-prudential regulation, ultimately also causing negative effects.

This chapter proceeds as follows: in the remainder of this section, I analyse the regulatory framework on capital requirements implementing international standards using the dynamic functionalist approach (section 1). I then undertake an analysis of Capital Requirements viewed through as legal transplants. This chapter contributes to our understanding of how and why Thailand would comply with international banking regulatory standards, particularly the Basel standards. It demonstrates the interplay between external pressures and internal policies constituted by international

organisations and domestic regulators (section 2). Lastly, I analyse the LLP system viewed through the theory of legal transplantation (section 3).

5.2 LLP and Capital Adequacy Regimes Viewed through a Dynamic Functionalist Approach

5.2.1 The Functionalist Approach and Reflexive Law

This section assesses Thai banking regulation of LLP and capital adequacy by adopting a dynamic legal functionalist approach, as augmented by reflexive law.

Following a financial crisis, the tendency of regulators is naturally to focus on reforming certain regulatory failures witnessed in the preceding crisis, aiming to prevent their recurrence. However, it is unlikely that any one cause of the crisis will recur as before since there are other loopholes in the regulation and new approaches and /or instruments to commit other financial crimes or take advantage differently in the financial industry, keeping in mind too that the financial system itself is continually dynamically changing. It is therefore argued that it is a common mistake of regulators to take an *ad hoc* approach of macroprudential regulation as a 'toolkit' to – in effect - tackle the previous financial crisis as a means for promoting future 'financial stability'.[268] Considering the paradoxical nature of regulation that exists in its application, even a single regulation can generate higher costs or undesirable/opposite effects.[269] Without specific and realistic guidance in the application of the macroprudential regulation, this toolkit creates unintended consequences. Black[270] argues that the regulator's toolkit as a prompt response to the financial crisis could the harm its financial system:

[268] Robert Hockett, 'Implementing Macroprudential Finance-Regulatory Policy: Legal Considerations', IMF Working Paper, 2013.

[269] Iman Anabtawi and Steven Schwarcz, 'Regulating Ex-Post: How Can Address the Inevitability of Financial Failure' 92 Texas Law Review, 75-131, 99.

[270] Black, 'Paradoxes and Failures: 'New Governance' Techniques and the Financial Crisis' (n 71) 1038.

> .. the highly functionalist, toolbox approach which focuses on fashioning and prescribing the appropriate regulatory tools in order to achieve desired outcomes is necessary but insufficient to that approach's own ends, which are reformist and perspective. Regulation is a complex and multi-dimensional activity. Failures in any of these dimensions can create points of vulnerability, such that the carefully fashioned tool will simply not as invented. Instead it is transformed in the very process of its performance, resulting in a number of paradoxes.

According to Black, the implementation of regulatory standards to the macroprudential tools has multiple effects that impact upon other parts of the financial system. It is probable that the application of macroprudential regulation will lead to financial problems. Rather than developing the financial system, macroprudential regulation can lead instead to financial instability and impede the economic functions of the financial system in funding by giving rise to credit-growth ceilings. This signifies that reforming decision-making underlies paradoxical effects. In this context, Thai banking supervision authorities have decided to adopt a toolkit approach to Thailand's regulatory system in response to the financial crisis, and as suggested to them by international organisations. The LLP approach under the new banking regulation stipulates different LLP calculations for the expected credit loss model.[271] However, guidelines for the application of these new regime remain unclear. Banking supervision provides plenty of discretion to banks when calculating their losses in classifying the stages of those losses between stage 1 (performing) and stage 2 (non-performing) under the amended assets classification system.

In addition to the new provisioning regime, the Thai Capital Requirements system incorporated the Basel II and III in Thai banking regulations.[272] Consequently,

[271] Bank of Thailand Notification No. 7/2562 Re: Regulations on Components of Capital for Locally Incorporated Banks; Notification of the Bank of Thailand No. FPG. 9/2562 Re: Regulations on the Calculation of Credit Risk-Weighted Assets for Commercial Banks under the Standardised Approach (SA).

[272] Bank of Thailand Notification No. 12/2555 Re: Regulations on Supervision of Capital for Commercial Banks.

financial institutions have had imposed upon them increased capital adequacy and a different calculation method. The implementation of the expected loss model and the higher capital charge were introduced (despite the concerns of market players) for a range of reasons, including that these would prevent another financial crisis, enhance financial stability, as well as gaining acceptance at the international level as Thailand complies with the international standards. Key questions are whether this toolkit of the Thai regulator truly can mitigate risk and facilitate the financial system in the operation of its functions.

To answer these questions, this research borrows Schwarcz's functional approach to assess the LLP and capital requirements system. As we saw in Chapter 1, his approach focuses on functions rather than on institutions. The underlying reasoning behind this principle is simply that financial functions are more durable than financial institutions. According to this approach, the functions of the financial system and regulation are emphasised. The key economic functions of any nation's financial system are to facilitate capital provision, allocation, and deployment.[273] These functions are called funding to investors, firms and businesses. The functions of this microprudential regulation thus are to correct 'market failures' and to facilitate the actions of components of the financial system, including firms and markets, in order to provide and fulfil economic functions.

Pursuant to this functionalist approach, appropriate regulation should improve funding because it is one of the key functions of the financial system. This is important because if considering whether any 'market failures' obstruct the capacity of banks to provide funding. Later, this chapter discusses the consequences of the application of regulatory provisioning that limits and/or lowers bank lending to markets.

[273] The discussion of challenges for commercial banks in Chapter 3 illustrates that it is the traditional business of banks to perform these economic functions of capital by borrowing money from depositors and lending that money to businesses.

Julia Black[274] also claims that applying the functional approach to regulatory governance analysis permits us to understand why regulation is not well-functioning and has paradoxical effects.[275] She analyses the deployment of new governance techniques in an international-standards setting – or as Black terms it, the 'enrolment' of such techniques – via their functional dimension in order to understand its limits, character, and operation.

Enrolment can lead to a situation in which functionally the 'proper' performance of one regime (accounting rules) can cause distortion in another (macro- and micro-prudential regulation) and, as the GFC illustrated, also bring about ultimately negative endogenous effects. In case of the enrolment of accounting standards, the institutional structure of global financial regulation makes the relationship between two regimes more complicated, and it is less easy to 'dis-enrol'. Significant adopters and users of the IASB's standards, in this case governments and global standard setting bodies (notably the BCBS and the Financial Stability Board), are exerting pressure on the IASB to amend its standards.

According to Black, although the enrolment of regulatory regimes can provide the benefit of well-developed standards[276] and boost the capacities of the regulatory authorities, it can also lead to vulnerabilities. Although the financial models for LLP are intended to be risk management instruments, in certain conditions this could create unwanted consequences. The regulator has relied on global accounting rules and global capital regulation to determine the capital charge and provisioning ratios in its regulatory regimes. Yet the same rules have the potential to create different responses from market players. Under the functionalist approach, the financial regulation should operate to serve the functions of the financial system. The functions of financial

[274] Julia Black, 'Paradoxes and Failures: 'New Governance' Techniques the Financial Crisis' (n 71) 1037-1063, 1039.

[275] Julia Black, 'Enrolling Actors in Regulatory Processes: Financial Services Regulation' (2003) Public Law 63.

[276] John Braithwaite and Peter Drahos, *Global Business Regulation* (Cambridge University Press 2000).

systems include serving as a 'network', and systemic risk is the type of risk that fails this function. Macroprudential regulation should protect the financial system to function as a network and therefore mitigate systemic risk.

In this context, banking regulation imposes increasing LLP and capital adequacy. Changes to the LLP system may trigger market failure. The Basel III regime requires banks to be robust by increasing the quality and quantity of capital to protect banks from unexpected losses. The overriding reason for this adaptation of the Basel convention is to respond to the crisis. As mentioned above, *ad hoc* regulatory governance may divert regulators' attention from paying sufficient heed to the risks that may arise from the balance sheet rather than focusing on the functions of the financial system and on the risks that could occur in the entire system of credit creation.[277] To comply with these requirements, banks have to reduce their investments, sell assets and lend so as to be able to set aside the required amount of capital. This lowers the profitability of banks and thereby reduces funding to markets, decelerating credit growth. For these reasons, it can be concluded that in certain circumstances an enforcement of rules established by different regulatory bodies can create negative effects.

Furthermore, in accordance with functionalism, the law as a subsystem should operate to serve the purposes of reproduction of the system by adapting to the environment of its society. It should adapt itself and modify its elements to be compatible with other systems. Having said that, if banking regulation only serves the purpose of the regulator in mitigating risk but ignoring the reproduction of the credit system and the economic functions of the financial system in respect of funding, it can be concluded that such regulation does not serve its purpose and is ineffective. This could be due to the arbitrariness of regulators or to political pressures. Therefore, the next section proposes a self-regulatory regime arguably could take the politics out of the equation since the decision is solely in the hands of the market.

[277] Samuel Hanson, Anil Kashyap and Jeremy Stein, 'A Macroprudential Approach to Financial Regulation' (2011) 25 Journal of Economic Perspectives 3-28.

Because reflexive law supports a self-regulatory regime, it is necessary to employ reflexive law to examine the Thai regulatory system in respect of LLP and also to explain the self-regulatory aspect.

The concept of reflexive law is used in a normative sense to encourage decentralised forms of deliberation and to remove the state from the conceptual centre of society. So, for example, reflexive law shifts decision-making to business organisations by causing these organisations' governance bodies to take notice of designated matters – for example, modern slavery in supply chains – in the hope that these governance bodies will react accordingly. This reaction may be encouraged by imposing a general duty to act for the interests of all stakeholders of the organisation.

Self-regulation manifests in a further positive way on the grounds that the provisioning level could be spontaneously altered consistent with its current stage of the economic cycle: boom and bust times. Ayers and Braithwaite argue that self-regulation is more responsive to market situations.[278] Market actors will continue to develop or act in their own way in the absence of intervention, while top-down regulation is incapable of constantly correcting the behaviour of those being regulated because self-regulation has internal drives through its banking institutions to comply with those standards. In this regard, a key aspect of banks' own practices is the flexibility with which it appears to be dealing in regard to the procyclicality of banking business and economic fluctuation.

Reflexive law tends to limit influence of government intervention in the market.[279] By regulating LLP ratios, banking regulation not only regulates banks' behaviour but also intervenes in the autonomous process of banks' own adjustments on provisioning. This reflexive law is supported by the functionalist theory that banks' own practices would

[278] Ayers and Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (Oxford OUP 1992) 4.

[279] Zumbansen (n 50) 769.

be more efficient and productive than regulation. Zumbansen[280] argues that the functionalist approach to norms aims to promote governance whereby market actors make their own choices. Neo-functionalism meanwhile encourages a form of governance through the single mandate of facilitating individual autonomy, aiming to protect the demands of the market, market freedom and competition from state intervention. When the function is shifted to the outsider, decision-making becomes vulnerable as a result of distorted lenses. In the same vein, Teubner[281] argues that the law is restricted to creating mechanisms for self-regulation– i.e., creating social institutions that function as self-regulating systems. Compare this to reflexive law, which seeks to design self-regulating social systems through norms of organisation and procedure.

In the financial market, self-regulation has reached beyond what is traditionally regarded as industry regulation. It is suggested that banks could perform a function in governing self-regulation in the market. Through this approach, banks can retain a sense of autonomy. Thus, it is argued that LLP accounting standards could be derived from banks' practices as equivalents to positive norms.

It should be noted that provisioning is recorded in the balance sheet, which is part of the financial reporting, and hence that it could link to potential bank accounting information distortion. In support of this argument, Haldane[282] states that 'a regulatory regime of constrained discretion has given way to one with too much unconstrained indiscretion'. Consequently, a state/banking supervision could be in a position that has insufficient knowledge and capacity to identify the causes of problems. Where autonomy is upheld, unilateral actors are restricted by their own knowledge. It is argued then that legal regulation could disrupt the efficiency of the market and that more fitting solutions can be designed unilaterally.

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[280] ibid 769.

[281] Teubner, 'Substantive and Reflexive Elements in Modern Law' (n 81) 239.

[282] Andrew Haldane, 'Constraining Discretion in Bank Regulation' in Charles Goodhart and others (eds), *Central Banking at a Crossroads Europe and Beyond*, (Anthem Press 2014) 15-32.

As discussed, regulation is prone to paradox and sometimes has unintended consequences. Regulation can produce changes in behaviour as well as outcomes that are unintended.[283] In the context of provisioning, banking regulation that adopts international accounting standards could decrease local banks' potential for making profits. IFRS 9 requires banks to apply a forward-looking model to LLP, meaning that banks are required to allocate more provision. In this light, IFRS 9 is designed to solve problems, particularly for a large-sized bank. In Thailand, the application of the international standards of IFRS 9 decreases banks' profits. This explicitly shows in the market responses to the application of IFRS 9 that require the forward-looking model in provisioning. Financial institutions complying with these new accounting standards claim that they are faced with a lowering of profits.[284] Consequently, being independent of international accounting standards could lower banks' provisioning and is thereby beneficial – at least in a narrow, Friedmanite 'maximisation of profits' sense – to a small-size bank.

With regard to the competence of banking supervision, it is contended that banking supervision could be limited in setting the requirements of LLP level by mixing its domestic characteristics with international standards influenced by more powerful states and by international organisations. The political standpoint of a state affects its policy decisions. In other words, powerful states can intervene in choices of regulation by using trade reasons or economic intervention. The state may make its decision without thorough consideration of its own markets and traditions, and that option might not be beneficial to its financial market and so cause harmful consequences.[285] In this case, legal regulation, mainly based on international accounting standards, could have adverse effects causing limitations to funding in the financial system. Therefore, it can be concluded that banking regulation intervenes in banks' decisions

[283] Julia Black, 'Decentering Regulation: Understanding the Role of Regulation and Self-Regulation in a 'Post-Regulatory' World' (2001) 54 Current Legal Problems, 108-109.

[284] Bangkok Post Online Newspaper< https://www.bangkokpost.com/business/1457153/ifrs-9-bringing-unpredictable-changes> Accessed April 9, 2020.

[285] Black, 'Paradoxes and Failures: 'New Governance' Techniques the Financial Crisis' (n 71).

about their own LLP practices; thus, this may well harm profit-making efficiency by setting excessive levels of LLP, which in turn is detrimental to bank stability.

5.2.2 Analysis of LLP and Capital Requirements

As the self-regulatory function has been examined in Chapter 4, this research proposes that self-regulation be used in setting standards for LLP and capital requirements. Since this research aims to analyse whether the LLP and capital requirements system can mitigate risk and effectively solve the problems attendant to NPLs, and initially this research argues that the implementation of international standards to LLP and capital requirements in banking regulation may produce unintended and unwelcome consequences in Thailand.

In this regard, it is worth mentioning the most relevant Thai legislation, the Financial Business Act[286], which empowers the Bank of Thailand (BOT) in setting LLP standards and capital adequacy for regulated banks:

> Section 61 states that Financial institutions shall set provision for unimpaired assets and contingent liabilities in accordance with the regulations prescribed in the notifications of the Bank of Thailand but shall not exceed five percent of the unimpaired assets and contingent liabilities.

The regulatory system for LLP in Thailand is mainly regulated by the Bank of Thailand (BOT). The Financial Institutions Act empowers the BOT to regulate LLP and the regulatory capital charge. In particular, the notification of the BOT specifies that provisioning is based on international standards: IFRS 9. Consequently, banks have imposed upon them an expected credit loss model to their financial model on provisioning. As we saw in Chapter 4, the adoption of IFRS 9 affects banks' investment efficiency.

[286] Section 61 of the Financial Institution Business Act.

The present LLP mechanisms under the Financial Institutions Act entail unintended consequences because it has had negative impacts on the credit system.[287] Thus, it is argued that banks' own practices on LLP as a source of norms are preferable than the regulation on provisioning since market players inevitably have a better understanding in their businesses.

To answer one question concerning the implications of the present LLP mechanism regarding risk mitigation and management of NPLs, this research argues that banks' own practices on LLP as norms could provide a more efficient regulatory framework than governance by legal regulation. This section advocates a self-regulating market by taking into account the nature of banking business and banks' performance. In other words, LLP should be treated in the same way as previous banks' own treatment of it by recasting their responsibilities in order to place them under professional duties entailed.

That being said, this research suggests that a combination of self-regulation and banks' supervisory power should provide the ideal regulatory outcome.[288] The underlying rationale is that in the majority of circumstances, the use of multiple rather than single policy instruments, adding to a broader range of regulatory actors, will produce better regulation.[289] Thus, it is possible to argue that standards-setting should be shifted to the market-based principle under supervision by the BOT to foresee the macro-perspective of the current financial market situation to prevent any consequent disruption in the market.

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[287] Payear Sayiamviboon and Virachai Arunrungsirirode, 'Concerns of IFRS 9 Implementation in Thailand' (2018) 41 *Journal of Accounting Profession* 67-69.

[288] Darren Sinclair, 'Self- Regulation Versus Command and Control? Beyond False Dichotomies' (1997) 19 Law & Policy, 529; Neil Gunningham and Darren Sinclair, 'Smart regulation' in Peter Drahos (ed), *Regulatory Theory Foundations and Application* (The Australian National University Press 2017) 133

[289] ibid.

Having considered functionalist theory by taking into account the possibility of considering LLP as being subject to a self-regulatory regime similar to banks' own norms prior to the legislation, the next section examines approaches to NPLs under international standards by adopting legal transplantation.

5.2.3 NPLs Regimes on Capital Requirements Viewed Through the Lens of Legal Transplantation

The foregoing analysis brings the implementation of international standards to the fore. Similar to many developing countries, Thailand adopted IFRS 9 and the Basel standards into its NPL regime. This may be due to the economic needs and pressures brought to bear by certain international organisations, non-explicitly delineating implementation of international standards in their lending conditions. Therefore, this research examines international standards as they have been implemented in the Thai legal framework.

