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Author

Nguyen, Thanh, Sharma, Parmendra, Roca, Eduardo

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Thanh Nguyen, Parmendra Sharma and Eduardo Roca*

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Re–designing banking structures: are there lessons to be learnt from socialist systems? A study of five ASEAN economies

Thanh Nguyen, Parmendra Sharma and Eduardo Roca*

Department of Accounting, Finance and Economics, Griffith University
Nathan, Queensland, Australia 4111

Abstract

This study contributes to the on–going worldwide debate on the future form of banking systems by examining the performance of a socialist ASEAN economy—Vietnam—with four other ASEAN but capitalist and transition economies—Thailand, Philippines, Indonesia and China. The study finds that over the 1996–2009 period, the Vietnamese banking system may have performed better than the comparator countries across a number of dimensions, including size, structure, efficiency, profitability and stability. One implication of the findings is that there might be some merit in the socialist system of bank risk management and operation. Policy implications emerge, including that some aspects of the socialist banking system might be useful in considering the future of banking systems and structures in other parts of the world, including capitalist societies.

Keywords: banking structures and performance, socialist and capitalist settings, Vietnam, China, Philippines, Thailand, Indonesia

JEL Classification: G21

* Corresponding author. e–mail: thanh.nguyen8@griffithuni.edu.au

Re–designing banking structures: are there lessons to be learnt from socialist systems? A study of five ASEAN economies

1. Introduction

A key lesson of the 2007–08 global financial crisis (GFC) has been a need, in some cases an urgency, to review national banking structures and the accompanying regulatory framework with a view to better understand and manage systemic risks, weaknesses and strengths. Indeed, as (Beck *et al.*, 2009) point out, an overleveraged and fragile system is a sure recipe for a major crisis, which in turn is likely to seriously hamper growth and development as experience has shown. As the worldwide debate on the future form of banking structures continues—among academics, policy makers, regulators, the financial sector and other stakeholders—recent global attempts to reverse free market operations of banks should be kept in perspective—re–intervention and re–regulation appear to be on the minds of many governments. That is, a move from a freer market to a more controlled one, begging the question: might there be lessons to be learnt from socialist systems?

In light of the foregoing, this study endeavours to examine if there are indeed any lessons to be learnt from socialist banking systems. To do this, the study focuses on Asia—a beacon of hope for all at a time when most other regions and countries of the world, including the Euro zone, US and UK are experiencing serious economic growth challenges. Indeed, implications for growth and development are likely to be particularly concerning not only for individual countries but for the region and beyond if banking systems and structures in the Asia region are suspect.

The socialist Asian economy we select is Vietnam, one of the very few remaining socialist Asian economies. Given the worldwide push towards capitalist systems, we compare performance of the Vietnamese banking with respect to size, structure, efficiency, profitability and stability with three neighbouring capitalist systems—Thailand, Philippines and Indonesia. Since there might also be some merit in a semi–capitalist system, we include China in our sample as well. Thus, our sample focuses on ASEAN countries.

Results show that over the 1996–2009 period, the Vietnamese banking system may have performed better or at least as well as the comparator countries across all dimensions of size, structure, efficiency, profitability and stability. One implication of the findings is that there might indeed be some merit in the socialist system of bank risk management and operation.

Policy implications emerge, including that some aspects of the socialist banking system might be useful in considering the future of banking systems and structures.

The rest of the paper is organized as follows: section 2 briefly reviews the literature on socialist and capitalist systems; section 3 examines the structure and performance of banking systems in our sample countries; section 4 discusses some implications of the findings and section 5 concludes.

2. Socialist versus capitalist systems–a brief review of literature

Generally, socialist systems stress on collective ownership of property while capitalist systems encourage the development of private sectors. Consequently, state–owned enterprises are a common feature in socialist economies while private enterprises flourish in capitalist economies. The stronger degree of state power in socialist economies also means weaker private property rights compared to capitalist societies. More state control also implies more government interference in corporate decisions and thus less economic freedom.

With respect to banking sectors, one implication of the above is that the socialist systems are more heavily regulated compared to capitalist systems. As such, there normally are more constraints and interference in banking operations in socialist banking systems compared to capitalist. In socialist banking systems, government control implies little or no independence of the central bank and large ownership controls in commercial banks, resulting in the banking sector dominated by state–owned banks (SOBs).

