



26th EBES CONFERENCE - PRAGUE PROCEEDINGS

OCTOBER 24-26, 2018
PRAGUE, CZECH REPUBLIC

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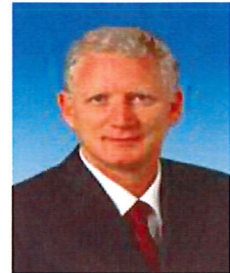


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EBES - Eurasia Business and Economics Society

It is my pleasure to mention that 2018 is our 10th anniversary of *EBES* which was established with a vision of inspiring collaboration among academicians around the world. *EBES* is a scholarly association for scholars involved in the practice and study of economics, finance, and business worldwide. *EBES* was founded in 2008 with the purpose of not only promoting academic research in the field of business and economics, but also encouraging the intellectual development of scholars. In spite of the term "Eurasia", the scope should be understood in its broadest term as having a global emphasis.



EBES aims to bring worldwide researchers and professionals together through organizing conferences and publishing academic journals and increase economics, finance, and business knowledge through academic discussions. Any scholar or professional interested in economics, finance, and business is welcome to attend *EBES* conferences. Since our first conference in 2009, around 10,510 colleagues from 97 countries have joined our conferences and 6,035 academic papers have been presented. *EBES* has reached 1,933 members from 84 countries.

Since 2011, *EBES* has been publishing two academic journals which are both indexed in *Scopus* and *Emerging Sources Citation Index*. One of those journals, *Eurasian Business Review - EABR*, is in the fields of industrial organization, innovation and management science, and the other one, *Eurasian Economic Review - EAER*, is in the fields of applied macroeconomics and finance. *Eurasian Economic Review* is published thrice a year and *Eurasian Business Review* is published quarterly and they have been published by *Springer* since 2014.

Furthermore, since 2014 *Springer* has started to publish a new conference proceedings series (*Eurasian Studies in Business and Economics*) which includes selected papers from the *EBES* conferences. The 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th and 19th *EBES* Conference Proceedings have already been accepted for inclusion in the *Conference Proceedings Citation Index - Social Science & Humanities (CPCI-SSH)*. The 18th, 20th and subsequent conference proceedings are in progress.

On behalf of the *EBES* officers, I sincerely thank you for your participation and look forward to seeing you at our future conferences. With your continued support *EBES* will remain at the forefront of finance and economics fields and we very much look forward to the next 10 years.

In order to improve our future conferences, we welcome your comments and suggestions. Our success is only possible with your valuable feedback and support.

I hope you enjoy the conference and Prague.

With my very best wishes,

Jonathan Batten, PhD
President

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Welcome to the 26th EBES Conference - Prague

We are excited to organize our *26th conference* on October 24th, 25th, and 26th, 2018 at the *University of Finance and Administration in Prague, Czech Republic* with the support of the *Istanbul Economic Research Association*. We are honored to have received top-tier papers from distinguished scholars from all over the world. We regret that we were unable to accept more papers. In the conference, 238 papers will be presented and 439 colleagues from 46 countries will attend the conference.



We are pleased to announce that distinguished colleagues **Jonathan Batten** from the *University Utara Malaysia, Malaysia*, **Peter G. Szilagyi** from *Central European University, Hungary*, and **Roman Mentlík** from *University of Finance and Administration in Czech Republic* will join the conference as keynote speakers.

Throughout the years, EBES conferences have been an intellectual hub for academic discussion. Participants have found an excellent opportunity for presenting new research, exchanging information and discussing current issues. We believe that our future conferences will improve further the development of knowledge in our fields. In addition, based on the contribution of the paper to the field, the *EBES Award Committee* has selected one of the papers for the *Best Paper Award*. The *Best Paper Award* winner will be announced during the conference.

On behalf of EBES, I would like to thank to the *University of Finance and Administration* for their hospitality and our sponsor *Istanbul Economic Research Association*, all presenters, participants, board members, and keynote speakers.