In Chapters 1 and 2, this research has proposed a conceptual framework for analysing NPL regimes[290] and the associated banking regulations that have added international standards to their comprehensive, relational, and embedded buffers against systemic risk and their forward-looking character. The particular legal approaches taken by this study draw on conceptual tools and insights from a range of disciplines, including accounting, economics, the political economy, and banking law. Here, I show how various concepts in these various fields assembled together form a theoretical lens through which regulatory choices and their impacts can be revealed, critically analysed, and assessed.

[290] This research defines the 'NPL regimes' as the capital requirements and provisioning that are essential elements of bank credit risk management to prevent and reduce the level of the NPLs. *See* William Handorf and Lili Zhu 'Credit Risk Management and Bank Size' 20 Commercial Lending Review (2005), 27-34.

While international standards regarding provisioning[291] and capital requirements are not binding as hard law, Thailand has decided to implement IFRS 9 and the Basel II and III within its regulatory framework. Therefore, this research seeks to investigate these implementations and to examine the effects of this banking regulation. In Chapter 1, I demonstrated how modern functionalism can be augmented through use of legal transplants theory – a point first made by reflexive lawyers. By applying the theory legal transplantation to banking regulations, this thesis critiques Thailand's implementation of international standards on LLP structure and capital charges, and it also explores the consequences of such implementation as they affect the performances and credit risk management of banks and thereby their NPLs.

Seen in this light, this thesis seeks to understand why Thailand has implemented international standards and encompassed them in its banking regulation on the basis that the stability of financial institutions could be enhanced, not least because they make economic contributions in terms of competition, questions of feasibility of the implementation while maintaining certain strengths of its national banking system as well as profits and preserve its political goals.

To answer these questions, the banking regulations under the Financial Institution Business Act 2008 are analysed here as legal transplants. Although legal transplantation is generally defined as the borrowing of law, legal transplants are not limited to that borrowing of law – they also include the importation of international standards. And yet, viewed through the lens of some recent critical scholarship on banks' performance, the central bank's surveys and evaluations on the one hand, and the predictions of the consequences of implementation on the other, in addition to the fact that IFRS 9 implementation is effective from 2020, i.e. for only seven months at the time of writing up this thesis, this approach may have some limitations.

[291] In this thesis, provisioning and LLP are used interchangeably. The reasoning is that some countries prefer provisioning as a risk management tool that can be used for expected losses/NPLs. Loan loss provision in certain countries is used in banks' accounting for losses. Nevertheless, their functions are similar in managing credit risk.

5.2.3.1 Capital Charges Framework and the Basel Standards

As mentioned, the NPL regulatory framework for the purposes of this research comprises capital charges and provisioning for use as a risk management tool. This section discusses that capital framework and the implementation of international standard (here, those of Basel). It should be noted that the Financial Institution Business Act 2008 establishes the BOT as the supervisor of commercial banks, having powers of enforcement and being empowered further to set minimum enforceable prudential standards for banks and banking groups.[292] Under the 2008 Act, the BOT is empowered to regulate the capital framework—minimum requirements, the quality and quality of capital, and the calculation of capital.[293]

Before examining the implementation of international standards, it is helpful to investigate why the Basel framework has been implemented in the Thai capital framework. The understanding in the reasons why Thailand adopts such standards to its national capital regulatory framework will help to analyse whether the international standards implementation is probable or achieved or not.

5.2.3.1.1 Causes of Implementation: External Pressure

Turning to the roots of the Basel Convention's establishment, the Basel Committee on Banking Supervision (BCBS) issued the Basel Conventions – Basel I and Basel II – to strengthen global banking regulation standards by requiring banks to hold more capital to prevent spillover during problems facing financial institutions worldwide.

[292] Prior to the Financial Institution Business Act 2008, financial institutions had been under the Commercial Banking Act 1962. The legislative proposal was intended to improve the standards of supervision of financial institutions and to regain the confidence of the public and depositors in the Thai financial institution system, since Thailand was facing severe economic crisis.

[293] Article 29 of the Financial Institution Business Act 2008 states that financial institutions shall maintain capital funds in accordance with the regulation prescribed in the notification of the BOT. The BOT is empowered to prescribe classes and types of capital fund as well as rules for the calculation of the capital fund of financial institutions.

Subsequently, the BCBS introduced Basel III[294] in 2010, to create a new capital framework requiring financial institutions to hold more quality capital to absorb losses in boom-and-bust times, in order to strengthen the banking system and as a response to the shortcomings that the 2007-2008 GFC brought to light.

It is interesting to note that the Thai financial system was scarcely affected by the GFC.[295] Nevertheless, although Basel III is the BCBS's response to the GFC, Thailand has implemented Basel III within its national prudential framework[296] by issuing banking notifications that are subordinate legislation of FIBA and considered to be enforceable law. If Thailand did not suffer much impact from the most recent financial crisis, which was the springboard for Basel III, and since international standards have no legal enforcement, the interesting question arises as to why the Thai government was so keen to implement the Basel framework. The answer to this question lies in considering two factors: external pressures, and internal policies.

There are many factors that lead to or trigger the implementation of international standards within a country. Generally, implementation comes about as a result of prestige rather than imposition. It is voluntary, the volition coming out of the recipient state's appreciation of international standards. Unlike national law and /international law, international standards usually carry no legal enforceability. Since the Basel Convention is an example of international standards or so-called 'soft law', it is not

[294] The key principle of the capital requirements is the Capital Adequacy Ratio (CAR Ratio) or 'BIS Ratio' calculating from the capital divided with risk weight assets of commercial banks. However, each asset differentiates in risk weigh ratio. For example, cash has zero risk, therefore, no capital is required, while credit lending contains risks according to the level of credibility of each debtor. The BCBS stipulates the BIS Ratio at 8 %. Thailand is at 8.5 % which means that every risk weight asset of commercial banks at 100 baht, for example, the lender borrows 100 baht, banks will need capital requirements not lower than 8.50 baht for each 100 baht.

[295] Bank of Thailand Notification No.12/2555 Re: Regulations on Supervision of Capital for Commercial Banks.

[296] BCBS issued Basel I in 1988 and amended the Basel accords to the Basel II in 2004. Moreover, in 2010 the BCBS revised its principles and amended the Basel standards called the Basel III.

binding to any nation to adopt the Basel standards in its national legal framework. That the Basel standards have no legally binding power[297] and also that Thailand was barely impacted by the GFC 2007-2008, it is interesting to examine whether there are any other causes, pressures, and evidence of choices and reasoning by the Thai executive, besides the need to promote financial stability.

There can be another type of implementation that occurs because a state has entered into an agreement with international organisations and made a commitment to those organisations. This is illustrated when developing countries undertaking a major loan agreement come under pressure to fulfil international standards laid down by the IMF or the World Bank, which an emerging nation will do in exchange for financial support.[298] The implementation of the Basel standards in Thailand's banking regulation may also be included in this category.

The IMF's financial assistance, the IMF, and the Basel implementation

The IMF, together with the World Bank and the FSB, have played a vital role in the international surveillance programme and in financial assistance to promote the implementation of the Basel frameworks. Basel is one of the international financial architectures, the creation of standards related to banking as the regulatory tasks of the trans-governmental network. Despite its lack of formal legal powers, Basel has been effective in setting forth principles and promulgating standards that have been widely accepted and implemented by bank regulators around the world, including regulators of countries that are not in fact members of Basel.[299] International legal frameworks require cooperation among international bodies ranging from international

[297] Under the Basel Committee's Charter, only internationally active banks should fully implement Basel standards. However, Members of the Basel Committee on Banking Supervision (BCBS) may decide to set their capital charges above the minimum requirements of the Basel Standards.

[298] Graziadei (n 51) 459.

[299] Eric Pan, 'Challenge of International Cooperation and Institutional Design in Financial Supervision: Beyond Transgovernmental Networks' (2010) 11 Chicago Journal of International Law 256.

organisations (the IMF and the World Bank), transgovernmental networks (Basel, the FSB, and IAIS), and state-to-state contact groups (G7 and G20).[300]

This is important because there are the overlapping powers of the Basel Committee, the IMF, the World Bank, the FSB, and G20 to keep in mind. It can be seen that there is a connection between the IMF and the BCBC.

Many low-income countries dependent on aid have seen much of their policy space eroded by conditionalities imposed by donors, the IMF and the World Bank.[301] Aurelio Gurrea-Martínez and Nydia Remolina argue that the implementation of Basel recommendations involves pressures from certain countries in the Basel Committee, its choices to counter powers in order to prevent conflicts and in exchange for obtaining financial assistance from the IMF.[302] In particular, Gurrea-Martínez and Remolina[303] state that:

The expansion of the scope of Basel-based capital requirements, especially to emerging markets and non-internationally active banks, can be explained by two primary reasons. First, international surveillance programs and financial assistance provided by international organizations such as the International Monetary Fund (IMF) and the World Bank forced many countries to comply with Basel capital requirements in order to be able to receive financial aid. Second, market forces and reputational concerns also served as a powerful mechanism to embrace the adoption

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[300] ibid.

[301] Yilmaz Akyüz, 'Multilateral Disciplines and the Question of Policy Space' in Julio Faundez and Celine Tan (eds), *International Economic Law, Globalization and Developing Countries*, *Cheltenham* (Edward Elgar 2010).

[302] Aurelio Gurrea-Martínez and Nydia Remolina, 'The Dark Side of Implementing Basel Capital Requirements: Theory, Evidence, and Policy' (2019) 22 Journal of International Economic Law, 131; Chris Brummer, Soft Law and the Global Financial System: Rule Making in the 21st Century (Cambridge University Press 2015), 94.

[303] Aurelio Gurrea-Martínez and Nydia Remolina, 'The Dark Side of Implementing Basel Capital Requirements: Theory, Evidence, and Policy' 22(1) Journal of International Economic Law 2019, 131.

of Basel capital requirements by countries and institutions beyond those initially included in the scope of the Basel standards. The IMF, the World Bank, and the Financial Stability Board—initially known as the Financial Stability Forum—have played integral roles in the adoption of the Basel standards.

Their point of view on the implementation of the Basel standards having an effect on loans granted by the IMF, particularly to international surveillance programs and financial assistance, show that emerging economies are having their hand forced by more powerful member states of the IMF, with the fear of not receiving credit. Consequently, many emerging economies adopt the Basel recommendations although they have no binding effect. It can therefore be concluded that developing countries' implementation of the Basel standards can be linked to the IMF's financial aid.

Moreover, Thailand has voluntarily participated in the Financial Sector Assessment Program[304] conducted by the IMF and the World Bank in order to be accepted at the international economic level.[305] The programme aims to determine compliance with regulatory requirements of the Basel Core Principles, and for a thorough understanding of the risk profile of banks and the banking system. These can be utilised as an irresistible pressure on national regulators of emerging economies to adopt these standards. In particular, the IMF's Financial Sector Assessment Program during November 2018[306] shows that the overall assessment result of the banking sector found

[304] Thailand has voluntarily entered into the Financial Sector Assessment Program (FSAP), which is a project based on cooperation between the International Monetary Fund (the IMF) and the World Bank. To gain worldwide acceptance, the BOT has entered into the assessment for the banking supervision under the Basel Core Principles for Effective Banking Supervision. The FSAP report about Thailand by the IMF is called the Financial System Stability Assessment.

[305] BOT, 'Financial Sector Assessment Program (FSAP) B.E. 2561 – 2562' (2019). <https://www.bot.or.th/Thai/FinancialInstitutions/Policy/Documents/FSAP_2561.pdf> accessed 22 May 2020.

[306] Jose Tuya and Katia D'Hulster, 'Thailand: Financial Sector Assessment Program-Detailed Assessment of Observance-Basel Core Principles for Effective Banking Supervision' IMF Country Report No. 19/319 (October 2019).

that commercial banks in Thailand have a stable status and high capital and leverage, as well as supervisory regulation and efficient risk inspection. The BOT has a close relationship with commercial banks and supervisory agencies both domestically and internationally. Observing this trend leads to the conclusion that maintaining a good relationship with certain powerful countries while the IMF plays a pivotal role in emerging economies.

Considering now the IMF guidance for the effective implementation of international standards, the IMF established the BCP to assess compliance with and assessment of the Basel Framework. It stipulates that the followings should be considered:

- Implementing the standards needs to be accompanied by the development of supervisory capacity. The core element of effective banking supervision is sound supervisory judgement to enforce regulation and challenge banks' practices.

- Taking a conservative approach, adjusting international capital and liquidity standards to reflect key differences with financial systems in advanced economies. Adjustments should reflect international minimum thresholds and the actual risks of the local financial system.

- Drawing closely on international standards when framing national regulations, following them in spirit to ensure resilience, increasing international comparability, and minimising revisions as financial markets evolve and mature. Departures from international standards should be considered only when there are clear reasons and benefits.

It can be seen that the overall guidance does not take the characteristics of developing economies as its main consideration. Rather, the compliance to the Basel Core Principles (BCP) is the paramount priority in the guidance. In other words, the IMF has focused on the effectiveness of compliance with the BCP rather than the impacts of the implementation by developing economies. Consequently, the guidance emphasises factors that could boost compliance and the level of implementation. The

IMF does not provide the elements to consider in order to effectively implement the international standards for developing economies either collectively or individually.

In the context of Thailand, international organisations made some interesting assessments concerning the Basel implementation. The IMF[307], for example, in 2019 acknowledged that Thai banking law has complied well with the Basel Core Principles.

> '43. The BOT sets conservative capital adequacy requirements, the components of capital absorb losses and the capital requirements are in line with Basel III. The average CET1 ratio for D-SIBs sits around 15 percent and 16 percent for non-D-SIBs. Foreign bank branches are required to hold capital like domestic banks. Three banks can use internal models for credit risk, and two foreign bank branches have been accredited to use the market risk internal model approach. The BOT has a well-staffed specialized team that accredits and oversees modelling by banks. Even though the BOT has the power to set individual capital ratios and will require a 1 percent add-on for D-SIBs by 2020, it has not yet tailored capital ratios to the risk profile of individual banks. The BOT should build on its risk-based supervisory framework to develop a methodology that facilitates individual capital ratios, at least for its largest and most complex banks.'

This assessment shows the IMF's involvement in the Basel compliance of developing countries. Although there is no document that states that Thailand adopted the Basel standards in its regulatory framework to react to influences and to tackle pressures from certain group of countries, Thailand borrowed from the IMF and entered into the conditionalities set by the IMF.[308] This research suggests that Thailand may have implemented the Basel standards under pressure from the IMF to do so.

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[307] ibid.

[308] The IMF sets out specific terms and conditions to the requesting member country for its grant requests, stipulating particular economic policies. See Wong, Y, 'Sovereign Finance and the Poverty of Nations: Odious Debt in International Law (Edward Elgar 2012), chapter 2: IMF, IMF Lending, A Factsheet 3 October 2016 (2014). <http://www.imf.org/external/np/exr/facts/howlend.htm> accessed 22 May 2020.

5.2.3.1.2 Internal Policies: Evolving Rules and Procedures for Capital Requirements

The BOT has issued regulations concerning the capital requirements of commercial banks, stipulating capital charges and calculations as specified by the Basel Accord, albeit that international standards have no legal enforceability.

The Thai regulator decided to enact a series of regulations to implement the Basel standards, which had been established as a legal development process as a result of financial system reform.[309] The BOT views that the aims are to increase the financial stability of Thailand's financial institutions and to avoid regulations that could obstruct the development of the Thai economy. The BOT believes that Basel III could strengthen commercial banks in Thailand; thus, it was decided to implement these standards to apply to all commercial banks in Thailand.[310]

The BOT claims that the stability of financial institutions in Thailand can be defined as the capacity to compete. In addition to capital requirements and provisioning ratios being much higher than international standards, the implementation of international standards such as Basel II and III in the Thai banking system is one factor that assists commercial banks in Thailand to be competent for competition in banking business.[311] Ritchukorn[312] argues that the Basel III implementation not only increases the credibility of Thai financial institutions but also boosts the trust of foreign investors.

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[309] The BOT, 'The conceptual policies' The Bank of Thailand website (2008), 2. <https://www.bot.or.th/Thai/FinancialInstitutions/FIPolicy/Documents/InstitutionFramework.pdf> accessed 12 July 2020.

[310] Bank of Thailand Notification No. 12/2555 Re: Regulation on the Capital Requirements for Commercial Banks Regulations on Supervision of Capital for Commercial Banks <https://www.bot.or.th/Thai/FIPCS/Documents/FPG/2555/EngPDF/25550332.pdf> accessed 12 July 2020.

[311] Prasaim, 'From Basel II to Basel III: Development of the Financial Stability of Thai Financial System' April 2 5 5 7 , 8. <https://www.bot.or.th/Thai/Phrasiam/Documents/Phrasiam_2_2557/No.04.pdf> accessed 24 May 2020.

[312] ibid 9.

That is because international standards have worldwide acceptance. Commercial banks in Thailand are intermediaries in financial services for multiple business sectors. Ritchukorn views banks as key drivers of the Thai economy; thus, the robustness of Thai financial institutions is in a position to increase growth in the national economy. The reasons for adopting international standards reflect the government's objectives in the implementation of Basel III. At this time, this choice of policy on the banking regulation shows [313] that Thailand values financial stability in terms of competition and has gained the widespread trust of foreign investors in Thai financial institutions.

The essential internal reasons for the implementation are summarised as follows:

(1) The BOT is of the opinion that the increase of the quantity and quality of commercial banks' capital requirements will tend to boost the strength of commercial banks and lead to the stability of financial institutions.[314] What is more, this leads to better preparedness for any future financial crisis. The BOT means to ensure that financial institutions conduct their business appropriately and prudently, thereby contributing to the stability and resilience of the overall financial institutional system. The former capital supervision of financial institutions may not sufficiently address various types of risk from business operations. According to the Basel capital framework, financial institutions and their financial business groups must hold quality capital at a higher level to ensure that the capital can absorb any and all substantial losses that may incur. As a result, the system comprising financial institutions will be more robust, resilient and stable, while that system can deal with potential future financial crisis and can continue to be internationally accepted and competitive.