Since SOBs virtually implement government policies, bank lending activities in socialist systems are commonly influenced by government's planned investment priorities, with very flexible repayment options (Fries and Taci, 2002). Lending to government projects, including poor performing public enterprises, with credit privileges such as low interest rates and rolling credit are also common features of socialist systems (Hawkins and Mihaljek, 2001). Accordingly, it appears that the SOBs might be less profitable and have higher operational costs than their private counterparts (Micco *et al.*, 2007). Research also shows that state ownership of banks is negatively linked with the development of banking systems (La Porta and Shleifer, 2002). Furthermore, less degree of openness in banking sector and tighter regulation may result in greater levels of poor loan quality and lower efficiencies (Chortareas *et al.*, 2011).

In summary, literature shows that the performance of banking systems in socialist settings may not be comparable to those in capitalist systems, even suggesting that there might be a need not only for restructuring and privatisation of state banks, but also for more effective regulation of the entry and exit of banks and removal of obstacles to the expansion of foreign–owned banks (Fries and Taci, 2002). On the other hand, the inclination, in recent times, of many capitalist governments worldwide to re–regulate and take back some control of their banking systems requires further examination of the merits and demerits of socialist banking systems, relation for example to performance and risk management, which essentially forms the purpose of this study.

3. Size, structure and stability

Basic approach

We employ commonly used measures to examine the size, structure, efficiency, profitability and stability of Vietnam's socialist banking industry against neighbouring capitalist industries, namely Indonesia, Philippines and Thailand. We are also interested in the performance of banks in a transitional economy, one that is in the process of moving from a predominant socialist system to a more capitalist system; we use China as an example.

Our main data sources are BDL's financial structure data set[1] and the World Bank's database[2]. While these appear to be the most comprehensive financial development and structure databases available; data on not all 175 plus countries are available for reasonably long periods; we are interested in balanced panel data. Accordingly, our analysis is limited to a 14 year period—1996–2009—which is still relatively long for the purposes of this study.

Size of banking industries

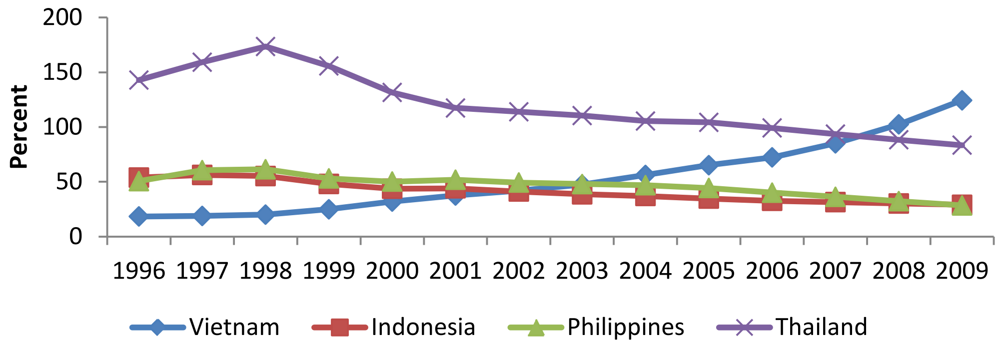
To measure and compare the size of banking industries, we employ the commonly used bank assets to GDP (BANKY) ratio. As indicated, the ratio provides evidence of the importance of financial services performed by banks relative to the size of the economy. The assets

[1] BDL refers to Beck, Demirguc–Kunt and Levine. Updated, on–line version of the Database is available at: http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20696167~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html

[2] http://data.worldbank.org/

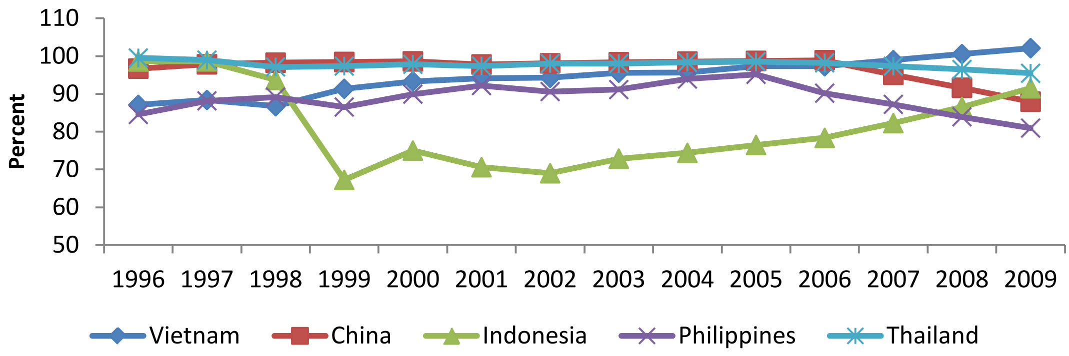
include claims on the entire non–financial real sector, including government, public enterprises and the private sector. For this measure, however, data for China is not available. To include China in the size analysis, we use an additional measure for which data for all five countries is available for the 14 year period—bank versus central bank assets (BCBA). Countries with higher BCBA ratios can be considered to have higher levels of financial development.