I am looking forward to meeting you in person in Prague and seeing you all again at the upcoming EBES conferences.

Best regards,

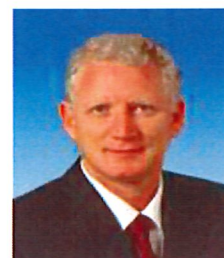
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KEYNOTE SPEAKERS

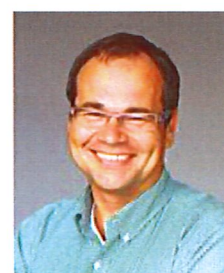
Jonathan Batten is professor of finance and CIMB-UUM Chair in Banking and Finance at *the School of Economics, Finance and Banking at the University Utara Malaysia*, Malaysia. Prior to this position, he worked at *the Monash University*, Australia, *Hong Kong University of Science and Technology*, Hong Kong, and *Seoul National University*, Korea. He is a well-known academician who has published articles in many of the leading economics and finance journals and currently serves as the Editor of *Emerging Markets Review* (SSCI), *Journal of International Financial Markets, Institutions & Money* (SSCI), and *Finance Research Letters* (SSCI). He is currently the President of EBES. His current research interests include: Financial market development and risk management; spread modelling arbitrage and market integration; and the investigation of the non-linear dynamics of financial prices.



Peter G. Szilagyi is an Associate Professor of Finance and Director of the MSc in Finance at *CEU Business School in Central European University*, Hungary. He maintains a fellowship at *Judge Business School, University of Cambridge*, where he served in 2007-2014. He has been an external fixed-income consultant to *the World Bank* and *the Asian Development Bank*. His research interests include corporate finance, corporate governance, international finance, and law and economics. His researches are published in journals such as *Journal of International Finance Markets, Institutions & Money*; *Emerging Markets Review*; *Journal of Corporate Finance*; *European Financial Management*; and *Quantitative Finance*. Furthermore, he is the Editor of Elsevier's *Journal of Multinational Financial Management* (SSCI), and Subject Editor of *Emerging Markets Review* (SSCI) and *the Journal of International Financial Markets, Institutions & Money* (SSCI). He holds a PhD in Finance from *Tilburg University*.



Roman Mentlík is a senior executive with more than 25 years of experience, both at strategic and operational levels, with strong track record in developing, driving and managing business improvement and development, change management and turn-around (subordinated staff up to 350 people). He managed international teams in multicultural environment across Central and Eastern Europe. He got extensive experience with working across different cultures and in dynamically changing political and economic environments as well as company structures (both private to public). He has broad experience in financial industry (retail - eBanka, corporate - Česká spořitelna, treasury/investment banking - Komerční banka, WestLB) and also in IT and consulting industry (Associate Partner-IBM, Managing director-Logica CEE). Furthermore, he has been teaching and since 2016, he has been acting as a Vice-rector for International Relations at *University of Finance and Administration* in Prague.



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Business Performance Evaluation of Thailand Specialized Financial Institutions during Economic Downtrend

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Abstracts

The purpose of this study were 1) to analyze the financial condition and the operation of financial institutions using CAMEL model 2) to compare business performance of Specialized Financial Institutions with commercial bank sector average ratios. The data used in the study were secondary data during 2014 - 2017 using applied CAMEL analysis concepts. The study indicated that 8 financial institutions tried to keep their financial performance and almost firms succeed. Thai Credit Guarantee Corporation had the financial condition and operating results as the first among financial institutions that followed by EXIM Bank and Government Housing Bank. The lowest rank is iBank because it was the result from higher distressed debt. iBank had operating losses since 2014. Although the performance had improved, iBank couldn't generate profits. Moreover, when considering to key financial ratios Specialized Financial Institutions performance went along with commercial bank sector turnover during the hard time.