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[313] *See* the rationale of the Bank of Thailand Notification No. 12/2555 Re: Regulation on the Capital Requirements for Commercial Banks Regulations on Supervision of Capital for Commercial Banks.

[314] Bank of Thailand Notification No. FPG 12/2555 Re: Regulation on the Capital Requirements for Commercial Banks Regulations on Supervision of Capital for Commercial Banks <https://www.bot.or.th/Thai/FIPCS/Documents/FPG/2555/EngPDF/25550332.pdf> accessed 12 July 2020.

(2) The BOT believes that implementation of the Basel standards makes the Thai financial institutional system is internationally accepted and competitive.[315]

(3) Under Basel III, there is a measure on systematic risk — countercyclical buffer— that is essential to commercial banks since the commercial banks may be impacted by failures at systemically important banks.[316] The BOT also considers the systemic relationship between the financial institutional system and macroeconomic forces that are dynamic in economic cycles and may lead to economic fluctuation. Therefore, Thailand needs a tool to deal with this systemic risk. For these reasons too, then, the BOT implemented Basel III.

Analysis of banking notifications indicates that the regulator believes that high capital requirements could lead to greater robustness of financial institutions and thereby eventually increase financial stability. These reasons have been cited in the rationale of the legislation formed by a series of banking regulations that incorporate the Basel standards. However, although the BOT Notification (subordinate law in Thai banking legislation) involves contexts that are from different Pillars of the Basel standards, they share certain objectives. According to a number of studies, emerging economies implement the BCBS recommendations on capital requirements for similar reasons: to increase financial stability and economic competition.[317]

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[315] Bank of Thailand Notification No. FPG. 9/2561 Re: Regulations on Capital Supervision for Financial Business Groups.

[316] Countercyclical buffer requires commercial banks to hold capital consistent to the system-wide risk.

[317] *See* Salvatore Polizzi and Enzo Scannella, 'The Role of Capital and Liquidity in Bank Lending: Are Banks Safer?' (2020) 11 Global Policy 28, 36; Mohammad Bitar and the others, 'Basel Compliance and Financial Stability: Evidence from Islamic Banks' IMF Working Paper No. 17/161 (July 2017).

Evidence

If we look back to the first time of implementing the Basel Accords, one BOT Notification[318] states that the BOT, with the approval of the Minister of Finance, improved banks' capital structure to be in accordance with the Bank for International Settlements (BIS)' standards. This notification classified the capital charge into two categories – Tier 1 and Tier 2 – and set the minimum capital requirement at 7% of assets and liabilities. During that time, banking supervision regulators were combined across two agencies: the Ministry of Finance and the BOT, in accordance with the Commercial Bank Act. It was the Thai government's decision to implement Basel I as part of its national capital framework. It is interesting, however, that the subordinate legislation does not disclose the reasons behind this implementation of international standards.

Since 2008, each financial institution has been governed by the FIBA 2008, which supersedes the 1962 Commercial Banks Act. The Notification of the BOT[319] states the objectives underpinning why Thailand implemented Basel framework in its capital standards. Thailand decided to implement the series of international capital adequacy standards established by the BCBS— Basel I to Basel III framework, to promote stronger robustness of commercial banks. The development of the Basel framework is based on the improvement of rules in response to the problems that have occurred in the financial system. For example, Basel II is designed to improve risk management operation and Basel III to tackle systemic risk. The most material details are set out below.

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[318] Bank of Thailand Notification on Capital Requirements of commercial Banks. <https://www.bot.or.th/Thai/FIPCS/Documents/FPG/2535/ThaiPDF/25350375.htm> accessed 8 June 2020.

[319] Bank of Thailand Notification No. 50/2251 Re: Components of Capital of Branches of Foreign Commercial Banks and Bank of Thailand Notification No. 12/2555 Re: Regulations on Supervision of Capital for Commercial Banks.

Stated Aims of the Basel Implementation

(i) The Implementation of Basel II

The BOT Notification[320] of the 2008 Act states in the 'rationale' section by way of introduction to the legislation:

> 'Currently, it is essential to financial institutions to have adequate capital for unexpected loss. Financial institutions that set the capital requirements which sufficiently cover their risks could establish the confidence to their depositors and creditors that they have the capacity to comply with agreements and contracts. Consequently, it could increase the financial stability to the financial institution system. Therefore, the BOT requires that financial institutions shall maintain the capital charges in the ratios of their total assets and liabilities in accordance with the 1998 Basel Capital Accord (Basel I). The capital is to be used to protect against credit risk and market risk. Moreover, to improve the risk management operation according to Basel II (2004), the Bank of Thailand requires that all commercial banks should increase the capital to operational risk too.'

It can be seen from these subordinate pieces of legislation that key reasons for adopting international standards include standardising Thailand's capital framework by setting new standards for the components of banks' capital and increasing the capital ratio to ensure that it will sufficiently cover risks. In doing so, the statement shows an expectation of the regulator that the new standard could lead their financial institutions to be more stable since the risks will be covered by the capital. The question is whether maintaining the capital requirements to cover risk in accordance with the ratios set by the BCBS will be truly fitting for financial institutions in Thailand and whether that formula and ratio bring financial stability to the Thai financial institutions system. I agree with the rationale of increasing the qualities and quantities of the capital and also that banks should allocate adequate capital to cover unexpected losses. However, the

[320] Bank of Thailand Notification No. 50/2251 Re: Components of Capital of Branches of Foreign Commercial Banks <https://www.bot.or.th/Thai/FIPCS/Documents/FPG/2551/ThaiPDF/25510560.pdf> accessed 8 June 2020.

formula for the capital calculation and specific ratios should be further examined since banks are sophisticated in their operation and different in size and tradition.

(ii) The Implementation of Basel III

The BOT Notification[321] under the 2008 act also states in the 'rationale' section at the beginning of the legislation:

> The GFC and financial institutions' breakdown in many countries during 2007 – 2008 as well as the complexity of the business model of financial institutions overseas and growing linkage between financial sectors and trading sectors together point out and underline the necessity of reviewing the frameworks of financial system supervision. Part of those frameworks entails reviewing the regulations on capital requirement of financial institutions (see the Basel III framework) to raise both the quality and quantity of regulatory capital. This is to ensure robust and resilient financial institutions, protecting against losses that may arise both in periods both more ordinary and more stressful in their circumstances.

During the recent global financial crisis, the Thai financial system was hardly affected in marked contrast with the US financial system and that of other countries in the EU. However, the BOT has deemed that applying the Basel III framework to Thai commercial banks is consistent with their own objectives of financial institution supervision. That is, retaining high quality of capital will result in greater robustness, competitiveness, and international acceptance for Thai commercial banks, which in turn will lead to these financial institutions' greater stability.

Under the Basel III framework, there are also measures addressing systemic risk that may stem from systemically important banks and dynamic linkage between the financial system and the macro economy, which can result in procyclical amplification

[321] Bank of Thailand Notification No. 12/2555 Re: Regulations on Supervision of Capital for Commercial Banks.

of shocks. The BOT acknowledges the importance of implementing Basel III framework in Thailand. An impact assessment on the implementation of capital regulations in Thailand shows that such regulations would benefit the Thai financial system and economic sector in the long run.

The banking regulations on capital requirements show that Thailand implemented the Basel III framework in order to maintain a high quality of capital and be vigilant against another financial crisis. [322] The regulatory objectives for increasing international acceptance for Thai commercial banks and the financial stability are for an acceptance of Thai commercial banks at the international level, and the financial stability of the commercial banks. This shows that the priorities of the Thai government include global acceptance from investors, international organisations, and other countries. It is interesting to note that Thai regulators have claimed that Thailand was scarcely affected by the GFC. It can be seen that the main reasons in adopting the Basel standards are economic: to increase financial stability, economic growth, and improve related law. Yet has Thailand achieved these aims? If the new regulations have a trade-off vis-à-vis economic growth owing to the higher capital charges hampering financial inclusion and access to finance, why have these priorities been trumped by the need for international acceptance? The next section seeks answers by examining the consequences of Basel implementation.

By way of interim conclusion, after examining the legislation, policy documents, and meeting documents, it can be deduced from that documentary evidence that Thailand adopted the high capital requirements of the Basel Accords for two main reasons: (i) for the greater robustness of financial institutions by lowering risks from losses ensuring the financial stability; and (ii) to gain more international acceptance. That said, the IMF also plays a role in this implementation as mentioned in the earlier

[322] The version of Basel III that Thailand has implemented is the Basel III framework: A global regulatory framework for more resilient banks and banking systems (Revised version 2011), which was developed from Basel II: International Convergence of Capital Measurement and Capital Standards – A Revised Framework (Comprehensive version of 2006).

section.[323] Yet there again, the effectiveness in implementing international standards, similar to the borrowing of law, requires consideration of the probabilities in the implication, the readiness and the possibility in applying those rules to national law. In this context, the readiness of financial institutions and the unique characteristics of the financial system in Thailand start to become clear.

The following section presents an examination of the Basel standards' implementation in Thailand by considering whether it has been successful in transplanting these international standards, and whether Thailand has achieved its objectives by that implementation. A brief elaboration on the theory of legal transplantation has been provided as a basis for the analysis.

5.2.3.2 An Analysis of the Capital Standards Through the Legal Transplantation Theory

Adoption of the Basel II and III banking regulations, in compliance with international standards on reserve requirements, which is the borrowing or importation of international standards, is regarded as legal transplantation. The Theory of legal transplants is used here as a tool for analysis of the capital requirement framework in Thailand in accordance with the stated aims of the banking regulation in respect of the Basel implementation as it relates to Thai law. The BOT states that its main objectives in implementing the Basel standards are to enhance the financial stability of financial institutions and to raise the capacity and standing of Thailand's financial institutions in the global banking market. A compelling question then is how these borrowed standards have developed – in other words, whether the transplantation has been successful.[324] Depending on different circumstances, transplanted law may not only lead to success but could also have unintended and undesirable outcomes.

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[323] See more details in 2.1.1 External pressure of this Chapter.

[324] *See David* Nelken, 'The Meaning of Success in Transnational Legal Transfers' (2001) 19 Windsor YB Access Just, 349; John Allison, *A Continental Distinction in the Common Law: A Historical and Comparative Perspective on English Public law* (Clarendon Press 1996) 15; Roger Cotterrell, 'Is There a Logic of Legal Transplants?' 79; Mindy Chen-Wishart, 'Legal Transplant and Undue Influence: Lost in Translation or a Working Misunderstanding' (2013) 62 ICLQ 1, 27.

This section considers and analyses the success of a legal transplantation on capital requirements into the Thai regulatory framework in terms of whether the transplanted law is implemented according to the intentions of the regulator, and particularly the impact on banks' capacities.[325] Ultimately it leads to the question of whether the imported legislation is logically sound and provides sufficiently for effects on financial stability and on confidence in Thailand's banking system.

To answer these questions, the banking notifications under the FIBA 2008 are analysed here as legal transplants. Generally, legal transplantation is defined as borrowed law. Legal transplants are not limited to the borrowing of law, however: they include international standards, which are not law. Seen in this light, the implementation of international standards is regarded as legal transplants.

5.2.3.2.1 Success of Transplanted Law?

It is difficult to formulate a measure for success. Alan Watson's notion of successful legal transplants, for example, is unclear. Watson does not adequately explain when and how a legal transplant can be treated as 'successful'.[326] Yet from his propositions, we can reconstruct Watson's conception of a successful legal transplant and the determinants of its success or otherwise. For Watson, legal borrowing is successful if the law borrowed survives for a period of time. A key determinant of success is therefore the 'survival' or 'existence' of the transplanted law. However, this notion of survival is disapproved of by Friedman[327], who questions how we can determine the precise point when a legal rule survives or dies out. He is not convinced in any case that a legal rule can survive by itself. Friedman's argument has some merit at least in that there should be a more objective assessment of the success of a legal transplant than a focus on whether the adopted rules continue to exist. The survival of a law

[325] John Matson 'The Common law Abroad: English and Indigenous Laws in the British Commonwealth' (1993) 42 INT'L & COMP. L.Q. 753.

[326] *See* Jan Smits, 'On Successful Legal Transplants in a Future Ius Commune Europaeum' in Andrew Harding and Esin Örücü (eds), *Comparative Law in the 21st Century* (Kluwer Academic 2002) 140.

[327] Lawrence Friedman, 'Review of Society and Legal Change by Alan Watson' (1979) 6 BJLS 127, 128.

ultimately depends on the government bodies that hold the power to retain or abolish it.

In practice, the effect of legal transplants cannot – and at most times is not – seen as a success or failure. For that reason, the validity of findings is disputed, since the actual nature or extent of what is considered to be a success is dependent on the aim of the transplant, and each school of thought is of course subject to its own standards.

Although it is plainly controversial to define the success of transplantation,[328] academics nevertheless attempt to determine indicative factors contributing to success. Criteria indicating success may depend on the aims of the reception, which results in various subjective assessments. Ogus used transaction costs as a variable to predict the compatibility of legal transplants. It is suggested there that laws generating fewer transaction costs, or those which are facilitative or "homogenous" in nature, such as contract or corporate law, are more likely to be compatible. According to Dezelay and Garth's theory, transplants are made through individuals or groups who seek to import laws and norms through human capital for economic or political gain.[329] Through the transplantation process, expertise and knowledge of law are subsequently turned into enacted law, which may be borrowed for use with different motives and objectives. Therefore, the predicted gains by the importer can also be used as a measurement for success, and indeed one can conclude that transplant-specific measures of success are a feature of current legal transplants theory.

In this research and with regard to the credit risk, another question is whether the implementation of Basel has led to banks becoming more capitalised. – in essence, whether the minimum capital requirements (e.g., 8.5% of RWA) have made the banks

[328] David Nelken, 'The Meaning of Success in Transnational Legal Transfers' (2001) 19 Windsor YB Access Just 350, 362.

[329] Yves Dezalay and Bryant Garth, *The Internationalization of Palace Wars* (University of Chicago Press 2002) 246. See Ch 14 The Logic of Half-Failed Transplants.

safer and more competitive because they have more capital. In light of the foregoing methodological discussion, in this chapter I propose to regard this specific criterion – increased bank capitalisation – as the requisite measure of transplant success.

Effect of the reception: increasing financial stability?

The predicted gains from the regulator are in raising financial stability and earning higher profits from greater competition in the global banking market. As discussed in Section 2.1.2, the main concerns of the Thai government are the economic gains to be had from the new regulatory framework applied to capital requirements, which are (i) to prevent another financial crisis and (ii) to increase the capacity of financial institutions to compete in the banking market by raising capital to reach international standards. It is the BOT's perception of financial stability[330] that this higher capital will make banks safer insolvency. At the same time, binding to international standards does gain credibility in the minds of foreign investors. In this way, banks' profits will be increased and that naturally enhances all-round financial stability.

5.2.3.2.2 Banks' Behaviours

It has been the decision of the Thai regulators to address the problems of systemic risk by raising regulatory capital requirements. Consequently, commercial banks are required to hold more capital in defence against risky transactions. For example, loans with the potential to default, are graded according to a risk-weight assets schedule. The more the risk, the higher the capital a bank needs to place to act as a buffer. As a result, transaction costs are created. This research classifies banks' behaviours when responding to the raising of capital requirements in the categories described and defined below.

First, banks can impose fees on their customers, shifting the burden to borrowers by charging more for each transaction. Through this, banks lend money to businesses, but customers have to bear the costs of extra fees charged by the lending banks.

[330] The definition of the financial stability is controversial. *See* Andrea In this case, Thai regulatory defines it as financial institutions' capacity to compete in the banking business.

Consequently, the loan transaction is more expensive, and this reduces financial inclusion, which indirectly decreases access to finance. When it is impossible to gain credit from financial institutions, in emerging economies it is more likely that 'usurious' lending will fill the market gap. This creates local problems ranging from illegal loans, high interest rates, and even violent crimes. Consequently, bad debts increase since the credit from so-called 'loan sharks' does not in truth consider the potential of the borrower to repay the loan.[331]

Second, higher capital requirements increase shadow banking. When banks are bearing significantly heavier burdens, it is a choice that some banks make to avoid any disadvantages required by law. Third, when it is more costly to provide credit due to increased costs, banks may decide to reduce their lending activities as a means of reducing their risks and therefore their needs for higher capital requirements. This can worsen the problems of financial exclusion that already exist in Thailand. As a result, business and investors are unable to access the finance needful to continue and / or grow their business.

The new regulatory framework on capital requirements adopts the Basel standards. Accordingly, commercial banks have to raise their capital and apply BIS ratios to their capital charges. Under the Bank of Thailand's notifications, Thai banks must maintain a minimum common equity ratio of 4.5%, a Tier 1 ratio of 6%, and a total capital ratio of 8.5%.

[331] Wichyada Tanomchat and San Sampattavanija, 'Dependence of Informal Interest Rates and Level of Lenders' Influence in the Informal Loan Market in Thailand' (2018) 24 International Advances in Economic Research 47; Sarit Phosri and the others, 'Attitudes toward Informal Debt in Term of Personal Loans of Residents in Hat Yai, Songkhla Province' (2016) 33 Journal of Management Sciences 161-163.

5.2.3.2.3 Critique on the Reception of the Capital Charges

It can be said, looking from a regulator's perspective, that the Basel implementation has been successful in Thailand. Rachukorn[332] believes that the Basel implementation in Thailand is running smoothly because financial institutions in Thailand are robust – the capital requirements are above 14-15%, i.e. above the regulatory capital charge of 8.5 %, at the time of the implementation. He states that:

> After the financial crisis in, it is the fact that financial institutions in Thailand are well adapted themselves and the risk managements works efficiency. Thus, the adopting of the Basel III could run smoothly as planned. Partly, the BOT preparation for the adopting is well-prepared to ensure the readiness of financial institutions before applying the new regulatory framework on capital structure.

In the same vein, the OECD[333] view is as follows:

> Most of the countries are well on their way to conforming to the stronger prudential norms specified by Basel III (OECD 2011a). Capital adequacy ratios are already above those specified by Basel III in many cases and other key indicators of financial soundness, such as non-performing loan ratio and loan-loss provisions, compare favourably with those in (most) other emerging markets and many developed economies. These measures, provided they are persistently and effectively enforced, should considerably reduce the risks capital inflows into the domestic banking system will undermine financial stability, as they did in the 1997 Asian crisis.