Figure 1: Bank Assets to GDP (BANKY), 1996-2009



As Figure 1 shows, per the BANKY size measure of banking industries, that of Vietnam's has risen gradually but steadily from around 20% in 1996 to around 125% by 2009, i.e. Vietnam's banking size had expanded by more than six times in the 14 year period. It may also be noted that across the four countries illustrated in the figure, Vietnam's was the smallest in the first half of the analysis period. In the second half of the period, beginning 2003, Vietnam's size started to surpass that of Philippines and Indonesia; by 2005 it was clearly larger than the two, with the trend continuing up to 2009. In 1996, Vietnam was around 3 times smaller than both Philippines and Indonesia; 14 years later or by 2009, it was around 4 times larger than both. Incidentally, the banking systems of both Philippines and Indonesia appear to have actually shrunk over this period. Lack of data does not allow comparison with China but we are able to do this using another measure of size: bank versus central bank assets (BCBA).

Figure 2: Bank versus Central Bank Assets (BCBA), 1996-2009



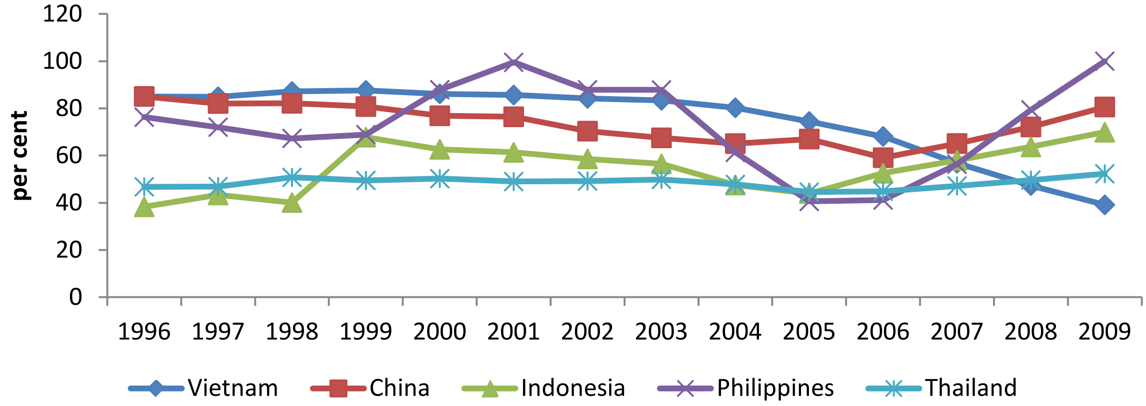
The BCBA trends are illustrated in Figure 2. As the figure shows, per this measure as well, Vietnam's banking industry may have been among the smallest across the five countries in 1996. However, by 1999, the size of Vietnam's banking system appears to have surpassed Philippines and Indonesia, and by 2007, that of Thailand's and China's as well. Per this measure, China's system appears to be among the largest, equivalent to that of Thailand's for most part of the analysis period but as demonstrated above, Vietnam's had surpassed even China's by 2007 and the trend appears to have continued into 2009.

In summary, the size of Vietnam's banking system appears to have expanded faster and better than that of Philippines, Indonesia, Thailand and China over the 1996–2009 period. Thus, per the size measures, the socialist banking system appears to have performed better than the capitalist and transition economies.

Structure

To examine the structure of the banking systems in our sample countries, we use the concentration ratio, the most readily available cross–country data. The concentration ratio measures the degree to which the banking system is controlled by three largest banks—higher ratios indicate stronger concentration and thus less competition; lower ratios indicate the converse.