Keywords: CAMEL Model, Financial Ratio, Specialized Financial Institutions

Introduction

Trading and industry in many countries have progressed rapidly. One of the reasons for the rapid expansion of the economy is the availability of financial institutions to facilitate the financing and foreign exchange. (Teswanitch, 2002) In Thailand, money market can be classified in 2 types, 1. Depository financial institutions such as Specialized financial institutions, Commercial banks, Credit union and Money market fund. 2. Non - depository financial institutions such as Mutual fund, Insurance companies, Provident fund and Securities company. At the end of 2014, Thailand money market has total asset about 36 billion baht or 2.7 times of GDP in the country. Depository financial institutions have market share more than two-third of the total (Bank of Thailand, 2014)

Specialized Financial Institutions (SFIs) are Government financial institutions that play a major role in fulfilling financial gap. When the market mechanism does not working. Specialized financial institutions are divided in 2 types, 1. Specialized financial institutions that serve as banks providing financial services in both deposit and lending. Currently, there are Government Savings Bank, Bank for Agriculture and Agricultural Cooperatives, Government Housing Bank and Islamic Bank of Thailand, and 2. Specialized Financial Institutions that do business to a certain extent, such as providing loans or guaranteeing loans to specific customers. But

do not accept deposits from the public. Currently there are Export and Import banks of Thailand, Small and Medium Enterprise Development Bank of Thailand, Small Industry Credit Insurance and Corporation Secondary Mortgage Corporation (Financial Services User Protection Center Bank of Thailand, 2016)

The financial status of specialized financial institutions is an important in part of the stability performance and analysis that can be done in advance to reduce the risks of financial institutions. In practically, the risks of financial institutions can be measured by financial ratios analysis to identify firm's health. One of the most popularity financial tool that used financial ratios analysis for this purpose is CAMEL.

CAMEL is basically ratio based model for evaluating the performance of the banks. It is a model for ranking of the banks. CAMEL is an acronym for five components of Commercial banks safety and soundness (Dang, 2011): Capital adequacy, Asset quality, Management quality, Earning ability and Liquidity. In the present study an attempt is made to appraise the financial performance of Thailand Specialized Financial Institutions.

Research Objectives

1. To analyze the financial condition and the operation of Thailand Specialized financial institutions using CAMEL model.

2. To compare business performance of Specialized Financial Institutions with commercial bank sector average ratios.

Scope of the study

1. Information scope:

The financial ratios were calculated from the financial annual reports data of Thailand Specialized Financial Institutions. That consisted of 8 Specialized Financial Institutions.

Table 1. The list of Thailand Specialized Financial Institutions

1. Government Savings Bank	GSB
2. Bank for Agriculture and Agricultural Cooperatives	BAAC
3. Government Housing Bank	GHBank
4. Islamic Bank of Thailand	iBank

5. Export-Import Bank of Thailand	EXIM Bank
6. Small and Medium Enterprise Development Bank of Thailand	SME Bank
7. Thai Credit Guarantee Corporation	TCG
8. Secondary Mortgage Corporation	SMC

2. Time scope:

The study period are 3 years from 2015-2017 whilst Thailand economic situation stayed on downtrend.

Literature Review

From The United States of America, Uniform Financial Institution Rating System (1997) referred to the acronym CAMEL rating: Capital adequacy, Asset quality, Management quality, Earning ability and Liquidity. Then Grier (2007) defined asset quality, management quality and earning ability in Credit Analysis of financial Institution. And Rudolf (2009) emphasized the liquidity quality in Managing Liquidity in Banks: A Top down Approach. The next study confirmed by Dang (2011) that studied in the CAMEL rating system in banking supervision: a case study of American International Assurance Vietnam (AIA). After that, research of Misra and Aspal (2013) were made to evaluate the performance and financial soundness of State Bank Group using CAMEL approach. And Altan et.al (2014) studied attempts to extensively investigate the performance and financial soundness of state – owned and private – owned banks in community of Turkish banks.

In Thailand case, that study Performance Evaluation of Commercial Banks in Thailand by using CAMEL Model. (Panrod, 2016) The research found that top seven Commercial banks in Thailand tried to keep their financial performance and almost firms succeed in expected target. And when comparing to industrial average standard the research results consisted with the outcome of each bank financial performance study.