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[332] Pra Siam, 'From Basel II to Basel III: The Development of the Financial Stability of the Thai Financial System' April 2010, 5. <https://www.bot.or.th/Thai/Phrasiam/Documents/Phrasiam_2_2557/No.04.pdf> accessed 24 May 2020.

[333] OECD, 'Southeast Asian Economic Outlook 2013: With the Perspectives on China and India' (2013 OECD Publishing) 77.<https://www.asean.org/storage/images/2013/economic/iai/SAEO2013%20Complete%20light.pdf > assessed 12 May 2020.

However, reflecting on the state of academic debates about this topic in Thailand, certain underlying problems resulting from applying a higher capital then materialise. There has been criticism that the new standards are not designed for emerging economies.[334] The international financial architecture: the legal frameworks, usually originated from different levels of regulatory cooperation among states. From state-to-state contact groups to trans-governmental networks. In this case, the root of the Basel Framework was originally from the G10 attempts to response to disruptions in financial markets.

Many emerging economies have little influence over the formulation of the Basel recommendations. Nor are they adequately represented in forums that set standards for harmonisation of policies and practices. The G10 subsequently established the Basel Committee, or 'the BCBS'.[335] Their regulatory tasks are to set the rules and standards related to banking and which are referred to as the Basel standards. Although the Basel frameworks aim to strengthen regulation of prudential supervisory standards, the BCBC has overlooked undesirable results that may occur from raising capital requirements in emerging economies.[336] These less wealthy countries could experience ill effects from higher capital requirements while working to develop their economies. Alford[337] argues that implementing international standards on the minimum capital requirements entails flaws. Therefore, regulators should avoid a 'race to the bottom,' to attract additional foreign capital because it weakens their own financial regulatory system. Instead, regulators should harmonise banking regulations

[334] Adrian Blundell, Paul Atkinson and Caroline Roulet, *Globalisation and Finance at the Crossroads: The Financial Crisis, Regulatory Reform and the Future of Banking* (Palgrave 2018) 201-202.

[335] Basel Committee - Compendium of Documents <https://www.bis.org/publ/bcbsc001.htm> assessed 22 May 2020.

[336] See Ahmed Al-Darwish et al., 'Possible Unintended Consequences of Basel III and Solvency II', IMF Working Paper Series 11/187 (2011); Viral V. Acharya, 'The Dodd-Frank Act and Basel III: Intentions, Unintended Consequences, and Lessons for Emerging Markets', Asian Development Bank Institute, ADBI Working Paper 392 (2012).

[337] Duncan Alford, 'Basle Committee minimum standards: international regulatory response to the failure of BCCI' (1992) 26 George Washington Journal of International Law and Economics 241.

through new minimum standards. This shows that there are trade-offs in these higher capital requirements.

Although financial stability is promoted by lowering risks, such a scenario also sees reduced access to finance.[338] It is contended here that the implementation of Basel III will lead to a decrease of credit availability since the Basel accords require banks to hold more of their capital charges. Kim and Katchova[339] note that banks may lower their credit lending due to increased capital requirements. A decrease in credit availability from banks might pose a serious problem for, say, farmers who rely on bank credit, and especially during economic recessions. Their study examines whether the implementation of Basel III regulations has resulted in changes in commercial loan issuance by US banks, as predicted by lending channel theory. Kim and Katchova's findings show that the agricultural loan volume and their loan exposure to the agricultural sector showed signs of a possible credit crunch. Moreover, Chiaramonte [340]argues that the implementation of Basel III reduces aggregate bank credit in normal times and lower interbank lending.

There is a correlation between the capital charges and the credit growth. Limiting access to credit could have a substantially negative long-run economic impact. Chiaramonte[341] claims that decreasing access to credit can be a crucial constraint on innovation and growth in the small business that regards as the long-term economic cost of the Basel III reforms. The increase of capital charges decreases corporate lending while the lowering of the capital requirement increases credit growth. Yet the

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[338] Allen William and the others, 'Basel III: Is the Cure Worse than the Disease?' (2012) 25 International Review of Financial Analysis, 159-166.

[339] Kevin Kim and Ani Katchova, 'Impact of the Basel III bank regulation on US agricultural lending' (2019) *Agricultural Finance Review* <https://www.emerald.com/insight/content/doi/10.1108/AFR-11-2019-0124/full/pdf?title=impact-of-the-basel-iii-bank-regulation-on-us-agricultural-lending> accessed 20 May 2020.

[340] Laura Chiaramonte, *Bank Liquidity and the Global Financial Crisis: The Causes and Implications of Regulatory Reform* (Palgrave Macmillan 2018) 171-172.

[341] ibid.

Basel standards require banks to hold more capital, which could be an additional hindrance to the growth of emerging economies.

Since the new capital adequacy regime imposes higher capital ratios and so requires banks to raise more capital, this may create an upward pressure on the cost of capital, which banks then add to their lending rates thereby passing the cost onto customers through higher bank lending rates and interest.[342]

This is important because it can be seen that the Basel standards were prepared predominantly by a group of highly developed countries. It should be noted, therefore, that Thailand, in common with other emerging nations, has had only limited involvement in drafting these standards. As Charles Goodhart confirms, the BCBS does not take into account different factors and characteristics of emergent countries such as these nations' policy priorities, the size of their banks, and their market structures and systems.[343] Thus, it is argued that importing regulation may create quite a range of significant problems.

Implementing the Basel standards could create unforeseen and unwanted consequences for smaller banks since the requirements are not designed for the small-bank sector but rather for banks with significant risk exposure.[344] The implementation of international standards in banking regulation can have adverse effects on the banking industry. There are limitations that arise out of from governmental efforts to increase financial stability towards a more international standard level by increasing capital charges that the current practices of banks in respect of capital requirements not only fail to address the systemic risk of the international financial system, but also exacerbate its negative distributive outcomes to the banking sector.

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[342] Institute for International Finance (IIF), 'the economic impact IIF' (2010).

[343] Charles Goodhart, The relationship of the BCBS with banks and other banking regulators in *The Basel Committee on Banking Supervision: A History of the Early Years 1974–1997* (Cambridge University Press 2011) 413-464.

[344] Black, Paradoxes and Failures: 'New Governance' Techniques and the Financial Crisis (n 71) 1051.

The new regulations on capital requirements are not necessarily to be applied to smaller banks in developing countries because Basel III was designed to improve banks' ability to handle shocks from financial stress and to strengthen their transparency and disclosure, as the impacts of the 2008 GFC revealed were needed. For that reason, the formula in Pillar 3 of Basel III is not compatible and is unnecessary for emerging countries.

The question raised here is will banks in Thailand face difficulties in meeting these more demanding capital requirements? In Thailand, the increase of capital requirements creates a heavier burden for banks and eventually leads to lower levels of lending. Although the BOT studied those principles before their application in Thailand as a result of the implementation, small-sized banks now require higher capital levels, tend to lend less (compared to the period when the former capital structure applied), and earn less profit.[345] Consequently, it is more difficult for smaller banks in Thailand to compete with banks in other countries. It therefore cannot be said that the Thai Business Financial Institution Act and Banking Regulation on Capital Requirements have been completely successful, due to the inappropriate implementation of international prudential standards on NPLs within the Thai banking regulatory regime. Indeed, evidence suggests there have been negative effects on smaller Thai banks, with a consequent decrease in lending activity.

5.2.4 NPLs Regulatory Framework on LLP Viewed Through the Lens of Legal Transplantation

This section deals with the structure of LLP and has two aims. First, it examines the causes of the adoption of LLP in banking law to discover the regulator's perceptions of the new accounting standards and to understand the fundamentals behind

[345] Chitkasem Pornprapunt, 'The Impact of Regulatory Pressures on Capital and Portfolio Risk: An Empirical Study of Thai Commercial Banks'(2010) 24 Suddhiparitad Journal, 40-45; Somboon Jitpentom, 'Basel 1 to Basel 3: From the Bird Eye's View Perspective' (2011) 352 Journal of Banking and Finance, 237.

the decision to adopt IFRS 9 by Thailand. Second, it investigates more specifically the impacts in practice of the concept and rules of LLP on credit risk and the NPLs of banks.

5.2.4.1 Legal transplantation case study: from IFRS 9 to TSRF 9

This section analyses the implementation of international standards on LLP in Thailand, called the TSRF 9 (after IFRS9). In the recession after the subprime mortgage collapse that precipitated the GFC, the International Accounting Standards Board (IASB) provided a rich source of accounting measurements and the new requirements of decision-makers. With the aim of improving financial accounting, and of ensuring timely and adequate LLP within financial institutions, the IASB issued the International Financial Reporting Standards: IFRS 9. It was introduced to improve mechanisms of classification and measurement of financial instruments. Eighty-seven percent of jurisdictions were required to implement IFRS standards, covering most domestically accountable companies.[346]

In the literature, the adoption determinants of the IFRS have been explored in the context of developing countries.[347] The IFRS adoption determinants are economic growth, education level, the degree of external economic openness, cultural membership in a group of countries, and the existence of a capital market.[348] Although there are other variables such as culture, and the political system, economic

[346] International Financial Reporting Standards, 'Use of IFRS Standards around the world 2018' IFRS Foundation. <https://cdn.ifrs.org/-/media/feature/around-the-world/adoption/use-of-ifrs-around-the-world-overview-sept-2018.pdf> accessed 18 July 2020.

[347] See Daniel Zeghal and Karim Mhedhbi, 'An analysis of the factors affecting the adoption of international accounting standards by developing countries' (2006) 41 The International Journal of Accounting, 373-386.

[348] Daniel Zeghal and Karim Mhedhbi, 'An analysis of the factors affecting the adoption of international accounting standards by developing countries' (2006) 41 The International Journal of Accounting, 373–386; Fatma Zehria, Jamel Chouaibib, 'Adoption determinants of the International Accounting Standards IAS/IFRS by the developing countries' (2013) 18 Journal of Economics, Finance and Administrative Science, 56-62.

reasons are plainly the most important for emerging economies. The level of economic growth constitutes a major determinant for adopting international accounting standards.[349] Zeghal and Mhedhbi (2006) have examined the IAS/IFRS adoption determinants by developing countries; they conclude that those developing countries having a capital market, more advanced education levels and higher economic growth are evidently more inclined to adopt IFRS.[350] It can be seen that the key factors associated with the decision to adopt the IFRS by developing countries are overridingly economic. Therefore, commentators and analysts regard the new accounting standard as being one step closer to significant economic growth because they believe that complying with IFRS 9 is very likely to attract foreign investment and boost the abilities of banks to compete in banking markets.

In the case of Thailand, significant factors that influence the adoption of international standards, including IFRS 9, are political and economic: to boost foreign investment and foreign capital. With the improvement and advancement of financial accounting through the adoption of international standards in order to gain trusts from businesses and foreign investors this is more possible. It shows that the main determinants of the IFRS implementation are economic growth and market competition. In other words, Thailand's main objective with this voluntary adoption is the development of the country's economy.

Yet does the adoption of IFRS 9 enable improvement in the Thai economy by promoting investment? As mentioned earlier, the term 'legal transplantation' was first coined by Watson,[351] who in his theory of legal transplants defines legal transplantation as the 'Moving of a rule or system of law from one country to another

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[349] Fatma Zehri and Jamel Chouaibi, 'Adoption determinants of the International Accounting Standards IAS/IFRS by the developing countries' (2013) 18 Journal of Economics, Finance and Administrative Science, 57.

[350] Zeghal and Mhedhbi, (n 348) 373-386. *See* also Fatma Zehri and Jamel Chouaibi, 'Adoption determinants of the International Accounting Standards IAS/IFRS by the developing countries' (2013) 18 Journal of Economics, Finance and Administrative Science, 56-62.

[351] Alan Watson, *Legal Transplantation* (1974) 21.

or one people to another'. The subject of the transfer may include rules, entire legal systems or single legal principles, as well as whole structures and institutions. Therefore, legal transplantation includes transferring of international standards to another jurisdiction. In this respect, IFRS 9 implementation is regarded as legal transplantation. The next section examines the impact of receiving accounting standards of IFRS 9 into the Thai banking system.

5.2.4.2 Effects of the Reception Through the Legal Transplantation Theory

Following the issuing of IFRS 9, which was drafted by the IASB, the Federation of Accounting Professions began its work in drafting Thai Financial Reporting Standard 9: Financial Instruments (TSRF),[352] the authors followed the IFRS 9 model in their new measurements of impairments. TSRF 9 came into effect on 1 January 2020. These new standards of financial reporting are regarded as an upgrade on the financial instruments[353] of businesses in Thailand. That said, the new paradigm in accounting has effects on business entities that have financial instruments, such as lending and derivatives, and also on financial institutions. For this reason, the BOT issued a series of banking regulations to govern banks in applying the new accounting standards.

Before looking in more detail at the effect of IFRS 9 reception on Thailand's regime overseeing NPLs, it is worth setting the scene by reviewing the development of mainstream approaches to LLP there. The IFRS 9 exerted influence not only in drafting of the Thai Financial Reporting Standards[354] (TFRS) but also provided new standards applicable as part of the LLP regulatory framework. There are three main changes due to IFRS 9. First, IFRS 9 sets new standards for the classification and measurement of

[352] The Federation of Accounting Professions, 'Thai Financial Reporting Standard 9: Financial Instruments' (2019) <http://www.tfac.or.th/Article/Detail/78326> accessed 18 July 2020.

[353] The term 'financial instruments' includes any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another - for example, loan agreements, bonds, common stocks, and sale invoices.

[354] Thai Financial Reporting Standards (TFRS) are issued by the Federation of Accounting Professions. They were drafted by the Thai Accounting Standards-Setting Committee.

financial assets and liabilities. Second, there is now recognition of the impairment requirements of financial instruments from incurred losses to expected losses.

Owing to the transplanting of new international accounting standards, the major changes have been the classification and measurement of financial assets and the earlier recognition of impairment losses on receivables and loans. The new approach to LLP under IFRS 9 has had a direct impact on NPLs because this approach has changed the stages of debtors amending the duration of and criteria for impairments. In other words, NPLs are deemed impaired assets classified in the stage of loss according to the asset classification, while LLP ratios are based on asset classification. Thus, LLP is always linked to NPL ratios since LLP is the reserve allocated for impaired assets. This is important because the asset classification has tremendous effects on the regulatory aspect that relates to the recognition of NPLs because the recognition triggers certain regulatory duties.

Expected credit loss (ECL) has been introduced into the new Thai regulation standards on LLP for the recognition of losses in the timeliest manner. Contrary to this new standard, the former standard banks were required to have provisions for incurred losses—already occurred with evidence showing such losses, the new standard requires banks to allocate LLP to adequately cover the ECL [355] that may occur in future by considering information in the past, present, and future, and therefrom model the ECL. Financial institutions are required to modify their LLP to become a forward-looking model for possible future credit losses occurring from assets and liabilities such as loans and bonds. Estimation should apply reasonable and supportable information about past events, current conditions, and reasonable and supportable forecasts of future economic conditions.[356] This has changed the concept of accounting

[355] Expected credit losses (ECLs) are defined 'as the weighted average of credit losses with the respective risks of a default occurring as the weightings' [IFRS 9, Appendix A] (IFRS 9 chapter 5.5, IASB, 2014a).

[356] Pattanant Petchchedchoo and Orapin Duangploy, 'AFS versus FVTOCI: Twins or Siblings?' (2017) 22 *International Journal of Business*, 59. < https://www.craig.csufresno.edu/ijb/Volumes/Volume%2022/V221-4.pdf> accessed 18 July 2020.

for loan impairment from the backward-looking model to the forward-looking model. When the concepts of LLP have changed for expected credit loss, the new impairment measurements affect the terms of NPLs. It can be concluded, therefore, that the new accounting standard IFRS 9 is directly related to NPLs.

Turning now to classification and measurement of financial assets in Thailand, according to the former asset classification scheme, NPLs comprised four categories of loans:

- 'substandard',
- 'doubtful',
- 'doubtful-loss' and
- 'loss'.[357]

In contrast, IFRS 9 establishes a three-stage impairment model, based on whether there has been a significant increase in the credit risk of a financial asset since its initial recognition. These three-stages then determine the amount of impairment to be recognised as expected credit losses (ECLs) at each reporting date, as well as the amount of interest revenue to be recorded in future periods.[358] There are distinctive differences between the two measurements specifically on the level of impairment and on evidence of credit risk.

There are three groups of debtors classified by levels of credit risk. For example, 'stage 1 debtors' constitutes the group of debtors having a lower credit risk, one not significantly changed since initial recognition; stage 2 is a group whose credit risk has significantly increased; and stage 3 (referred to as NPLs) is the group showing clear evidence of loan impairment. Although this new classification required a lesser amount

[357]Bank of Thailand Notification No 5/2559 Re: Regulations on Asset Classification and Provisioning of Financial Institutions.

[358] Binder Dijker Otte, 'IFRS in Practice 2018: IFRS 9 Financial Instruments' 44. <https://www.bdo.se/BDO_SE/media/bdo/Dokument/IFRS/IFRS9-Financial-Instruments-2018.pdf> accessed 18 July 2020.

of interpretation in determining significant increases in credit risk and credit-impaired financial assets compared to the former classification, there are some concerns that the BOT guidance on this new standard is still unclear on how to interpret credit risk that is 'significantly increased', something that is discussed in the following section.

The transition from recognising 12-month expected credit losses (i.e., stage 1) to lifetime expected credit losses (i.e., stage 2) in IFRS 9 is based on the notion of a significant increase in credit risk over the remaining life of the instrument in comparison with the credit risk on initial recognition. The focus is on the changes in the risk of a default, not on the changes in the amount of ECLs.[359]

For example, for highly collateralised financial assets such as real estate backed loans, when a borrower is expected to be affected by the downturn in its local economy with a consequent increase in credit risk, that loan would move to stage 2, even though the actual loss suffered may be quite small because the lender can recover most of the amount due by selling the collateral.