Figure 3: Bank Concentration, 1996-2009

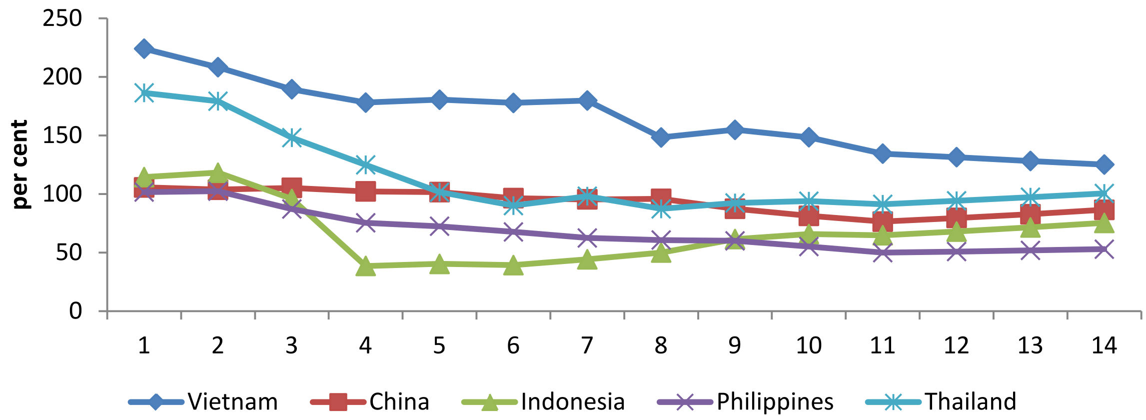


As Figure 3 shows, over time, Vietnam's banking system appears to have become the least concentrated across the comparator countries. At the start of the analysis period, at 85%, Vietnam's banking system may have been one of the more concentrated systems, equivalent to China's. At this stage, at 38%, Indonesia's was the least concentrated. Starting 2007, Vietnam's concentration levels declined significantly, with the trend continuing up to 2009. Comparatively, in this period, Indonesia's ratio appears to have been largely trending upwards. Thus, in addition to a faster and better expansion, the socialist banking system appears to be relatively less concentrated and therefore potentially more competitive as well.

Efficiency

We use the following measures to investigate the intermediation efficiency of banks for our sample of countries: (i) bank credit to bank deposits (BCBD); (ii) net interest margin NIM); (iii) overhead costs (OH); and (iv) cost to income ratio (CIR). BCBD is the ratio of claims on the private sector to deposits; the ratio gives an indication of the extent to which banks are able to intermediate society's savings into private sector credit. While higher ratios generally indicate higher intermediation efficiency, a ratio significantly above 1 suggests private sector lending is funded with non–deposit sources, which could expose an institution to higher liquidity risks as recent world–wide experience shows.

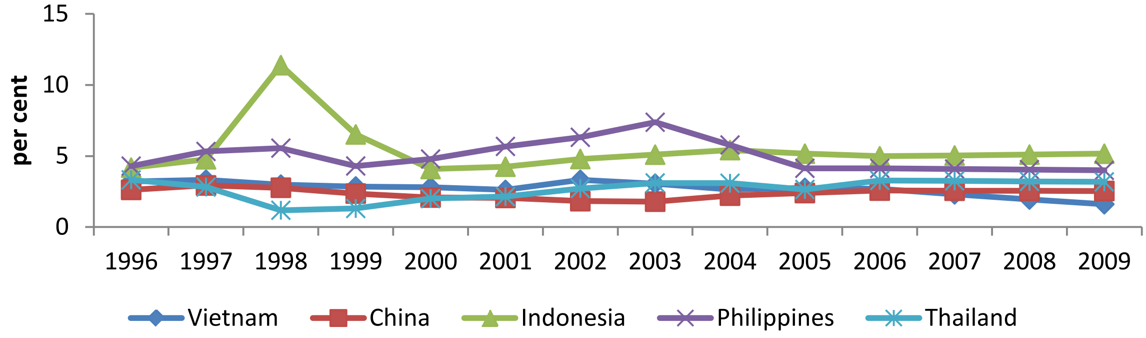
Figure 4: Bank Credit to Bank Deposits, 1996-2009



As Figure 4 shows, generally, there appears to be a gradual decline in the BCBD ratio across countries; it also appears that the countries may be moving towards a converging point. However, Vietnam's ratio remains the highest in the industry, indicating a relatively higher level of intermediation efficiency. On the other hand, Vietnam's ratio has always exceeded 100%, indicating that private sector credit may significantly be funded with non–deposit sources, potentially exposing the sector to higher levels of instability. However, the fall in the ratio from 225% in 1996 to 125% in 2009 is a positive sign.