Research Methodology

1. Source of information

This study used secondary data drawn from the annual reports of Thailand Specialized Financial Institutions. The information set consists of 8 Thailand Specialized Financial Institutions. In this analysis, the evaluation is done by using CAMEL. For applying CAMEL model, 5 main dimensions of the performance (Capital adequacy, Asset quality, Management quality, Earnings ability and Liquidity) used 10 financial ratios for analysis.

2. Data analysis

To analyze the financial condition and the operation of Thailand Specialized financial institutions using CAMEL model during 2015- 2017 is as follows.

Table 2. Financial Ratios by CAMEL model

Ratios	Formula
1. Capital Adequacy	
Capital Adequacy Ratio	$\frac{(\text{Tier1 capital} - \text{goodwill}) + \text{Tier 2 capital}}{\text{Risk} - \text{weighted assets}}$
Debt – Equity Ratio (time)	$\frac{\text{Total Debt}}{\text{Total capital}}$
2. Asset Quality	
Allowance for loan loss ratio	$\frac{\text{Allowance for loan loss}}{\text{Total loans}}$
Total loans and receivables to total assets ratio	$\frac{\text{Total loans and receivables}}{\text{Total assets}}$
3. Management Efficiency	
Net profit margin ratio	$\frac{\text{Net Revenue}}{\text{Revenue}}$
Asset turnover ratio(time)	$\frac{\text{Revenue}}{\text{Total Asset}}$
4. Earning Ability	
Return on asset (ROA)	$\frac{\text{Net interest income}}{\text{Asset growth rate}}$
Return on equity (ROE)	$\frac{\text{Net interest income}}{\text{Shareholder's equity growth rate}}$
5. Liquidity Quality Ratios	
Current Ratio (time)	$\frac{\text{Total assets}}{\text{Total loans and receivables}}$
Liquid assets to total Assets ratio	$\frac{\text{Liquid assets}}{\text{Total assets}}$

2.1 Capital Adequacy

Capital adequacy is important for a bank to maintain depositor's confidence and preventing the bank from going bankrupt that reflects overall of financial condition of banks and also the ability of management to meet the need of addition capital (Suba and Jogi, 2015) and then this ratio are measure a

percentage of risks weighted credit exposures. (Altan et.al, 2014) So, the capital adequacy is estimate based upon the following key financial ratios.

2.2 Asset Quality

The asset quality indicators highlight the use of non-performing loans ratios (NPLs) which are the proxy of asset quality, and the allowance or provision to loan losses reserve. (Frost, 2004) The maintenance of asset quality is a feature of banking. The foremost objective to measuring the assets quality is to determine the component of non- performing assets as a percentage of the total assets. (Misra and Aspal, 2013, and Altan et.al, 2014) All of the important asset quality ratios used in this research.

2.3 Management Efficiency

Management Efficiency is considered to be the single most important element in the CAMEL model because it plays a substantial role in a bank's success, (Grier, 2007) Management efficiency of bank includes its administrative ability to react in diverse circumstances. The term management efficiency involves the capacity of management in generating business and maximizing profits. (Trivedi, 2014)

2.4 Earning Ability

Earning ability reflects not only the quality and trend in earning, but also the factors that may affect the sustainability of earning. Inadequate management may result in loan losses and in return require higher loan allowance or pose height level of market risks. (The United States. Uniform Financial Institution Rating System 1997, p. 7) This rating is also necessary for a balanced financial structure and helps provide shareholder reward. (Grier, 2007) The flowing ratios explain the quality of income generation.

2.5 Liquidity Quality

The liquidity reflects the degree to which a bank is capable of fulfilling its respective obligation. Banks makes money by mobilizing short - term deposit at lower interest rate, and lending or inverting these funds in long - term at higher rates, so it is hazardous for banks mismatching their lending interest rate. (Rudolf, 2009) Liquidity is a crucial aspect which expresses bank's ability to meet its financial obligations. An adequate liquidity position means a situation, where organization can obtain sufficient liquid funds, either by increasing liabilities or converting its assets quickly into cash. (Altan et.al, 2014)

Results and Discussion

1. To analyze the financial condition and the operation of Thailand Specialized financial institutions using CAMEL model.