The new standard presents 'lifetime expected credit losses', which are the present value of expected credit losses that arise if a borrower defaults on their obligation at any point throughout the term of a lender's financial asset. This requires an entity to consider all possible default events during the term of the financial asset in the analysis.

For stage 1, or the group that has less credit risk not significantly different from the first date of lending, LLP is required for forwarding one year (1-year EL). For stage 2, or groups whose credit risk has significantly increased, a lifetime EL is required. Similarly, stage 3 or non-performing loans, groups demonstrating a clear evidence of loan impairment. As such, the LLP for 'lifetime expected loss' is needed to be

[359] Payear Sayiamviboon and Virachai Arunrungsirirode, 'Concerns of IFRS 9 Implementation in Thailand' (2018) 41 *Journal of Accounting Profession* 67-69.

allocated to account for these NPLs or the stage 3 of the debtor. In fact, IFRS 9 sets a new definition of non-performing loans.

This new measurement is important because LLP ratios are dependent on the stage of the impairment or the asset classification. Under the new measurements adopting IFRS 9 standards, the accounting practices for banks and LLP are likely to be tightened. Viewed in this light, there are costs and problems associated with the adoption of IFRS, particularly in developing countries.

The next section examines key consequences of implementing the new standards in Thai banking business operations and how these new standards affect NPLs in Thailand.

5.2.4.2.1 Effect of IFRS on Bank Performance and Risks in the Thai Banking Sector

As mentioned above, IFRS9 contains a revised classification of and measurement requirement for financial assets. This section analyses the effects of IFRS adoption, an accounting phenomenon, on the costs of implementation and on bank performance in Thailand. It also examines the effect on developing countries of the decision to adopt IFRS. In the literature, scarce are those studies dealing with the IFRS adoption by the developing countries, they have still remained limited as compared to the studies pertaining to the developing countries.[360]

When considering the Thai regulator's goals in introducing the IFRS 9 regulation, two broad research questions arise. First, does adoption of IFRS contribute to the efficient and cost-effective functioning of the banking market and – consequently – competitiveness in the banking sector? Second, do the new rules create unintended and unwanted consequences?

[360] Zehri and Chouaibi (n 349) 18 *Journal of Economics, Finance and Administrative Science*, 56-62.

The new standard adopts the forward-looking model, or a new method of recognising credit loss. The new banking regulation[361]states that financial institutions shall retain provisioning at 8%. To the extent that IFRS 9 standard modifies impairment measurements and increases provisioning quality, credit risk should in theory and in practice decrease under IFRS. Consequently, banks would recognise their impaired assets or bad debts in a timelier manner. At first glance, this new method appears to bring faster recognition of bad assets, including NPLs. However, an immediate, further question arises whether this modification also has any unintended and unwelcome effects on the financial institution system.

In the context of Thailand, the BOT has conducted an impact survey of TSRF 9 implementation.[362] The findings show that when the new standards became effective on 1st January 2020, the financial institution system has adequate LLP to comply with TFRS 9; thus, this implementation has not had a significant effect on credit lending. Moreover, since the market state is highly competitive, financial institutions strive to keep their customers. To that end, higher interest rates would not become a problem. For that reason, the BOE views TSRF 9 implementation as unlikely to have a significant impact on banks' lending.

Although it refers to stresses how prepared the financial institution system is for TSRF 9, and how the banks should respond to increasing LLP, it covers the beginning period of the implementation - including - sufficient LLP, but it does not address the long-term impact of the implementation. The survey points out that Thailand's economic success hinges on international standards implementation. What is noteworthy is that the report acknowledges the importance of critical factors in Thailand and further suggests guidelines to comply with international standards. As a result, the 2019 survey placed emphasis on economic growth, underlining that international standards compliance is imperative for further economic growth - although it does not seek to dictate in any way to create general compliance with those standards.

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[361] Bank of Thailand notification no. 23/2561 Re: Asset Classification System and Provisioning.

[362] Nichanun Maolanon, 'Assessment Impact of TSRF 9' (2018) *The BOT Magazine* 18.

Points to consider here are possible effects on both the banking system (in terms of database readiness) and consumer behaviour (in terms of the reclassification criteria of customers' credit default and credit rating). These possible effects may well differ in Thailand, as opposed to western countries. This implies the need for careful consideration of possible effects after full implementation of IFRS 9.

Although the Thai regulator has implemented the new standards with objectives that the financial institution would acknowledge their LLP in a timely manner by recognising the changing stage of debtor,[363] there are concerns about implementing the new accounting standards.

Since IFRS 9 has changed the recognition of loss by using a forward-looking model under TSRF 9 to minimise the credit risk, this has required banks to set aside LLP for future losses, and so banks have to allocate more provision. Thus, the new model has a result in an acceleration of recognition of impairment losses. Consequently, directors of banks are required to use greater levels of judgement to estimate impairment losses. As mentioned earlier in this chapter, LLP ratios affect banks' profits.

Loan provision to gross loans (PROV) is statistically negatively related to return on equity (ROE) and return on assets (ROA). PROV is positively related to TBQ without significance. It means that the higher ratio of loan provision to gross loans decreases bank performance. These negative signs of the coefficients are in line with this research's expectations. A higher PROV indicates that banks have higher credit risk and poorer-quality assets, which results in lowered bank performance. The ratio of PROV is statistically negatively related to the natural logarithm of the Z-score (LnZ), which means that the increase in PROV indicates higher probability of default.[364] In addition, the empirical evidence reveals that higher bank profitability is associated

[363] Nitchanun Maolanon, 'The Readiness and Impact from complying with TFRS 9' the Bank of Thailand (2019).

[364] Pornsit Jiraporn and others, 'The Impact of Ownership Structure on Bank Performance and Risk: Evidence from ASEAN' (2019) 42 *Thammasat Business Journal* 1, 16.

with a lower ratio of loans to total assets. The empirical evidence strongly shows that the lower ratio of loan to provision is associated with higher bank performance and less risk-taking. It is, therefore, argued that the new method in recognising credit loss under the IFRS 9 implementation has an impact on the volatility of earnings and financial status of financial institutions, as well as the financial system as a whole in Thailand.[365]

Moreover, another potential impact in implementing TSRF 9 is that the NPLs level will increase since the new standard has categorised NPLs into different classifications.[366] Yet the new regulation heightened tensions on expected losses, changing the financial asset classification into three stages. NPLs are regarded as stage 3 from the Special Mention ratio in the former scheme. The scope in the stage of debtors is wider than the former. As a result, NPLs ratios could increase.

The implementation of IFRS 9 has had a great impact on NPLs as it provides a new definition of NPLs and changes the concept of the NPL approach on LLP to a forward-looking model. The interpretation of NPLs is subject to the specific national jurisprudence. As Bloat suggests, it is necessary to bring the question of defining NPLs to the table, despite the difficulty in reaching an agreement at the international level to prevent regulatory arbitrage. Since NPL regimes are pre-emptive, they should always be under the close scrutiny of each state to ascertain whether they are being used as a means to achieve other objectives. Therefore, delineating scope and stages of debtor towards expected loss under TSRF 9 is one step towards reaching success in the harmonisation of a definition of NPLs. In conclusion, the new definition of NPLs seems to be creditable as a success of the Thai regulatory body to comply with international standards. However, training and systems change should be at hand.

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[365] Payear Sangiumvibool and Teerachai Arunruangsirilert, 'Concerns of IFRS 9 Implementation in Thailand' 41 (2018) *Journal of Accounting Profession* 63.

[366] Nitchanun Maolanon, 'Readiness and Impact of IFRS 9' BOT, 1-2 <https://www.bot.or.th/Thai/ResearchAndPublications/articles/Pages/Article_06Nov2019.aspx> accessed 28 January 2021.

5.2.4.2.2 Expected Loss Model, and the Provisioning under the TFRS 9

The new requirements under TSRF 9 may prompt banks and financial institutions to reassess their regulatory requirements for LLP. Unlike the adoption of these standards by large industrialised countries, such as the United States, Canada, and members of the European Union, it can be seen that the effect of IFRS adoption through national legislation in Thailand has had a profound impact on small-sized banks and local banks.

There are some concerns raised in practice that the BOT guidance on this new standard is still unclear on how to interpret credit risk that is 'significantly increased'.[367] This requires an entity to consider all possible default events during the term of the financial asset in the analysis; however, some discretion should be left to leave to bank managers to make decisions on the amount of risk and whether it has significantly increased before clear evidence of impairment. As aforementioned, this impairment asset classification is related to recognition of losses, which may have an immense impact on aspects of banking regulation on LLP, and particularly on its efficiency in dealing with NPLs. A hindrance of NPL management is that it generally lacks timely recognition of losses. That is, it is important to have international cooperation to have a universal definition of NPLs. Although the new standard presents 'lifetime expected credit losses' i.e., the present value of expected credit losses that arise if a borrower defaults on their obligation at any point throughout the term of a lender's financial asset, similar to stages 2 and 3 – the accurate amount of the NPL ratio is still critical to overall bank supervision and regulation.

In terms of the readiness of banks and their personnel to apply the new requirements, Sangiumvibool and Arunruangsirilert conducted interviews with seven Thai bank senior officers at the upper level of management between October and November 2017. Key questions include 'What are the expected benefits or other effects of TFRS 9 on your business?', 'What are the expected overall consequences of TFRS 9 implementation? 'How will your business and other firms in Thailand prepare for this

[367] Sangiumvibool and Arunruangsirilert (n 365) 63.

standard?' and 'What are your recommendations for TFRS 9 implementation, and do you need any support for preparing of its implementation?' They found that many stakeholders who are (i) bank practitioners (banks, auditors, and consultants), (ii) bank customers (SMEs) and investors, and (iii) rule makers will be affected after the implementation of TSRF 9.

Regarding the complexity of the new measurements, there are uncertainties over how to examine information to predict ECLs and how to apply new asset classification when changing the stage of debtors. Sangiumvibool and Arunruangsirilert take the view that the IFRS's new requirements on impairments and revised classification and measurement requirements of financial assets have effects on banking practices and business operations in Thailand. They argue that because of the implementation of these new standards, the provision of accounts receivable will be increased. The higher the provisions of banks are, the lower the amount of loans and capital are approved to customers. There will be less credit approval since more risks will be calculated and banks cannot bear higher costs of allocating the higher provision. In other words, the new requirements would lower banks' lending. It will have a direct impact on how banks approve their loans. As a result, SMEs and other customers cannot have access to finance, which can in turn lead to negative effects on the overall economic condition. Moreover, since the impairment recognition requirements have changed, there will be an increase in credit risk, and as a result banks' provision will be increased. This self-evidently lowers a bank's profit. Consequently, the IFRS 9 implementation will have an unhelpful impact on the volatility of banks' profit and loss statements.

Moreover, they claim that one unintended and undesirable consequence is that customers will turn to underground loan providers since they cannot borrow from banks. This implies that there is significant association between IFRS 9 adoption and earnings management in larger banks than in smaller ones.

In reality, however, the circumstances are uncertain. For example, the global economy is currently slowing down due to the coronavirus pandemic, and during significant downturns it is impossible for banks to maintain the LLP to reach the regulatory ratios

since the banking markets are obstructed by the shortage of business activities and losses, while at the same time NPLs are increasing. Therefore, it can be concluded that IFRS 9 does have a significant impact on banks' performance and on credit risk. Nevertheless, since new standards for impaired assets recognition or TSRF 9 became effective on 1st January 2020, or for six months while this research was being written, there is naturally only a limited circulation of documents regarding that short period post-implementation.

5.3 Conclusion

This chapter has explored challenges to approaches to NPLs in the Thai legal context and examined whether the current LLP and capital requirements of banks subjected to international standards could mitigate risks and whereby thereby? to manage the level of NPLs by adopting a legal functionalist approach augmented with legal transplantation This examination has led to the conclusion that the implementation of international standards can in turn lead to the unintended, undesirable outcomes of financial instability and impedance of economic functions of the financial system in funding by creating credit-growth ceilings. Moreover, applying international standards in different national settings can cause distortion in another macro-prudential regulation, ultimately also causing negative effects.

In case of the implementation of international accounting standards and the Basel Accords, banking regulation imposes increased LLP and capital adequacy to protect banks from losses. In this case, banking regulation intervenes in banks' decision-making about their own practices in respect of LLP; thus, this could harm efficiency in making profits by setting excessive LLP levels, this in turn being detrimental to bank stability. As has been seen, the ultimate aim of both approaches is to mitigate risk in the financial system. However, regulators engage in mitigating risk but ignore the reproduction of the credit system and the economic functions of the financial system in funding. Although the banking regulation objective is to reduce risks in the financial system, it is arguable that such regulation does not serve its purpose and is therefore ineffective.

Given that banking regulation of approaches to NPLs creates unintended and not always serendipitous consequences, it is inevitable that further development of banking supervision and regulation will take place. It is also noted that reflexive law allows banks to act independently of international standards and thereby lower banks' provisioning and capital charges. Since the present LLP mechanisms under the FIBA entail such unforeseen consequences as it has negative impacts on the credit system, this research proposes that banks' own practice on LLP should be a source of norms.

As stated above, this chapter has also applied legal transplantation theory in its examination. The preliminary findings from the application of the legal transplant theory to international standards on LLP and capital requirements in Thai law challenge the initial view that the implementation of international standards to a country's banking regulation is, in fact, a legal transplantation. In analysis of the success of banking regulation vis-à-vis approaches to NPLs, what is considered to be a success is dependent on the aim of the transplant, with each school of thought being subject to its own standards. The criteria for success may depend on the aims of the transplantation.

We have seen that the reforms of law in Thailand after the financial crisis were directed by successive governments to reform the traditional Thai legal system influenced by external forces for the robustness of financial institutions by lowering risks from losses to ensure financial stability and to gain international acceptance. Nevertheless, the IMF also plays a role in this implementation. Considering the advent of new capital requirements regulations, the BCBS's current solution to unexpected losses, and the contribution of the 'problem solving' method to address systemic risk, the Thai regulator decided to implement the Basel standards with the aims of ensuring financial stability and boosting the capacity of financial institutions to compete. However, the effectiveness in implementing international standards, similar to the borrowing of law, requires consideration of the probabilities of the implications, and the readiness to apply those rules to national law. Accordingly, this underlines the importance of adaptation and of unintended, unwelcome effects.

Paradoxically, however, I suggest that it continues to be necessary to consider whether the same solution to one problem would fit every country. The reason for this is that such an approach will ultimately reveal some of the disadvantages created by imposing international standards on capital over the risk-based capital requirements solution provided in banking law that is especially relevant to the use of credit risk measurement standards as an influential force increasing financial instability. In the analysis of what elements might affect the transplant of the Basel capital standards into Thai law via the FIBA, this paradox leads us to reflect on whether enough consideration has been given to the impact of the new capital requirements on bank lending and volume of lending, introduced under the Basel III framework rates, especially given the process of adopting a capital requirements solution of importing a mechanism that was designed originally to solve problems occurring from larger-sized banks' over-lending.

Ultimately it leads us to the question of whether the imported legislation provides sufficiently for the effects on smaller-sized banks of raising banks' marginal costs of funding, leading to higher lending rates and a reduction in the volume of loans. It is, therefore, suggested that this one rule does not fit all, and that this has to be reconsidered when applying international standards to banking regulations in emerging countries, including Thailand.

While this chapter has mainly examined the approach to NPLs in the form of banking regulation of the FIBA, the next chapter discusses secured transactions law as a potential solution for dealing with the threat raised by high levels of NPLs.

Chapter 6: An Alternative Approach to NPLs: Security Challenges in Thailand on Floating Charges

6.1 Introduction

Following the establishment of new rules and principles in international financial law through international organisations including the BCBS and the IASB, Thai regulators decided to adopt these international standards. The implementation of those has required Thailand to raise its LLP and capital requirements, but it has had unforeseen and undesirable effects on its financial market, as elaborated in the preceding chapter. This research is well aware of these concerns and now proposes the development of secured transactions law as the solution.

Although this research focuses on LLP and capital requirement mechanisms, the proposal of this thesis derives from the hypothesis that the correlation between secured transactions law and prudential regulation can bridge the gap between credit promotion and financial stability. Partly this is because, as Castellano and Dubovec claim, secured transactions law allows banks to lower their regulatory capital charges and LLP.[368] This chapter underlines the rationales and benefits of secured transactions law in respect of the reduction of the serious problems that can be caused by NPLs. This thesis thus proposes the solution to tackle NPLs through the development of secured transactions law, specifically in the matter of floating charges and in its procedures on enforcement, to coordinate prudential regulation and floating charges in reducing NPLs.

Since this thesis aims to interrogate whether floating charges will decrease the level of NPLs in banks' lending activities and thereby foster greater financial stability, this chapter will examine floating charges under Thai law through the legal transplantation

[368] Giuliano Castellano and Marek Dubovec, *'Coordination Secured Transactions Law and Capital Requirements'*, Modernizing International Trade Law to Support Innovation and Sustainable Development, UNCITRAL Congress, 50th Anniversary (4-6 July 2017, Vienna) Economic & Social Research Council (ESRC).

theory. The underlying reason for that is that the floating charges concept created under the Thai legal system is borrowed from foreign law.

Although the legislative process that culminated in the Business Security Act took more than ten years, this chapter presents the idea of floating charges as a solution to tackling NPLs. The Business Security Bill was withdrawn twice from the Thai Parliament. Partly because of disagreements over policies among departments over the types of property that could be regarded as security under the Business Security Act, including issues on the focal point for filling, administrative receivers' qualifications, and penalties for their misconduct.[369]

6.2 Bridging the Gap Between Secured Transactions Law and Banking Regulation of NPLs

In the previous chapter, the discussion of Thailand's NPL regime elaborated on the efficiency of the application of LLP and capital requirements, it is clear that the implementation of international standards has had unintended, less than happy consequences on the credit system in Thailand's financial industry.[370]

This research does not oppose the application of those banking mechanisms, but instead questions the ratios that have been adopted from the Basel Convention and IFRS 9. In support of regulating LLP and capital requirements based on market participants' self-regulatory regimes, the development of the secured transactions law could mitigate credit risk in Thailand's banking sector without raising the provisioning or capital requirements ratios. This is because the value of security can be used to lower LLP and capital requirements.

