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 system—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 with respect to size, structure, efficiency 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.

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 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—among others, recent global attempts to reverse free market operations of banks should be kept in perspective; re–intervention and re–regulation appears to be on the minds of many governments. One implication is that there might be some merit in risk management and regulatory frameworks of 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 and stability with three neighbouring capitalist systems—Thailand, Philippines and Indonesia. Since there might also be some merit in a semi–capitalist system, we also include China in our sample as well. Thus, our sample really focuses on ASEAN countries.

Results show that over the 1996–2009 period, the Vietnamese banking system may have performed better than the comparator countries with respect to size, structure, efficiency 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.

The rest of the paper is organized as follows: section 2 briefly the literature on socialist and capitalist systems; section 3 examines the structure and performance of banking systems in our sample countries; and section 4 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 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 set¹ and the World Bank’s database². 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 use the following ratios: (i) bank assets to GDP (BANKY); (ii) central bank assets to GDP (CBY); and (iii) bank versus central bank assets (BCBA). As indicated, the first three measures demonstrate the importance of

² http://data.worldbank.org/
financial services performed by the respective institution type relative to the economy. In each case, the assets include claims on the entire non-financial real sector, including government, public enterprises and the private sector.

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.

At the start of the analysis period, the largest banking system across the four countries appears to have been Thailand’s. However, as with Philippines and Indonesia, Thailand’s system too appears to be shrinking over the 14 year period such that by 2008 Vietnam’s system was larger than even Thailand’s or the largest across the four countries. In 1996, Thailand’s system was around 8 times larger than Vietnam’s; by 2009, Vietnam’s was around 1.5 times larger than Thailand’s.
CBY measures the size of central bank relative to GDP, the higher the ratio, the higher the ability of central bank in managing the banking market. As Figure 2 displays, per this CBY ratio, Vietnam appears to have gradually declined over the analysis period and was among the lowest from 1998 to 2009 across the sample countries; while there appears to have a generally increasing trend for its counterparts. This indicates that the capability of Vietnamese central bank in ensuring the security of banking activities as well as banking system is considerably more limited compared to others. Thus, the stability of Vietnamese banking system was threatened than others.

We are also interested in how Vietnam’s system compares with China—a transition economy—over this period. Unfortunately, similar data for China is not available. Nevertheless, we have comparative data relating to another measure: bank versus central bank assets (BCBA); the respective trends are illustrated in Figure 3. 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, Vietnam’s banking system size appears to have expanded faster and better than that of Philippines, Indonesia, Thailand and China over the 1996–2009 period. However, the stability of Vietnam banking system appears to have been threatened than its counterparts due to the smaller central bank size. That is, the socialist banking system appears to have developed better in size but bear more risks of instability than the capitalist and transitional economies.

Structure of banking industries

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.

As Figure 4 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 more competitive as well.

*Efficiency of banking industries*

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 5: Bank Credit to Bank Deposits, 1996-2009](chart)

As [Figure 5](chart) 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 thus 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 6. 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.

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 7 shows, this ratio appears to be almost consistently the lowest for China; 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 compare to the capitalist and even the transition economies.
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 (figure 8). 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.

In summary, it appears that the socialist banking system may be more efficient than the capitalist and even the transition economy.
**Profitability and stability of banking industries**

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 9. As the figure shows, the profitability of China’s and Vietnam’s banking systems appear to be steadier over the analysis period. Towards the end of the analysis period, the performance of the Vietnamese system appears to be one of the more stable and better ones; Indonesia’s is slightly higher than Vietnam’s but its trend appears less stable compared to Vietnam’s. Similarly, while the ROA of banks in Philippines appears to have increased substantially in 2009 to be the highest across the sample countries, its trend too appears less stable compared to Vietnam’s. Thus, there is some indication that the profitability of Vietnam’s banks may compare well with comparator countries.

**Figure 9: ROA, 1996-2000**

Further evidence that the profitability of Vietnam’s banking system may be steadier and compare well with the comparator countries is illustrated in Figure 10. ROE. In the first half of the analysis period, ROE of Vietnam’s banking industry was among the most stable across the five countries. In the second half of the period, this profit was steadily improved; by 2006, it surpassed that of Indonesia, with the trend continuing till 2009. Nonetheless, Vietnam’s ROE is certainly lower than China and Philippines in the last two years (2008-2009), but Vietnam’s trend was more stable than Philippines. Hence, as with the ROA, there
is some evidence that the capability of earnings to absorb losses without using capital of socialist banking system may be better than that of capitalist.

Figure 10: ROE, 1996-2000

The z-score is the ratio of return on assets plus capital to assets ratio to the standard deviation of return on assets; overall, higher z-score indicate higher level of stability. As Figure 11 shows, over the 1996–2009 period, the Vietnam banking system may have been more stable compared to the comparator countries.

Figure 11: Banking stability Indicator-Bank Z-Score over time (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. 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. 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 understanding, this study finds that over the 1996–2009 period, the Vietnamese banking system may have performed better than the comparator countries with respect to all of size structure, efficiency and stability. Policy implications emerge, including that there might be some merit in reviewing, with the intention of adopting some aspects of a socialist banking system in capitalist societies.

REFERENCES