Table 3. The financial condition and the operation of Thailand Specialized financial institutions using CAMEL model.

	C				A				M				E				L			
	D/E (T)		CAR (%)		All (%)		TL/TA (%)		NI/TI (%)		AsTu (T)		ROE (%)		ROA (%)		CA/CL (T)		Lia/Ta (%)	
	Aveg.	Rank	Aveg.	Rank	Aveg.	Rank	Aveg.	Rank	Aveg.	Rank	Aveg.	Rank	Aveg.	Rank	Aveg.	Rank	Aveg.	Rank	Aveg.	Rank
1. GSB	14.70	6	0.11	5	0.31	1	93.63	6	35.78	3	0.03	3	15.84	1	1.03	4	1.06	3	20.97	7
2. BAA	11.32	3	0.12	4	1.65	7	91.88	4	20.58	4	0.04	2	8.90	5	0.75	5	0.88	7	20.26	8
3. GH	13.39	5	0.15	3	0.84	4	93.05	5	41.37	2	0.02	4	14.75	2	1.03	4	1.06	3	25.77	3
4. iBank	52.59	8	7.21	8	3.73	8	107.40	8	-5.89	8	0.02	4	-3.80	8	-0.61	7	0.92	6	22.36	6
5. EXIM	3.32	2	22.27	1	0.97	5	76.84	2	68.05	1	0.01	5	8.30	6	1.90	3	1.27	2	24.84	4
6. SME	21.98	7	9.16	6	1.42	6	95.43	7	17.52	6	0.04	2	12.59	4	1.95	2	1.01	5	23.15	5
7. TCG	1.17	1	19.28	2	0.83	3	53.75	1	8.57	7	0.37	1	6.30	7	2.89	1	1.75	1	25.98	2
8. SMC	11.94	4	8.27	7	0.71	2	71.83	3	17.75	5	0.02	4	14.10	3	0.40	6	1.04	4	29.73	1

1.1 Capital Adequacy

In above table, EXIM Bank was on the top position with highest CAR ratio of 22.27% followed by TCG (19.28%) and GH Bank (15.42%). iBank scored at the bottom position. This ratio is propounded to ensure that banks can take up a reasonable level of losses arising from operational losses. The higher the CAR ratio, indicates stronger the bank and the more will be the protection of investors. (Misra and Aspal, 2013) The banks need to maintain 8.5% CAR ratio as per latest BASEL 3 standards. (Bank of Thailand, 2014)

In terms of debt - equity ratio represent the degree of leverage of a bank. It shows how much proportion of the bank business is financed through equity and how much through debt. Higher ratio is an indicator of less protection for the depositors and creditors and vice - versa. (Misra and Aspal, 2013) This research shows that, TCG was on the top position with least average of 1.17 followed by EXIM Bank (3.2) and BAA (11.32) while iBank scored the lowest position.

1.2 Assets Quality

GSB was at the top position with a least average allowance for loan loss ratio of 0.31 % followed by SMC (0.71%) and TCG (0.83%). Again iBank was at last position. In practical, the commercial banks always has the allowance for loan loss as the proportion of bad debts in the past or industry that compared with total loans in a normal situation. The allowance for loan loss ratio should stay at the level of 2 - 3 %. Higher ratio is an indicator that the Specialized Financial Institutions should be careful about the credit quality. (Thuwanimitkun, 2015)

In case of total loans and receivables to total assets ratio, TCG was at the top position with least average of 43.75 %, followed by EXIM Bank (56.84%) and SMC (71.83%). iBank was at last position. Bank

loans are classified as risk assets or non – liquid assets. So that, a higher ratio impact opportunities to generate income from interest, but it impacts negatively on liquidity. The funds will be caught up in risk assets and the financial flexibility to support the withdrawal of the deposit will be less. (Thuwanimitkun, 2015)