[369] The discussion on the form of the business security contract and the filing system of the property between the Ministry of Justice and the Ministry of Finance.

[370] Thailand has to increase its regulatory LLP and the capital charges as a result of the adoption of the international standards.

If domestic law allows the book value of security to be deducted from LLP and capital charges, it is feasible that NPL regimes can be applied to mitigate risks while at the same time balancing each bank's capital and LLP under certain circumstances, particularly when it comes to compatibility and readiness of reception of imported standards.

Since Thailand has amended its banking regulation[371] to stipulate that floating charges are types of collateral, the values of which can be deducted from outstanding balances of loans before provisioning, floating charges are examined.[372] This examination looks at the roles of secured transactions law in risk mitigation and how secured transactions law interacts with prudential regulation on provisioning, capital requirements, and NPLs themselves.

6.2.1 The Roles of Secured Transactions Law: Risk Mitigation

Recent trends indicate that the development of the legal framework on the enforcement of collateral may accelerate reduction of NPLs in the banking sector, as well as ensuring sufficient expected and unexpected losses of commercial banks for future NPLs through LLP and capital charges.[373]

The objective of a secured transaction is not only to provide access to credit, but also to provide the tools for credit risk reduction for secured creditors.[374] In light of reduced

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[371] Bank of Thailand Notification No. 5/2559 Re: Regulations on Asset Classification and Provisioning of Financial Institutions.

[372] ibid.

[373] ECBC News, 'European Commission-Reducing Risk in the Banking Union: Commission Presents Measures to Accelerate the Reduction of Non-performing Loans in the Banking Sector', 14 March 2018. <https://hypo.org/ecbc/publication-news/european-commission-reducing-risk-banking-union-commission-presents-measures-accelerate-reduction-non-performing-loans-banking-sector/> accessed 22 October 2020.

[374] Roy Goode, *Goode on commercial law*, (5th edn Penguin Books 2006); Roy Goode and Louise Gullifer, '*Goode and Gullifer on Legal Problems of Credit and Security*' (6th edn Sweet & Maxwell, 2017).

NPLs, secured transactions law protects creditors / lending banks through provision of alternative methods of debt satisfaction.[375] Security rights can decrease the risks related to banks' loan agreements. Efficient legal enforcement for the recovery of collateral will facilitate matters for secured creditors, including banks to receive the repayment by collateral when the borrower defaults. In this way, providing more efficient value recovery from secured loans would tend to reduce the level of NPLs.

Regarding the function of collateral that backs NPLs, it is interesting to note that the reform of debt recovery frameworks has been placed in the action plan for NPLs.[376] The European Commission has used the notion of collateral and debt recovery to manage risks caused by higher levels of NPLs. Furthermore, an extrajudicial collateral enforcement procedure has been introduced. The European Commission has stated that:[377]

> the proposal will help banks to better manage NPLs by increasing the efficiency of debt recovery procedures through the availability of a distinct common accelerated extrajudicial collateral enforcement procedure (AECE). In the majority of cases, banks address their NPLs themselves by recovering value through work-out. A large share of the loans that become NPLs are loans secured by collateral. While banks can enforce collateral under national insolvency and debt recovery frameworks, the process can often be slow and unpredictable. In

[375] *See* Michael Bridge and others, *The Law of Personal Property* (2nd edn, Sweet & Maxwell 2018); Joanna Benjamin, *Interests in Securities A Proprietary Law Analysis of the International Securities Markets* (Oxford University Press 2000) and Hugh Beale and others, *The Law of Personal Property* (Oxford University Press 2007).

[376] Financial Stability, Financial Services and Capital Markets Union, 'Commission measures to address the risks related to NPLs14 March 2018. <https://ec.europa.eu/info/publications/180314-proposal-non-performing-loans_en> accessed 22 October 2020.

[377] European Commission, 'Communication from the Commission to the European Parliament, The European Council and the European Central Bank' Fourth Progress Report on the reduction of non-performing loans and further risk reduction in the Banking Union (12 June 2019). <https://ec.europa.eu/finance/docs/policy/190612-non-performing-loans-communication_en.pdf> accessed 22 October 2020.

> the meantime, NPLs remain on banks' balance sheets, keeping the bank exposed to prolonged uncertainty and tying up its resources. This prevents the bank from focusing on new lending to viable customers. Therefore, the proposal makes available more efficient methods to banks and other authorized entities to issue secured loans to recover their money from secured loans to business borrowers, out of court. This more efficient extrajudicial procedure would be accessible when agreed upon in advance by both lender and borrower, in the loan agreement.

This stresses the importance of the EU Commission's obligation to manage banks' NPLs. The Commission action plan for NPLs emphasises that it is critical to reform enforcement for the secured debts under secured transactions law. It establishes effective out-of-court procedures for the enforcement of terms and conditions in respect of collateral and which are offered by companies and entrepreneurs as security when applying for loans. This shows that the economic aspect of NPLs is highlighted in the mission of the EU Commission in respect of debt recovery.

In addition, the European Union has focused on a legal framework for collateral enforcement and has made treatment of NPLs a priority during the post-GFC economic recession.[378] The ECB[379] states that:

> National as well as European and international regulatory, legal, and judicial frameworks influence the banks' NPL strategy and their ability to reduce NPLs. For example, legal or judicial impediments to collateral enforcement influence a bank's ability to commence legal proceedings against borrowers or to receive assets in payment of debt and will also affect collateral execution costs in loan loss provisioning estimations. Therefore, banks should have a good understanding of the particularities of legal proceedings linked to the NPL

[378] The studies show that NPLs are related to the economic growth. It tends to be faster if the figure of NPLs is low compared to other countries with a higher NPLs ratio, which their economy has a slower economic growth.

[379] The ECB, 'Guidance to banks on non-performing loans' (March 2017) 11. <https://www.bankingsupervision.europa.eu/ecb/pub/pdf/guidance_on_npl.en.pdf> accessed 21 October 2020.

workout for different classes of assets and also in the different jurisdictions in which they operate where high levels of NPLs are present.

This ECB guidance stresses how much impact the legal framework will have upon banks' management of their NPLs. It is critical to have a regulatory system that facilitates banks' ability to enforce terms for collateral in their loan agreements. Moreover, banks should have knowledge of the legal procedures regarding law enforcement of collateral terms and its relationship with classes of assets for LLP estimations. This is because it boosts banks' capacity to lower NPLs. When banks are fully aware of the concepts for enforcement procedures in respect of collateral, including LLP estimations, they will have the correct data to set a strategy for tackling NPLs in their business models. In addition, this statement shows a correlation between collateral and LLP estimation, in which collateral can be used to reduce LLP ratios in bank lending.

6.2.2 The Nexus Between Secured Transactions Law and Banking Regulation: How do floating charges interact with NPLs?

Correlation exists between floating charges and LLP / capital requirements.[380] Both legal concepts provide protection against credit-risk financial instability. On the one hand, the underlying function of secured transactions law is to ensure that the lender will receive repayment by the alternative means of secured assets and expanded credit access. That in turn decreases credit risk. On the other, LLP and capital requirements/ decrease credit risk in light of micro- and macro-prudential regulation by requiring banks to maintain capital charges according to a given lending ratio.[381]

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[380] Giuliano Castellano and Marek Dubovec, '*Coordinating Secured Transactions Law and Capital Requirements*' UNCITRAL CONGRESS, Modernizing International Trade Law to Support Innovation and Sustainable Development, 50th Anniversary (4-6 July 2017, Vienna).

[381] Giuliano Castellano and Marek Dubover, *'Global Regulation Standards and Secured Transactions Law Reforms: At the Crossroad Between Access to Credit and Financial Stability'* (2018) 41 Fordham International Law Journal, 533-555.

In pursuing different objectives, secured transactions law and prudential regulation are each related to risk reduction in credit agreements. In fact, secured transactions law provides alternative ways of repayment to creditors, thereby reducing credit risk. Ultimately, security rights can decrease the risks related to banks' loan agreements.

In the case of floating charges acting as one form of security rights, lending banks could enforce non-payment from charges, and as a result, bad debts are decreased. Since the value of floating charges can be used to lower LLP and capital requirements, this illustrates how floating charges interact with provisioning and capital requirements.

It has been claimed that reducing capital charges increases capital income.[382] As mentioned above, secured transactions decrease banks' capital charges. The value of floating charges could thus lower banks' capital requirements. The reason for this is that banks can enforce from floating charges, and banks can deduct provision from those floating charges. When banks provision less, they tend to generate more profits. Because banks can lower provision, they can utilise those saved amounts in investment and thereby offer more credit to their business customers, with an expected return in the form of fees and interest.

Domestic law may stipulate that the value of a floating charge may be used to deduct from regulatory LLP and capital requirements.[383] In this way, reform of secured transactions law can be regarded as treatment of NPLs and as a mechanism to increase financial stability through LLP and capital requirements. In particular, the macroeconomic effect of freeing up credit ensures that loan capital is more freely available to borrowers, not just when they wish to expand, but also when they wish to manage their liquidity. If borrowers in mild financial difficulty can obtain cheap credit to smooth cashflow, they may stave off worse financial problems such as payment

[382] ibid.

[383]Bank of Thailand Notification No. 5/2559 Re: Regulations on Asset Classification and Provisioning of Financial Institutions.

default (i.e. insolvency). The result: the probability of loan default decreases, and so banks generally will see fewer NPLs. For this reason, it can be argued that floating charges decrease NPLs and thereby increase financial stability, in the light of macro-prudential regulation to better ensure that the banking sector carries a significantly lower amount of NPLs.

If the above claim is plausible, it could solve the problems entailed in international standards implementation that have caused the kinds of unintended, unwanted consequences as described in Chapter 5.

As a result of adopting IFRS 9 and the Basel Convention, in lending more money banks are required to allocate higher LLP and capital charges. This study has shown that it is difficult to comply with higher-level capital ratios in developing countries. In the aftermath of the GFC, the trend of the forward-looking model is gathering pace. Capital and provisions are required even though losses have not yet occurred. Consequently, less credit is offered by banks. When security rights can decrease capital requirements, bank lending will increase. Thus, credit access is promoted, and financial stability enhanced.

For the foregoing reasons, this research suggests a development plan founded on secured transactions law for reducing levels of NPLs. In this context, it is critical to examine whether the floating charge system is actually used and acceptable in facilitating financing and lowering risks in the Thai banking industry, something discussed in section 4 of this chapter after reasons for the development of the collateral system in Thailand are first set out. The next section addresses the limitations of secured transactions law in Thailand.

6.3 Limitations of Secured Transactions Law under Thai System

The previous section has discusses discussed on how the secured transactions law can facilitate credit expansion and reduce risks in the banking industry. This section examines why the Thai government has introduced into Thai law a new type of security

akin to a floating charge, by discussing in a discussion of the key limitations on of the that current law.

In Thailand, the secured transactions law under the Civil and Commercial Code (CCC) has traditionally supported only two forms of transaction: the pledge, and the legal mortgage.[384] That the terms 'pledge' and 'legal mortgage' are appropriate transliterations of the Thai concepts has been confirmed in several comparative studies, including by Thanomrod and Sriboonrot.[385] Both contain inherent limitations. Thailand was in need of development to meet new advances in business.[386] Regulators considered this to be a hindrance to economic growth since the current laws would not support credit expansion in terms of a variety of the security rights and were not capable of properly addressing the complexity of many business transactions.[387]

In respect of pledges under Thai law, one may only pledge movable assets, and the pledger must transfer the possession of assets to the secured party. However, this concept limits enterprises from granting pledges of certain material assets, such as machinery, silos, and material products, for the simple reason that these items are in use by the business to conduct its business. In cases where the debtor prefers to run its business while offering the pledge, although such business-essential items are movable assets, according to Thai law the debtor could not pledge them because the debtor could not transfer them to the creditor. If such assets have to be taken into the

[384] Sanchai Maneenoparat and others, 'English Insolvency and Restructuring Law: An introduction', (2018) Judicial Training Program Report, 3-15 June 2018, King College London, UK, 5. <https://oia.coj.go.th/th/file/get/file/201901312155d2fe5de621c861fe3ce7657228bb104418.pdf> accessed 21 October 2020.

[385] Panya Thanomrod, *Law on the Civil and Commercial Code: borrow, guarantee, pledge and legal mortgage*, (The Thai Bar Association 2020: Anon Sriboonrot, *Law on the Civil and Commercial Code: borrow, guarantee, pledge and legal mortgage*, (Vinyoochon 2020).

[386] Department of Business Development Ministry of Commerce, Business Security Act (2017). < http://www.dbd.go.th/ewt_dl_link.php?nid=15255&filename=secured> accessed 29 January 2021.

[387] Kamchai Jongjakapan, *Business Security Act*, (Srianan Publishing 2014).

possession of the pledger, enterprises will not have the capacity to carry out their business.

As for legal mortgages, the CCC[388] states that only immovable property and four types of movable assets can be mortgaged, namely ships of five tons and over, floating houses, beasts of burden and other movables stipulated by the law. Here, then, mortgaging is limited to immovable assets and certain types of movable assets. As with an English legal mortgage, a Thai legal mortgage is affected by means of a written assignment of title to the property, subject to retransfer on satisfaction of an underlying secured debt.

As is well known, the floating charge in English law (and more generically the universal charge found in several jurisdictions and in the US Uniform Commercial Code) can be described as a whole-business security. Practically it amounts to security over the assets owned by a company from time to time. Technically under English law, what is subject to security is a mutable 'fund' signifying those business assets.[389] The precise extent of the assets secured is only ever determined and perfected on default (as defined in the charge), at which point in English law the charge is said to 'crystallise'. Given that crystallisation occurs at the time of default, this security usually ranks posterior in time to all other fixed security. Thanks to the universality of this charge, it extends far beyond the numerus clauses of permitted security types under Thai law before 2015, and on its face seems more appropriate to the realities of modern business.

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[388] *Section 703. Immova*bles of any kind can be mortgaged.

The following movables can also be mortgaged provided they are registered according to law:

1. Ships of five tons and over
2. Floating houses.
3. Beast of burden
4. Any other movables with regard to which the law may provide registration for that purpose.

[389] *National Westminster Bank Plc v Spectrum Plus Ltd [2005] UKHL 41, [2005] 2 A.C. 680.*

Therefore, it was felt in Thailand that secured transaction law under the CCC is in need of development to meet advances in business practices where the law still lags behind changes in business transaction and in the worldwide economy.[390] The government proposed that it was necessary to pass new legislation that would provide support to businesses and also benefit the economy.[391] According to the Ministry of Justice's report submitted to the cabinet meeting for the approval of the Business Security Bill, the new law should be introduced to assist the country's continued and sustained development.

Entrepreneurs need finance for their investments and businesses. However, and as we have seen, some economically valuable properties cannot be offered as security. As a result, this limits business growth and in turn slows down the economy. Indeed, Thailand's secured transaction law has certain limits. In fact, the law on pledges stipulates that securing assets must be in possession of the pledger.[392] Consequently, the debtor or pledgee could not use, manufacture, dispose of, or take any benefit of such property.

The Thai government argued that if assets that are of economic value cannot be offered as security, this affects the growth of business and in turn the same of the economy.[393] As a result of this inconsistency in the law and the failure to provide adequate mechanisms fit for purpose, Thailand it was believed, could be at risk of having to face yet another crisis. For these reasons, it was deemed necessary to amend secured

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[390] Jongjakapan (n 387).

[391]The Rationale of the Business Security Act.

[392] Section 747 states that a pledge is a contract whereby a person, called the pledgor, delivers to another person (the pledgee) an item termed the pledge, a movable property as security for the performance of an obligation.

[393] Anyamanee Kanchanasuttisang, 'Access to Credit by business Security' Bank of Thailand Press (2018).

transaction law to meet advances in business practice by adding a new type of security that is not required to be property to be delivered to the creditor.[394]

The above analysis illustrates that the security and collateral laws in Thailand have limitations on the types of collateral that may be used in businesses transactions. Since secured transaction law can facilitate repayment to secured creditors and thereby reduce NPL levels as discussed above, this research suggests a development plan for secured transactions law to reduce the level of NPLs, and in particular where floating charges are concerned. This approach is grounded on the premise that floating charges are correlated to LLP and to capital requirements and can be used to reduce both regulatory provisioning and capital requirements; hence, Thailand could then benefit from the credit system in improved, readier access to financing and reduction of NPLs. The next section examines the floating charges system in the Thai legal system.

6.4 Floating Charges in Thailand

The Thai floating charges system is created by the Business Security Act 2015 (BSA). The earlier literature showed that floating charges are not a Thai concept but a legal mechanism that was brought into Thai law from an external, foreign source. The main question raised here is whether floating charges will decrease the measure of NPLs in banks' lending activities and thereby foster better financial stability in Thailand by coordinating effectively with the country's prudential regulation. Therefore, the BSA is analysed here as a legal transplant.

This section first presents the historical background of floating charges in Thailand before discussing the legislation process of the BSA.

[394] This idea of security that it is not required to transfer possession is very new to Thailand. For over a hundred years, the security transaction law had laid down that the debtor shall transfer the property to the creditor except where the property is immovable.

6.4.1 Introduction of Floating Charges into Thai Law

Following the Asian Financial Crisis of 1997-98, floating charges were ushered into the Thai legal system by the Economic Solution Committee, appointed by the cabinet to try to solve economic problems arising from failing enforcement of financial law.[395]

At that time, Thailand faced serious economic problems because of the '97-'98 financial crisis. The stability of the Thai baht rocked alarmingly, while public finance ran a deficit and lacked liquidity.[396] Severe slowdown of Thailand's GDP, the onerous bulk of NPLs, and the resultant recession called for an urgent need to stabilise and recover the crashing Thai economy. The main priorities of the Economic Solution Committee were to heal economy, including increasing market flows and economic growth primarily by resort to legal instruments.