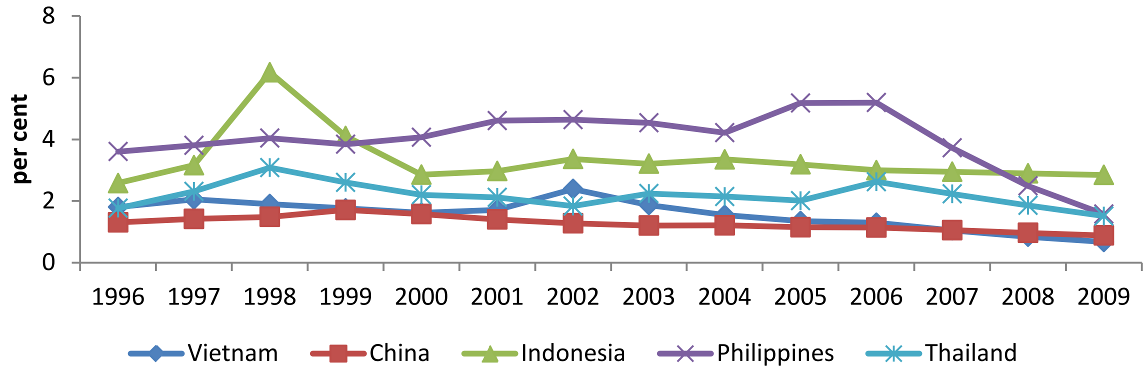
The net interest margin (NIM) is the accounting value of an institution's net interest revenue as a share of its total earning assets; generally, higher ratios indicate lower levels of efficiency and vice versa. The NIM of the sample countries are illustrated in Figure 5. As the figure shows, towards the end of the analysis period—2007–2009—Vietnam's NIM was the lowest. In this period, Vietnam's NIM fell steadily from 2.6% in 2006 to 1.6% by 2009. In the same period, China's NIM hovered at around 2.5%, Indonesia's at 5%, Philippine's at 4% and Thailand's at 3%. Over the entire analysis period as well, Vietnam's NIM was among the lowest across the sample countries. Thus, by this measure, the socialist banking system appears more efficient compared to capitalist systems; Vietnam's efficiency appears to have improved compared to China's as well, the transition economy in the sample.

Figure 5: Net Interest Margin, 1996-2009



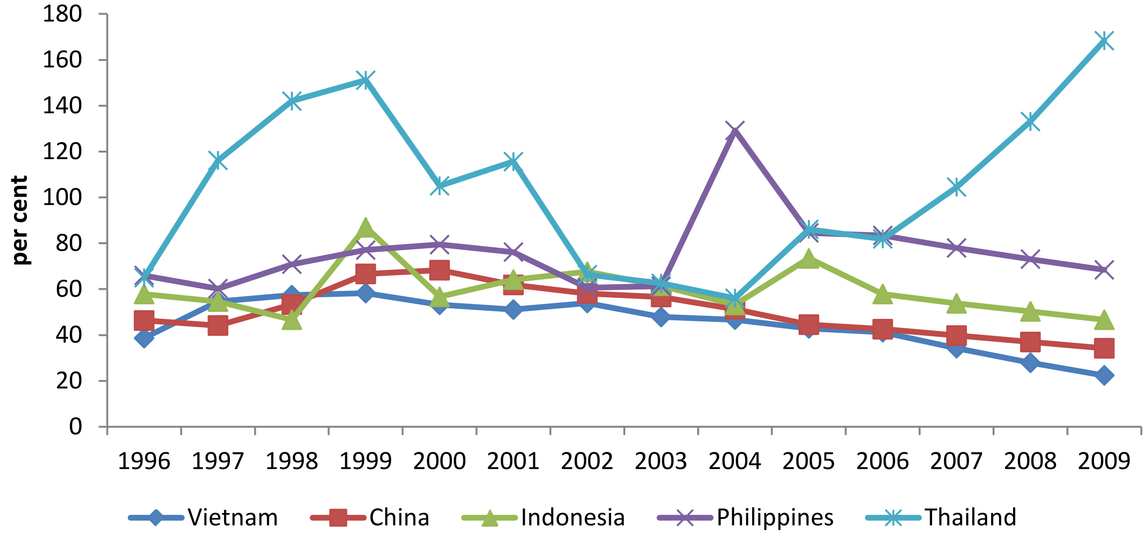
The overhead cost (OH) is the accounting value of a bank's overhead costs relative to total assets; as with the NIM, higher levels indicate lower efficiency levels. As Figure 6 shows, this ratio appears to be almost consistently the lowest for China; almost consistently, because again towards the end of the analysis period—2007–2009—Vietnam's ratio falls below China's to be the lowest across the sample countries. The OH ratios of Thailand's and Philippine's also appear to be falling but were still higher than Vietnam's in the later part of the analysis period. Thus, the lower OH ratios for Vietnam appear to confirm the finding of the NIM—that the socialist system may be more efficient compared to the capitalist and even the transition economies.