1.3 Management Quality

Net profit margin ratio, EXIM Bank was at the top position with an average of 68.05% followed by GH Bank (41.37%) and GSB (35.78%). iBank was at the last position. This ratio is a measure of the management efficiency of the bank. Hence, the proportion of profit compared with total revenue higher that represents a powerful arm in the higher as well. (Thuwanimitkun, 2015)

Asset turnover ratio TCG was at top position with an average of 0.37, followed by SME Bank and TCG. EXIM Bank scored the lowest position. The Asset Turnover ratio can often be used as an indicator of the efficiency with which a company is deploying its assets in generating revenue. In general speaking, the higher ratio, the better the company is performing, since higher ratios imply that the company is generating more revenue per dollar of assets. (Trivedi, 2014)

1.4 Earning Quality

Return on assets ratio, TCG rated top with an average of 2.89 followed by SME Bank (1.95) and EXIM Bank (1.95). iBank was at the bottom most position with an average of -0.61. This ratio is a key profitability ratio which measures bank's efficiency in using its assets to generate net income (Yamin et.al, 1997)

Return on equity ratio is a key profitability ratio for investors which measure the profitability of shareholders investment. (Yamin et.al, 1997) Return on equity ratio showed GSB at first position with an average of 15.84, followed by GH Bank and SMC. iBank was at the last place with an average of -3.80.

1.5 Liquidity Quality

TCG was at the top position with a Current Ratio of 1.75 followed by EXIM Bank (1.27) and GSB (1.06). BAA was at last position with an average of 0.88. The Current ratio will measure the ability to repay short term debt. If this ratio is low, Specialized Financial Institutions will high risk and can't pay their debts to creditors. (Trivedi, 2014)

Liquid assets to total assets ratio also indicates the overall liquidity of the unit by indicating the proportion of liquid assets in total assets. (Trivedi, 2014) The highest ratio was found in SMC at the average of 29.73 followed by TCG (25.98) and GH Bank (25.77). BAA was at the last position with an average of 20.26%.

2. To compare business performance of Specialized Financial Institutions with commercial bank sector average ratios.

Table 4. Comparing ratios of 2 financial institution.

	C		A		M		E		L	
	D/E (T)	CAR (%)	All (%)	TL/TA (%)	NI/TI (%)	AsTu (T)	ROE (%)	ROA (%)	CA/CL (T)	Lia/Ta (%)
Specialized Financial Institutions	16.30	8.32	1.31	85.48	25.47	0.07	9.62	1.17	1.12	24.13
Commercial Bank	9.69	15.02	4.70	99.21	16.47	0.35	10.61	1.05	1.14	23.33

From the table, Commercial Bank performance was better than Specialized Financial Institutions for the ratio of CAR, D/E and Asset turnover, except All and TL/TA that showed outstanding performance of Specialized Financial Institutions. Moreover, the ratio of Earning Quality and Liquidity Quality for both institution were nearly closed up because there operations were under Bank of Thailand regulation.

Conclusion and Recommendation

1. Conclusion

The study indicated that 8 financial institutions tried to keep their financial performance and almost firms succeed. Thai Credit Guarantee Corporation had the financial condition and operating results as the first among financial institutions that followed by EXIM Bank and Government Housing Bank. The lowest rank is iBank because it was the result from higher distressed debt. iBank had operating losses since 2014. Although the performance had improved, iBank couldn't generate profits. Moreover, when considering to key financial ratios Specialized Financial Institutions performance went along with commercial bank sector turnover during the hard time.

2. Recommendations

This study used CAMEL model financial ratio to evaluate Specialized Financial Institutions performance in overall picture and each bank in details, but it must use many sources of information to explain the occurrence

data results. However CAMEL model is the basic model using financial ratios to analyze not only the past performance but also risk position in each bank.

The next study should cover using the other key related financial ratios as tools to study financial performance like the same purpose of this research.

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