In the aftermath of the Asia financial crisis, the cabinet also formed the Legislative Measurement Committee on Solutions for National Economic Problems, having the mission to eliminate any obstacles to economic recovery, particularly in respect of the legal process. In doing so, the Committee appointed a subcommittee for reform of security law.[397] The main reasons were that its principal aims were to eliminate obstacles to economic recovery, in which the law become the most important tool. This subcommittee was formed to create legal mechanisms to solve economic problems and remove hindrances to law enforcement relating to economic solutions.

As mentioned above, the commercial law on CCC has restricted lenders from accessing security from borrowers' movable assets. Thus, the Thai government has

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[395] The cabinet resolution on the 1st January 1998 <http://www.cabinet.soc.go.th/soc/Program2-3.jsp?top_serl=127282&key_word=&owner_dep=&meet_date_dd=06&meet_date_mm=01&meet_date_yyyy=2541&doc_id1=&doc_id2=&meet_date_dd2=&meet_date_mm2=&meet_date_yyyy2=> accessed 10 October 2019.

[396] *See* the Thai Economic Status and Policy Issues, The Office of the National Economic and Social Development Board 31 December 1998, The Financial Economic Status Report of November 1998, The Academic Team, The Bank of Thailand, 30 December 1998.

[397] It is called the Subcommittee on Security and Security Enforcement.

aimed to develop the economy by further facilitating business access to financing. Subsequently, the introduction of floating charges to Thailand's legal framework has been adopted since 2000, although not until 2015 did it become effective as a result of persistent disagreements among government departments and in parliament.

With the objectives of providing greater opportunities for business to access financing, to assist the large-size business sector like Project Finance to access funding on credit and thereby develop their businesses, floating charges were incorporated into the Business Security Bill (BSB), drafted by the Subcommittee on Security and Security Enforcement[398] by the Economic Solution Committee. This Bill was designed to serve the government policy of stimulating the Thai economy by introducing floating charges as a key strategy.

In this respect, both the Committee and Subcommittee were and are working under the umbrella of the Ministry of Justice.[399] In fact, the Committee comprises 12 heads of relevant state agencies, with the Minister of Justice as its President.[400] Despite the Ministry of Finance (MoF) being responsible for national money and loans, the cabinet assigned the MoJ as the department responsible for the Committee. Appointing the MoJ as the responsible authority illustrates the cabinet's perspective of law as the most effective instrument for economic recovery, something highlighted in the mission of

[398] The Subcommittee on Security and Security Enforcement which consisted of the Public and Private sectors: the Ministry of Justice, Ministry of Finance, Ministry of Commerce, Ministry of Interior, the Bank of Thailand, SEC, the Thai Bank Association, the Thai Chamber of Commerce, and academics from law schools.

[399] The Committee was under the umbrella of the Ministry of Justice.

[400] The Legislative Measurement Committee on Solutions for National Economic Problem: Minister of Justice (President) , Deputy Minister of Finance, Permanent Secretary of Ministry of Justice, Permanent Secretary of Ministry of Finance, Permanent Secretary of Ministry of Commerce, Permanent Secretary of Ministry of Labour, Protection and Welfare, , Permanent Secretary of Ministry of Industry, Attorney General, Deputy of Legal Execution Department, Commissioner-General Royal Thai Police, Secretary of The Securities and Exchange Commission, the Secretary-General of Thailand Board of Investment (BOI), the National Economic and Social Development Board, The Director of Fiscal Policy Office (Ministry of Finance), Secretary of the Financial Sector Restructuring Authority.

the Commission since the MoJ is the Ministry whose main duties encompass the development of Thai law.

The Subcommittee drafted the BSB with the main objective of assisting the large-size business sector to access finance, for example by borrowing from banks and using as security its projects and any property attached to the project. At the time, the new notion of a floating charge was first introduced to the Thai legal system. The review of the drafting process of the BSA shows how the foreign rules of floating charges were imported into the Thai legal system. In the drafting process, the Subcommittee studied foreign laws, namely the Model law on Secured Transactions (2016) of the United Nations Commission on International Trade Law (UNCITRAL), the Uniform Commercial Code (UCC) Article 9 (Secured Transactions), and floating charges (from English law).

Beginning in 2000, the cabinet approved the rationale of the Business Security Bill: to enact the new law to allow assets with economic value to be placed as charges without transferring the possession of such assets, as proposed by the MoJ.

The BSB proposed in draft form by the MoJ highlights include that the security provider may place an asset - one that has economic value but cannot be mortgaged and which he/she possesses the right thereof at present or which is to be acquired in the future - as security without any possession of such asset being given to the security provider. At that time, the current law stipulated that there must be a transfer the possession of assets to the secured party. Accordingly, the drafter introduced the concept of placing charges without giving any possession to the charger and designed to solve the limitations of the security law. Thus, the main objectives of the law drafter were to develop the type of security and to improve the health of the seriously ailing Thai economy by stimulating access to financing.

However, there were concerns within the Ministry of Industry that this concept would not be possible in practice since the chargee possesses the charges and may dispose of, sell or transfer the assets to a third party. It was argued that floating charges would not

be suitable or acceptable to Thai business culture because most if not all creditors would be disinclined to countenance the risk of non-possessory security. It suggested that one way of mitigating risks is to have provisions that regulate on disposal, selling assets placed as charges. The Secretariat of the Cabinet also have concerns along the same lines. Their discussions and concerns are noteworthy because they point towards issues of freedom of contract. This important matter is further discussed in the following section.

Nevertheless, the Committee approved the BSB proposed by the Subcommittee for approval in December 1999, and the MoJ approved the draft Bill, which was submitted to the cabinet accordingly.

6.4.2 The Concept of Floating Charges in Thai Law

The notion of floating charges was officially introduced for the first time in modern Thai law by the BSA of 2015. It is generally considered that the BSA has played a crucial role in introducing highly significant and influential, far-reaching changes to commercial law in Thailand. The main objectives of this Act are to provide more and greater opportunities for businesses to access financing for developing their businesses. In substance, the BSA has introduced new types of security for immovable property and movable property added to the existing types of security stipulated in the CCC.[401] It introduces two main changes, namely creating new types of business security and expanding those classes of property that can be subject to security to rights of claim (equivalent to choses in action), movable property used in a business such as

[401] Section 8 states that security means the following properties:

(1) business;

(2) right of claim;

(3) movable property provided by a security provider in operating business such as machinery, inventory, or raw materials;

(4) immovable property in cases where a security provider operates an immovable property business;

(5) intellectual property rights;

(6) other properties as prescribed in the Ministerial Regulation.

machinery or inventory, and immovable property used in executing business, including floating charges.

The BSA stipulates that the debtor can continue to sell or dispose of goods or other assets in the ordinary course of business without delivering and depositing such assets to a creditor.[402] This concept is presented as a new form of security for business financing in Thailand. Before this Act, there has never been in Thailand a business tradition whereby a debtor could continue to use the movable property placed as security. Thus, the floating charges are a phenomenon novel to all Thai businesses. Nevertheless, the BSA places a restriction that a creditor undertaking the floating charges must be a financial institution.[403] This principle is set out in sections 5, 22, and 7 of the BCA.

Moreover, and as mentioned above, the primary objective of the BSA is to eliminate obstacles to economic recovery, enabling the process of enforcement of secured assets to be performed immediately and without a court process. This facilitates the creditor / bank in making an enforcement for the repayment of a loan.

The next section examines the adoption of the floating charges system into the Thai legal framework.

6.5 Floating Charges under the Business Security Act 2015 as Legal Transplantation

As stated, the main question is whether these floating charges can decrease banks' LLP and capital charges and thereby deal more effectively with problems caused by NPLs in Thailand. It is, then, useful to first examine whether it is possible to adopt the

[402] Section 5 states that a business security agreement is one in which a contracting party called 'security provider' has placed a property with the other contracting party - called the 'security receiver' - as a security to secure a payment or other performance of obligation, and where the security provider may not be required to give up possession over the said property to the security receiver.

[403] Section 7 states that a security receiver must be a financial institute or other persons as prescribed in the Ministerial Regulation.

transplanted floating charges system to the Thai legal system through legal transplants theory, since Thai law is borrowing concepts of floating charges from foreign law.

Watson argues that legal transplantation may be regarded as a fine instrument or tool for assisting legal development.[404] It is the objective of Thai regulators to introduce floating charges under the BSA to improve the country's legal system as it pertains to security and its legal enforcement process. Although Watson's work provides guidance to some extent to needful adjustments for transplanting, factors that are important and necessary for the success of transplantation have not been sufficiently considered in Watson's studies.[405]

According to Jupp, the local context and a different environment may impact on whether or not a transplant is successfully received in terms of any given nation's legal development.[406] The determinants of successful transplanting include the capacity for adaptation of adopted rules, and the degree of familiarity of transplanted law to the local population.[407] With regard to secured transactions law, Mooney[408] states:

> '[S]uccessful transplantation of the Modern Principles into a given State's laws may depend on (sometimes sui generis) adaptations of and adjustments to the legal environment and business credit markets of the adopting State as well as modifications of the substance of the Modern Principles themselves.'

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[404] Watson, *Legal Transplants: An Approach to Comparative Law* (n 74) 95.

[405] Ibid 101.

[406] John Jupp, 'Legal transplants as tools for post-conflict criminal law reform: justification and evaluation' (2014) 3 Cambridge Journal of International and Comparative Law, 381-407, 396.

[407] Daniel Berkowitz, Katharina Pistor and Jean-Francois Richard, 'The Transplant Effect' (2003) 51 The American Journal of Comparative Law, 163–204.

[408] Charles Mooney, 'Lost in Transplantation: Modern Principles of Secured Transactions Law as Legal Transplants' (2020) Faculty Scholarship at Penn Law, 2174.

It can be seen that adaptation of the reception to the borrower's own legal environment, culture, and business traditions of its people is critical to the success of transplantation. This also applies to the implementation of foreign law on floating charges in Thai law, which accords with Jupp and Mooney, who also state that adaptation is a factor in successful transplantation. An analysis of transplanting floating charges applies this determinant in the next section.

The following section addresses the adaptation of floating charges to the legal environment and to business practices in Thailand in the forms of comments and concerns of the relevant ministries, which is followed by a discussion of obstacles to successful transplantation of the floating charges system.

6.5.1 Comments and Concerns of Relevant Ministries

Since this chapter examines whether it is feasible to adopt floating charges into Thai law, it is useful to reflect on impediments revealed during the legislative drafting process. This section investigates government policies and legal drafts.

In the law drafting process, the BSB was sent to the relevant government departments for consultation.[409] The Ministry of Industry, the Ministry of Transportation, and the Secretariat of the Cabinet responded by making clear their respective, particular concerns that they wished to be taken into consideration in the drafting process.

Following cabinet approval, the BSB was sent to the Council of State with the request that relevant departments provide comments on the Bill. It is worth nothing that from the start the responsible authorities became embroiled in controversy over the Bill. At the drafting stage, the Council of State changed the departments responsible for this Bill by its resolution.

[409] The Bill was sent to nine departments for comments and concerns. 1. Ministry of Justice, 2 Ministry of Commerce, 3. Ministry of Industry, 4. Ministry of Transportation, 5. Ministry of Agriculture and Cooperatives, 6. Ministry of Interior, 7. Ministry of Finance, 8. The Office of the Civil Service Commission, and 9. The Bureau of the Budget (8 and 9 come under the Office of the Prime Minister).

It was advised that department responsibilities should be established by cooperation between the Ministry of Finance and the Ministry of Commerce instead of the Ministry of Justice and the Ministry of Commerce following the majority agreement that financing is the responsibility of the Ministry of Finance. This is important because it shows how the drafting Council has allocated parts of the mission for the new legislation to different authorities based on their functions. Clearly, the Ministry of Finance has been elected to be a co-responsible authority. In addition, the Council of State suggested that one department responsible for a registration office for the new Collateral under this Bill was required. Set out below are the reported concerns raised by relevant authorities. This section reveals that foreseeable obstacles had been clearly pointed out prior to the enactment of the new law.

a) Concerns of the Secretariat of the Cabinet

The Secretariat of the Cabinet[410] raised some concerns about the Bill drafted by the Ministry of Justice. The security receiver may refuse to accept the security because of the uncertainty over the true value of future assets as security (sections 8[411] and 12[412]). This is because placing future assets as a security is a wholly new concept to the Thai people and in respect of standard, traditional trade practice hitherto. In the Thai people

[410] The Secretariat of the Cabinet comes under the umbrella of the Office of the Prime Minister, with the Secretary General reporting directly to the Prime Minister. Technically, the Secretariat of the Cabinet runs along distinct lines parallel with the Secretariat of the Prime Minister, whose Secretary General is a politician, although in practice the two agencies often give no formal regard to names, functions or heads of mission. The Secretariat of the Cabinet, in contrast with the Secretariat of the Prime Minister, facilitates operations of the Cabinet, e.g. Cabinet Meetings, Cabinet Decision Announcements, Parliament Contact, Royal Contact, Requests for Royal Decorations and Decree Drafting, whereas the latter facilitates those of the Prime Minister, Deputy Prime Ministers and Ministers of the Office of the Prime Minister, e.g. Committee Establishment, Information Revision and Analysis, Welcoming Parties and other minor responsibilities. < http://www.soc.go.th/eng/aa_main11.htm> accessed 22 October 2018.

[411] Section 8.

[412] Section 12 states that where a business is placed as security, the contracting parties shall select one or several licensees to be the security enforcer under the business security agreement.

view, it is risky to place such assets as collateral for debts. Moreover, in the contract the security receiver may restrict the ability of the security provider to sell, distribute or transfer the assets (section 22). Therefore, the Secretariat of the Cabinet is of an opinion that this law will not be effective in raising the level of available finance. This is important because the adaptation and adjustment of businesses to the imported principles are critical for successful transplantation.[413]

The Secretariat of the Cabinet also expressed concerns about the establishment of a separate registration office for business security, pointing out the inconsistency with the cabinet resolution concerning cost limitations of government personnel. The Secretariat recommended that the registration office be in an existing department under either the Ministry of Justice or the Ministry of Commerce.

b) Comments of the Ministry of Industry

The Ministry of Industry agreed at least with the rationale of the Bill. However, it was of the opinion that the BCB was likely to be rendered ineffective because of its allowance of a future property to be a security without delivery, when it is difficult for anyone to accept such security in practice. This conveys that the Ministry of Industry emphasises structural and cultural change, legal tradition and norms that are critical conditions for the successful implementation of a floating charges system.

c) Comments of the Ministry of Transportation

The Ministry of Transportation agreed with the rationale of the Bill, although it added five cautionary comments as follows:

1. Preferential rights of the security receiver should be more clearly defined and stated in the Act.

[413] *See* John Jupp, 'Legal transplants as tools for post-conflict criminal law reform: justification and evaluation' (2014) 3 Cambridge Journal of International and Comparative Law, 381-407, 396: Charles Mooney, 'Lost in Transplantation: Modern Principles of Secured Transactions Law as Legal Transplants' (2020) Faculty Scholarship at Penn Law, 2174.

2. A special research unit should be established to give advice to law practitioners.

3. 'Project Finance' should not include Build-Transfer-Operate Projects because the original project proprietor should transfer project ownership to the state before the project comes into operation.

4. The rights and duties of the security provider and the receiver as well as any third party should be more clearly defined and stated in the Act.

5. Property that can be placed as security should be more clearly specified.

It is plain that the majority of the relevant authorities raised concerns about the adaptation of the new security concepts within the existing legal environment and current trading practices and expressed their opinion that the law was unlikely to be effective in the Thai legal system because the new concepts inherent in the BSB contradicted the Thai people's culture and long-established, customary business practices.

The following section presents some insights into the nature of obstacles in transplanting floating charges that have occurred during the legislative process and the enforcement of the law.

6.5.2 Obstacles in the way of transplanting floating charges

From the primary sources and literature, we have seen that there are impediments to the adoption of floating charge concepts into the Thai legal system. The discussion in this section seeks to offer an insightful foundation for subsequent, summarising arguments made throughout the thesis as it attempts to explain whether – and if so, precisely how – floating charges can effectively tackle the problems caused by NPLs.

The legislative process of the BSA took more than ten years. It was withdrawn twice from the Thai Parliament, in part because of protracted disagreements over policies

among the appointed relevant authorities.[414] Within a year of its enactment, the Ministry of Finance submitted a request for an amendment to the BSA on the grounds that the law was impracticable in the context of Thai business norms and mores. There were uncertainties preventing businesses from using the securing assets and from taking any risks that might be caused by this new form of security under the BSA. The types of property proposed as security were seemingly endlessly discussed and debated.

According to this draft amendment Bill of the Ministry of Justice, 'business collateral' was now defined as a security that is placed by a juristic person doing business as part of any project. The security shall be placed to ensure any debts related to such a project. The number of secured debts should be higher than 500,000,000 baht (approximately USD16.6m today).[415] The Ministry of Justice intended to assist large businesses and projects, including Project Finance, to access finance. The main targets of this amendment were large-sized project businesses who wished to gain readier access to finance from banks by placing their projects as business security. The advantages of this requirement are that large, high-value projects, such as those involving electricity or construction, would have more opportunity for financing. There was considerable disagreement among authorities whether the Bill should exclude small- and medium-size businesses from accessing finance under the Bill.

Nevertheless, the initial rationale of the Bill intended to solve the limitations of the secured transaction law, primarily by expanding types of property that could be placed as security. Meanwhile the call from the government to solve the economic problems resulting from the crisis was urgent, and in particular businesses demanded help for SMEs to increase their business growth.

[414] The discussion on the form of the business security contract and the filing system of the property between the Ministry of Justice and the Ministry of Finance.

[415] 500,000,000 baht is equivalent to 12,198,145 GBP.