Figure 6: Bank Overhead Cost to Total Assets, 1996-2009



The cost to income ratio (CIR) measures the overhead costs relative to gross income; again, higher ratios indicate lower levels of cost efficiency. While Vietnam's NIM and OH may have been slightly higher than China's for a fair part of the analysis period, Vietnam's CIR is certainly lower than China's not only towards the end of the analysis period (2007–2009) but almost consistently during the entire analysis period (see, Figure 7). Thus, if there were any doubts about the efficiency of Vietnam's banking system compared to China's—the transition economy in the sample—the CIR appears to alleviate the level of that doubt; Vietnam's banking system could well be the most efficient across the sample countries.

Figure 7: Bank Cost to Bank Income, 1996-2009

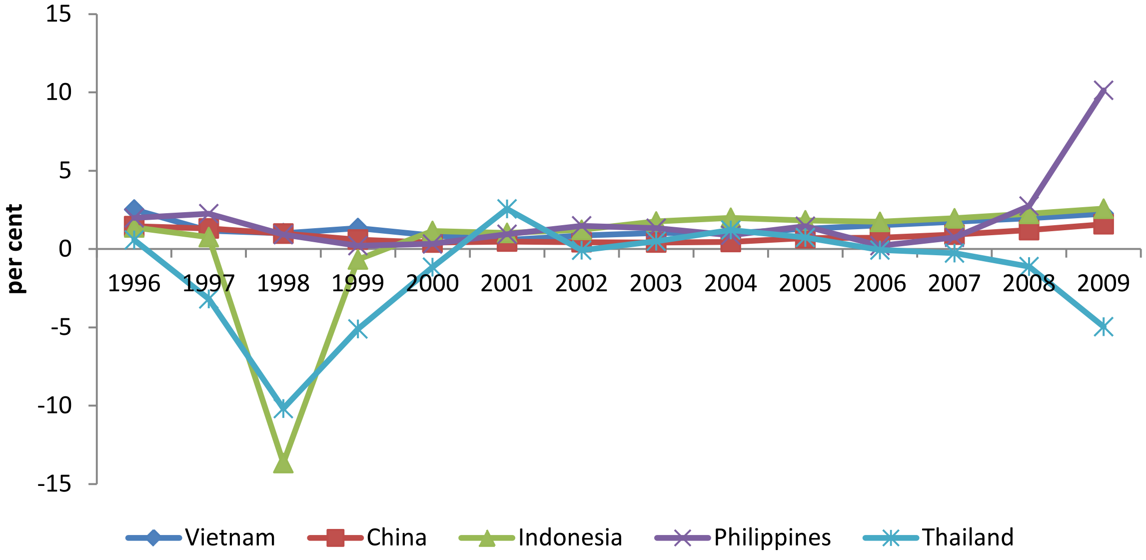


To summarise, in addition to expanding faster and better than comparator countries and being better structured, Vietnam's banking system appears to have been more efficient as well in the 1996–2009 period; four different measures provide support for this finding.

Profitability and stability

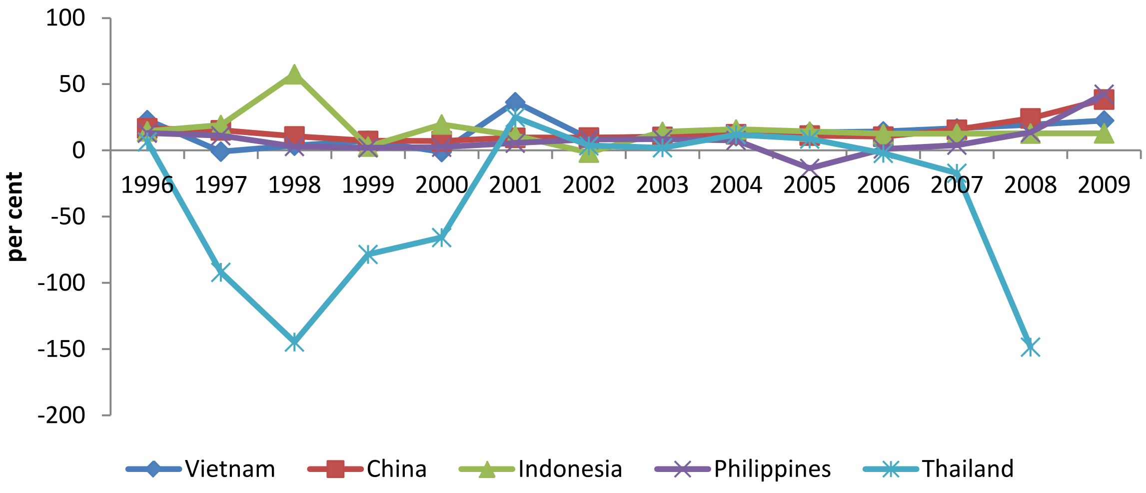
To measure profitability, we use: (i) return on assets (ROA); and (ii) return on equity (ROE); to measure stability, we use the z–score. The ratios are unweighted averages across all banks in a given year. The ROA trends are illustrated in Figure 8. As the figure shows, Thailand's banking industry appears to be the worst; not only has it been more volatile, the ROAs have been regularly negative as well. Overall, the Philippines appears to be the better performing industry with the country's ROA clearly the highest towards the end of the period. However, Vietnam's performance is notable with respect to stability; Vietnam's as well as China's profitability appear to be more stable over the 1996–2009 period. To better understand the cross–country profitability performance, let's look at the ROE measure.