Two key questions raised here are whether banks will hold tighter reins on borrowing companies as a result, and whether lenders will rely more heavily upon other forms of security and invoice discounting in future. These are difficult to address since these questions are likely to be answered in the affirmative by lenders. An answer to these questions will depend predominantly upon the attitudes of lenders to the new provision. Nevertheless, this circumstance discourages the application of floating charges. Therefore, this research argues that to achieve the objectives of this law, the defects of floating charges under the Thai legal system needed to be taken in consideration.

While the floating charges in England have been developed by case law (subject to some statutory intervention pertaining to registration and insolvency priority), floating charges in Thailand had never been used in practice prior to the new law's enactment.[416] Defects are clearly entailed in such law because the law drafter may incorporate western concepts of floating charges to the Thai legal contexts without thorough consideration of aspects and practices particular or peculiar to traditional norms and mores of Thai business culture.

To sum up, the problem is that although there exists a new type of security, such as in the law reform on the secured transactions law, banks are no more willing to offer financing than before Thai floating charges were available. Even though Thai law allows assets with economic value to be placed as charges and to deduct from provisions, banks hesitate to accept such assets as floating charges.

6.6 Conclusion

This research argues that strong monitoring and supervision - including regulatory framework: Banking Regulation and Secured Transactions Law and Enforcement Procedure – are fundamentally important in more effective management and control

[416] The development of floating charges in the UK has evolved as a common law system, i.e. problems are solved in court, entirely unlike in Thailand, where the civil law system is based on the code and statutes.

of NPLs. A modern secured transactions law is an essential component of a country's well-developed banking business. Lending banks depend on reliably secured transactions that together return a sufficiency of satisfactory profits. However, banks are increasingly required to conform to international accounting standards in order to maintain provision and capital to mitigate risks and to increase financial stability as part of an adequate system of macro-prudential regulation. Secured transactions law aims to decrease credit risk while capital requirements tend to prevent, or limit expected losses. When banks lend money, they expect borrowers to repay those loans with interest. However, banking regulations have required banks to maintain LLP and capital charges, both of which reduce banks' profits. If this is the case, the secured transactions law could provide the credit risk mitigation and increase those profits for banks. Thus, these two laws are coordinated.

In support of banking supervision and regulation, this research further contends that secured transactions law can act as a legal instrument to reduce credit risks and deal efficiently and effectively with bad loans. It is suggested that floating charges may reduce NPLs occurring from defaults affecting bank lending. Through a well-designed floating charges insolvency procedure, a bank as a creditor could seize a debtor's assets promptly. By this means, NPLs arising from a bank's lending defaults will tend to decrease. The outcomes from this proposal are that banks could enforce bad debts by use of floating charges and that banks could deduct provision from floating charges. In turn, banks are then required to maintain less provisioning, which then in turn prevents NPLs.

However, this research has found that although adopting floating charges into Thai law is likely to be beneficial to businesses and the banking industry in terms of greater financing capacity and lowering of both LLP and capital charges, there exist some significant, practical obstacles in relation to the granting of floating charges, in particular to their enforcement and to the establishment of substantial court precedent.

Although Thailand allows floating charges to be taken into account in its regulation of LLP, there is still considerable scope for improvement on the provisioning percentages

linked to asset classification systems and treatment of security. In particular, there is evidence that there are major obstacles standing in the way of applying a floating charges system under Thai law. This illustrates that this new and foreign notion and form of security may be incompatible with Thailand's civil-law oriented legal system. In line with legal transplantation theory, this study has found that comprehensive and close consideration must be given to essential, pressing questions of whether the new regime is truly fitting for the borrowing country by taking into complete account national traditions, domestic market practices, and the normally expected and accepted operations of the country's banking system.

For the foregoing reasons, in this context much-improved development of secured transactions law is plainly necessary, demanding much more careful and thorough consideration from policymakers, regulators, and practitioners alike. It may well take several more years to reform its systems before secured transactions law can be successfully enacted and implemented in Thailand. Last, potentially valuable future research would pay more sustained attention to the relationships between NPLs, banking regulation, and the law governing security in Thailand's banking sector.

Chapter 7: Conclusion

This thesis has examined and sought to answer four main questions in the context of solving problems caused by NPLs in Thailand's banking sector. The first is a two-part question asking initially whether the legal frameworks of LLP and_capital requirements can assist in reducing and / or preventing the considerable and potentially serious threats to financial stability posed by higher NPLs ratios; and second, asking how those two legal frameworks can effectively tackle the difficulties caused by NPLs on bank balance sheets. As is well documented, NPLs have the potential to spark grave financial crises, nationally and globally, thus necessitating mechanisms that both define NPLs much more rigorously and tackle them far more effectively. Following the credit-driven GFC of 2007-09 there was a subsequent, consequent transplanting of international standards to Thailand's banking regulatory framework governing LLP and capital requirements. This thesis has also investigated whether that has had unintended and unwanted results. Further, this study has asked how dynamic legal functionalism can indicate present flaws in Thailand's system for regulating NPLs and offer possible remedies. Last, this thesis has addressed one such remedial proposal: the question of whether floating charges can reduce Thai commercial banks' LLP and capital requirements, and thus better manage problems arising from NPLs in Thailand's economy.

Since the 2007-09 GFC, the world has witnessed international transplantation of legislative structures to put in place remedial regulatory frameworks for better protection against systemic risks in the banking sector, principally through the influence and work of several international bodies, imposing in particular accounting standards and capital requirements. Yet the success or otherwise of this importation or legal borrowing into local-national jurisdictions has been debatable, particularly in the case of emerging countries including Thailand. This study has found that considerably greater care needs to be taken in the transplantation of those financial legal frameworks, so that unforeseen and undesirable outcomes may become more avoidable.

This thesis has described (in Chapter 3) and defined the systemically problematic nature and functions of NPLs in global and national financial markets. Concerning the roles of NPLs and the economic functions of banks, this research has also demonstrated that a correlation between NPLs and banks' profitability and stability clearly exists. Banks are vulnerable to credit risk owing to particular features of their normal, common lending practices, and it is clear that NPLs have special capacity for causing serious imbalance and failure in banking systems. They can cut heavily into banks' profits, which in turn directly and adversely affects banks' ability to lend, which then in turn negatively impacts upon economic growth at the macroeconomic level.

What is more, a high NPL ratio can bring about wide-reaching financial crisis, and it is clear from records of overall gross NPLs in Thailand from 2007 to 2020 that the Thai government should be concerned about this development. As a result, both national banking supervision and relevant international organisations have expressed concerns about improving macro-prudential supervision instruments for dealing with systemic crisis. Addressing this difficulty, in general, banks tend to use the risk-management instruments of LLP and capital requirements, although whether these tools are fit for purpose for all countries is questionable.

In terms of recognising NPLs, although they are typically defined as debts in default for greater than 90 days, their definition remains disputed across differing legal systems. The necessary defining criteria require proof of a default on the loan where a judgment is required. Because the reporting of NPLs is important to effective banking supervision, evidently cooperation in arriving at a universally agreed definition of NPLs is crucial. Other terminology has been formed in addressing the failure to standardise a definition of NPLs: NPEs (non-performing exposures) and NPAs (non-performing assets). That said, when global financial organisations including the IMF and the BCBS seek to set criteria for defining NPLs – e.g. to date: default, past-due, and unlikely-to-pay – via their expert guidance, those definitions remain prone to difficulties in application at the national level, notwithstanding their potential to harmonise definitions of NPLs. Clearly, even though in the European Union the EBA offers criteria for agreed definitions of NPLs, cooperation on standardising definitions

of NPLs has not fully succeeded at either regional or international levels. There remains no universally agreed definition of NPLs.

This research has emphasized the close interaction between the top-down regulatory concept of NPL and the initially bottom-up accounting practice of Loan Loss Provisioning. In thesis' discussion of supervisory systems of LLP and capital requirements, we have seen that implementing NPL mechanisms entailing LLP and capital requirements can significantly reduce credit risk and mitigate against the possibly endangering effects of NPLs. Analysing the systemic functions of LLP and capital requirements, and in particular their place in banks' self-regulation, together with the development of approaches to NPLs and the useful capacities of LLP in banking supervision today, it becomes evident that the intricate, multi-functioning role of LLP can work as a 'bottom-up' instrument assisting banks to regulate themselves; at the same time, LLP has also become essential in the preventive and protective workings of some international and several national supervisory bodies alike, implemented also as 'top-down' regulation by organisations including the IASB and the Basel Committee. –Indeed, through reporting requirements LLP is intended further to form a foundation of public-choice, market-regulatory architecture. Yet there is also a linguistic duality here: in one sense, the term 'LLP' covers the different ways of business operated by individual banks when managing lending losses and reporting those to stakeholders – and in that meaning, LLP carries no more significant bearing than signifying a sociological fact; but in another sense, LLP is also now a regulatory term of use, necessary for indicating a measure of universality of meaning, in order that supervising bodies are able to say that they are complying with regulatory principles or standards, while investors can be confident of claims of that compliance. Examining LLP thus also needs nuance, sensitised to alternative understandings of its meaning.

Apart from regulatory functions, creating an effective legal framework to deal with NPLs at a macroprudential level while taking into account the procyclicality of the banking sector raises questions of risk mitigation. Only one study has shown that the backward-looking model can enhance procyclicality and the effects of lending rate

behaviour as well as highlighting the attendant difficulties. Banking law's architectural framework has shown so far some development of international cooperation that follows a macroprudential line, while reform of regulation has applied a forward-looking model in prudential regulation and standards of accounting, as directed in Basel III and IFRS 9. This new way of thinking has been the principal priority in banking regulation since the time of both. While some nations have adopted the forward-looking model, dynamic LLP has become important in cushioning against procyclicality in banking during the credit cycle. Yet different methods of dynamic LLP exist.

Controversy over the principles of LLP centres on the absence of consistent realisation of when it should be carried out, and on accounting of losses, since LLP entails subjectivity in measurement and judgement. Furthermore, there are special issues involving interaction of countercyclical capital and provisions, as well as new and varying international standards on both LLP and capital requirements. Notwithstanding those, the results of this dynamic loan loss mechanism differ between countries. Now nearly a decade after implementation, there remain loopholes in the legal framework for LLP and capital requirements. For that reason, regulations for mitigation of losses under IFRS 9 and Basel III capital requirements stipulations need to be further developed. From this we conclude that a well-formed risk management process can help banks to better manage NPLs. Effective NPL management needs tools for classifying assets, enabling financial bodies to manage losses arising from defaulting loans. Absence of an agreed, universal NPL definition plainly continues to result in a hamstringing of effective application of LLP and capital charges.

After reflecting on LLP processes and capital charges by emphasising the important part that they play in managing procyclicality and NPLs, this thesis went on to examine ways and means in which adopting international standards for dealing with NPLs - methods designed around LLP and capital requirements, and drafted in the Global North - impact upon the regulatory systems and interests of nations in the Global South and specifically Thailand. This thesis finds that there are a number of attendant and considerable limitations and disadvantages. Such transplanting, in support of a legal

functionalist approach, is designed to reduce risks posed by NPLs and to make them more manageable, yet its implementation in Thailand can be seen to have had unintentional and unwanted outcomes, generating financial instability in the Thai financial system by impeding economic functions of funding by the undesirable creation of credit-growth ceilings. Also, the application of these international standards can have a distorting effect on other local-national macro-prudential regulatory measures.

In adopting international accounting standards and Basel Accords stipulations, regulation of commercial banks demands higher levels of LLP and capital adequacy to better hedge against banks' possible losses. Yet here, the imposition of such regulation can also interfere with banks' governing of their own practices vis-à-vis LLP and may demand too high a level of LLP, in turn disadvantaging banks' profitability and therefore their stability. In that sense, the motive to protect against risk may turn out be over-protective and therefore ineffective, impinging too much as it does upon the functions of funding by banks. It seems clear therefore that further regulatory development in respect of NPL oversight is desirable and will occur. This thesis has deployed insights and critiques of functionalism via reflexive law to propose that Thai banks to take action autonomously of transnationally adopted standards, lowering both their provisioning and capital charges, and this thesis argues that banks' own practices in these respects should become a formative part in the standardising of legal norms in the banking sector.

In applying legal transplantation theory in its analysis, this thesis has challenged the opinion that imposing international standards on a nation's banking regulatory supervision is in actual fact a straightforward legal transplantation. Examining the success or otherwise of such transplanting, it is clear that criteria for success vary and are dependent on differing outlooks, and also rely on the objectives of the transplantation.

Reforms in Thai law following the global financial crisis were directed by government after government under outside influences and were intended to reduce the risk of

losses, thereby to foster greater stability, and thus to achieve greater credibility internationally. The IMF played a part in this. With the coming of new regulations governing capital requirements, the BCBS's own way of dealing with unanticipated losses, and intending to address the problems of systemic risk, Thailand's regulators implemented Basel standards that are meant to underwrite financial stability and to improve Thai financial institutions' competitiveness. But effectiveness in the implementation of transplanted international standards, like the importation of foreign law, necessitates care in contemplation of probable ramifications in applying those to national law, seeking to foresee and guard against unplanned and unwanted effects.

This thesis also finds that it is incautious and unwise to believe that solutions to the problems caused by NPLs in one country will work either in the same ways or as effectively for another – i.e., that one size fits all. Following such a policy unthinkingly will disclose drawbacks, in particular in the imposition of those criteria on capital over the risk-based capital requirements solution laid down in banking law, which is a particularly material consideration when using credit-risk measuring criteria to boost financial stability. Analysing what might impact upon transplantation of Basel capital standards within Thailand's legal system through the FIBA, this thesis reflected on whether sufficient thought has been given to how new capital requirements impact on bank lending and the volume of that lending, those rate demands being brought in by the Basel III framework. This was not least because trying to create a solution for capital requirements in the importing of an instrument initially created to tackle difficulties arising from excessive lending by bigger banks.

That then leads to consideration of whether transplanted regulation adequately takes into account the impact on smaller banks of increasing their marginal funding costs, which gives rise to increased rates in lending and so to a lower loan volume. Again, then, one rule does not work for all, making it clear that the application of international standards to the banking regulations of emerging nations including Thailand needs to be rethought.

Ultimately, this thesis contends that more robust oversight –in particular through the banking regulation and secured transactions law and enforcement procedures – are of

fundamental importance in better managing and controlling NPLs. A modernised secured transactions law is necessary for the healthy and productive development of any country's banking sector. Commercial lenders rely on dependably secured business exchanges that are mutually profitable, and banks need to conform increasingly to international standards of financial accounting, so as to sustain essential provision of services including in particular loans, while operating under an effective, stabilising system of macro-prudential regulatory supervision. Secured transactions law is intended to reduce credit risk, while capital requirements normally stop or reduce anticipated losses. When lending, banks arrange repayment with interest, while regulations insist that banks maintain LLP and capital requirements, each of which cut into banks' profitability. Since this is so, secured transactions law can offer both credit risk mitigation and increased profitability for banks.

This thesis also argues that secured transactions law can act legally instrumentally to lower credit risk and tackle the problems of bad loans more efficiently and effectively. It recommends floating charges are used to limit the problematic effects of NPLs on banks' lending. Via better-designed floating charge-related insolvency procedures, banks as creditors may seize a defaulting debtor's assets more swiftly, thereby reducing the negative impacts of NPLs. Thus, this thesis argues that banks can – through the use of floating charges – better manage bad debts through using those charges and deducting from them. In this way, banks can maintain lower LLP, which in turn mitigates further against the adverse effects of NPLs.

Yet at the same time, this thesis also finds that while the adoption of floating charges in Thai regulation will probably benefit business borrowers and banks in respect of improved funding capacity, that benefit arising from reduction of LLP and capital requirements, there remain considerable barriers to the use of floating charges, above all in enforcing them and in establishing meaningful, courts-made precedent.

Thailand does permit floating charges to be accounted for in LLP regulation, yet opportunity remains for ameliorating provisioning percentages that link to asset classification systems and management of security. In particular, it has become

apparent that substantial barriers still impede the progress of a fully-fledged floating charges system in Thailand. This novel, common law concept and type of security may not sit fully comfortably with the Thai legal system, which is traditionally oriented towards civil law. In accordance with theory of legal transplantation, this thesis concludes that detailed and careful thought must attend to necessary and even urgent matters concerning whether imported regulation genuinely *is* suited to an adopting or transplanting country, fully considering that nation's traditions, market norms, and its usual banking-systemic workings. For all of these reasons, evidently much-ameliorated secured transactions law is called for now in Thailand, its development insistently requiring closer and more complete examination by government, supervisors and market operators together.

Our hypothesis was that the Thai financial regulatory system is unable to function effectively to prevent instability arising from NPLs because of an inappropriate transplant both of international standards and private law innovations into the context of the Thai financial system. The various facets of these innovations and international transplantations have been examined in detail, and their interactions probed. The overall conclusion is that currently there are definite limitations in the transplantation of these norms, both in terms of their nonfit with aspects of Thai legal and financial culture, but also in terms of subsisting inadequacies in in those standards, of which definitional inconsistencies are the most marked. The result of the accumulated evidence and argumentation concerning NPL regulation, LLP practice, accounting standards, capital adequacy, and the attempt to shore up the Thai NPL regime using floating charges, is, it is submitted, that the hypothesis is proven.

It seems likely that some years will elapse before we witness genuinely successful, more sophisticated enactment and implementation of law that is much better tailored to dealing with NPLs in the Thai national context, in which – as this research has hypothesised and demonstrated - examples of non-fitting legal transplantation number more than merely a few: imported standards of IFRS 9 and TFRS 9 are a poor fit owing to international accounting standards on LLP not suiting the local characteristics of the Thai financial sector; those of Basel II and III, together with the Business Financial

Institution Act, as well as banking regulations on provisioning and capital requirements are also unsuitable because of not fully appropriate practical application of international prudential standards in respect of NPLs in Thailand's banking regulatory system; and last, as this thesis has also shown, the Business Security Act has too been less than a good fit due to its incompatible borrowing of floating charges into Thai law. As a final word, this study also concludes that more research into the complex, developing inter-workings of NPLs, regulatory oversight of banks, and laws supervising security in the country's banking industry is sure to be worthwhile, and will assist the development of banking regulation more protective of Thailand's economic interests.

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