Figure 8: Return On Assets, 1996-2009



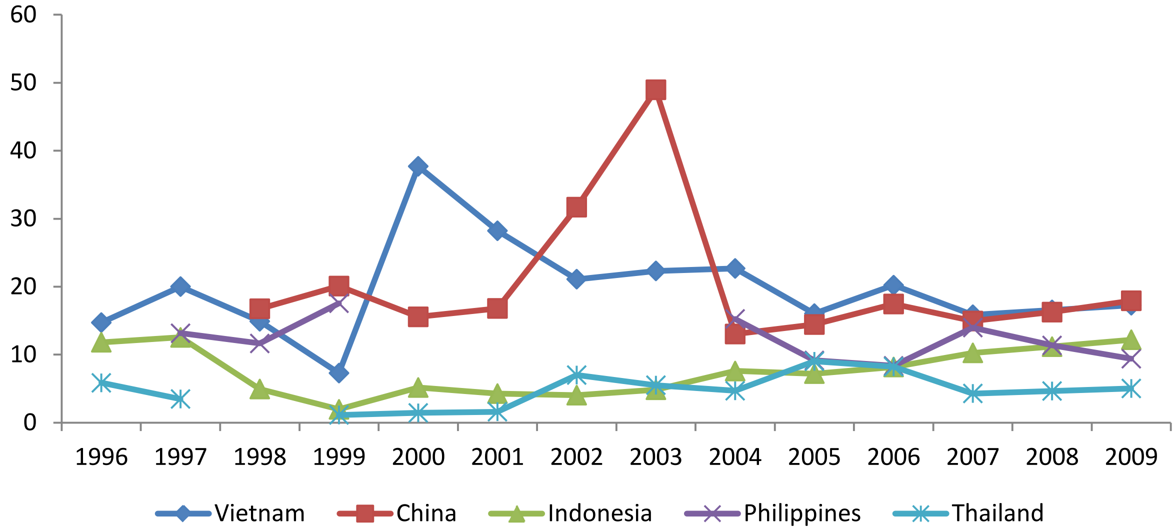
The profitability picture that emerges with the ROE measure is quite consistent with ROA; Thailand's is the worst and more volatile; Philippines is the better performing country but Vietnam's is one of the more stable ones over the 14 year period, and positive too (Figure 9)

Figure 9: Return On Equity, 1996-2009



The z–score is the ratio of return on assets plus capital to assets ratio to the standard deviation of return on assets. Specifically, z indicates the number of standard deviations a bank's ROA has to decline below its expected value before capital would be depleted and the bank becomes insolvent (Roy, 1952, Hannan and Hanweck, 1988, Boyd *et al.*, 1993, De Nicolo, 2001). Thus, higher z–scores indicate better stability. As Figure 10 shows, over the 1996–2009 period, the Vietnamese and Chinese banking systems have clearly had higher z–score values, indicating that these may be the more stable systems. As the figure further shows, the z–scores of all countries in the sample appear to be converging in the 2005–2009 period, however, Vietnam still had one of the higher scores. Thus, Vietnam compares very well in terms of overall stability of the banking system.

Figure 10: Z-Score, 1996-2009



In summary, the Vietnamese banking system appears more profitable and stable in the 1996–2009 period compared to the capitalist and transition economies.

4. Discussion and policy implications

In this section, we try to answer the question: in re–designing banking structures of the world, might there be lessons to be learnt from socialist systems? While a considered answer to this question may require further and deeper understanding of the operation of socialist systems, and further and deeper investigation of the issues covered in this study, using different techniques, methods, measures, longer and/or different time periods, and perhaps more countries, findings of this study appear to indicate that there might indeed be some lessons to be learnt.

Across a number of dimensions—size, structure, efficiency, profitability and stability—the performance of the socialist Vietnamese banking system, over a 14 year period (1996–2009) is better or at least as good as four neighbouring capitalist and transition economies—Thailand, Philippines, Indonesia and China. The trends and patterns are largely consistent. To underscore the importance of the foregoing message, Vietnam's has also been one of the better performing economies over the period under study; moreover, the prospects look equally promising (Table 1). If finance matters for economic growth, finance appears to be working well for Vietnam.

Table 1: Gross domestic product growth (%), 1996-2017 (estimated start after 2011)

Country	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Vietnam	9.34	8.15	5.77	4.77	6.79	6.90	7.08	7.34	7.79	8.44	8.23	8.46	6.31	5.32	6.78	5.89	5.61	6.26	6.93	7.25	7.50	7.50
China	10.01	9.30	7.83	7.62	8.43	8.30	9.08	10.03	10.09	11.31	12.68	14.16	9.64	9.21	10.45	9.24	8.23	8.79	8.73	8.70	8.56	8.48
Indonesia	7.82	4.70	-13.13	0.79	4.20	3.64	4.50	4.78	5.03	5.69	5.50	6.35	6.01	4.63	6.20	6.46	6.10	6.60	6.90	7.00	7.00	7.00
Philippines	5.85	5.19	-0.58	3.08	4.41	2.89	3.65	4.97	6.70	4.78	5.24	6.62	4.15	1.15	7.63	3.72	4.17	4.73	5.00	5.00	5.00	5.00
Thailand	5.90	-1.37	-10.51	4.45	4.75	2.17	5.32	7.13	6.32	4.60	5.14	5.05	2.56	-2.35	7.78	0.07	5.49	7.53	4.50	4.60	4.80	5.00

Accordingly, it might be of interest to briefly explore some regulatory policies applicable to the Vietnamese banking system which might be of interest to banking systems elsewhere, including in more capitalist societies. A common policy appears to be associated with mandatory lending. Currently, the priority areas include, among others, agricultural, rural, export production, and small and medium enterprises (SMEs). The SME sector for instance is known to be the "engine" of a country's economic development (Beck and Demirguc-Kunt, 2006) and yet the sector is also known to face major financing challenges across countries (Beck and Demirgüc-Kunt, 2005, Beck *et al.*, 2006). Could regulation be a solution? Bank regulation in the small island developing state of Fiji has predominantly been influenced IMF, World Bank and Basel Committee's BIS standards. Consequently, even a country like Fiji, faced with major economic growth challenges, has been convinced that deregulation of the banking market was the appropriate policy strategy. However, in more recent times, mandatory lending to the SME and agricultural sectors have been some of the re–regulatory policies re–instated in Fiji (P. and Gounder, 2012) .

Another common bank policy in Vietnam relates to deposit and lending rates; essentially, banks are required to adhere to minimum and maximum rates, respectively. Interest rates paid on deposits and charged on loans by banks have been a long debated issue in many parts of the world; the underlying tenet of the argument being that banks tend to charge relatively high rates in a deregulated market which might distort intermediation efficiencies and thereby have adverse implications for growth and development. Again, in the case of Fiji, in recent times, banks have been required to comply with maximum spread policies.

Perhaps, there is some merit in adopting such regulatory policies from time to time. And, perhaps, with some modifications and after wide debate and discussion, some of these policies may be applied to banking sectors in other regimes including capitalist.

5. Concluding remarks

Motivated by the global debate on the future form of banking systems, spurred by the ongoing worldwide economic and financial crisis, this study attempts to examine the merits of socialist banking systems in light of the inclination of some governments to re–regulate and take back some control of their banking systems, that is a move by governments from highly capitalist systems to more socialist systems. The study focuses on five economies in the ASEAN region where the socialist banking system is represented by Vietnam, the capitalist by Thailand, Philippines, Indonesia, and the transitional by China.

Contrary to previous findings and insights, this study finds that over the 1996–2009 period, the Vietnamese banking system may have performed better or at least as well as the comparator countries with respect to a number of dimensions, including size, structure, efficiency, profitability and stability. A number of different measures are used to examine these dimensions with the data sourced from two comprehensive databases: Beck et al. financial structure data set and the World Bank's database. Policy implications emerge, including that there might indeed be some merit in reviewing, with the intention of adopting, some aspects of risk management and regulatory frameworks of a socialist banking system in capitalist societies.

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