

Applying CAMELS Rating System to Evaluate Financial Soundness of Vietnamese Commercial Banks

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Abstract

In recent years, Vietnam has been adopting international ranking systems to assess the financial soundness and risk level of banks to help these banks be better equipped to cope with new challenges in the context of globalization. Among international rating systems, the CAMELS rating system is considered to be a useful tool for performing banking supervision. This study, therefore, aims to apply the CAMELS rating system to evaluate the financial soundness of Vietnamese commercial banks. This is a basic approach to analyzing criteria such as capital, asset quality, management, earnings, liquidity, and sensitivity to market risk. An unbalanced dataset of 37 commercial banks in the period 2006-2018 is used. The findings indicate that although there are more competitive advantages than joint-stock commercial banks, the financial soundness of state-owned commercial banks is still at a low level.

JEL classification numbers: G15, G21, G28

Keywords: CAMELS, commercial banks, financial soundness, Vietnam

1 Introduction

The banking system is facing more and more complex risks. To cope with these risks, it is important to evaluate the financial soundness of the banking sector by implementing the prescribed banking supervision framework. Theoretically, no rating system is considered to be optimal because banking supervision regulations vary significantly from country to country. In addition to political and historical differences, other factors such as the development of the financial system, the size, and the concentration of the banking system also have a great influence on the evaluation framework. According to economic experts, however, the CAMELS rating system proved to be a useful and effective tool to deal with the financial crisis, especially with the 2008 financial crisis in the U.S.

The CAMELS rating system was originally adopted in 1979 by the U.S. Federal Reserve under the name of CAMEL to evaluate the bank's overall condition. It was initially employed to every banking institutions in the U.S. (approximately 8,000 institutions), and later globally, was internationally implemented by various banking supervisory regulators. CAMEL is an acronym which comprises five assessment areas (namely capital adequacy, assets quality, management, earnings, and liquidity). The sixth component, "S" which stands for sensitivity to market risk, was added into this rating system since 1995 for

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the purpose was to focus on risk.

As a developing country with a relatively nascent financial and banking market, Vietnam always strives to learn from the experience of countries in the world in classifying the country's banking system. Since 2008, the State Bank of Vietnam (SBV) has issued Decision No. 06/2008/QD-NHNN on the bank rating, but this decision is limited to the rating of joint-stock commercial banks and the evaluation criteria set includes five components like the CAMELS rating system in the early days. However, by 2018, the SBV agreed on an evaluation framework for the entire banking industry based on the CAMELS rating system by issuing Circular No. 52/2018/TT-NHNN on the credit rating of credit institutions, which replaced Decision No. 06/2008/QD-NHNN. This new regulation also adds sensitivity to market risk indicator like the CAMELS rating system. Realistic, Circular No. 52/2018/TT-NHNN has not only expanded the scope of application but also provided more detailed guidance on the evaluation criteria, the weight of the criteria, as well as the scoring and rating method for credit institutions.

To our knowledge, there has been very little study on applying international rating systems, especially the CAMELS rating system, to evaluate the financial soundness of Vietnamese commercial banks. In this paper, therefore, the authors apply the CAMELS rating system based on the approach in Vietnam to measure and evaluate the financial soundness of Vietnamese commercial banks. The remainder of the paper is organized as follows. Section 2 provides the literature review. Section 3 describes the data sampling and methodology, respectively. Section 4 discusses the empirical findings. Finally, section 5 offers some conclusions.

2 Literature review

The CAMELS ratings are based on on-site examinations that combine the bank's financial condition, compliance with laws and regulatory policies, management, and internal control system. Although several empirical studies have evaluated the content of regulatory ratings, a few have attempted to measure the speed at which financial conditions change can reduce the applicability of the CAMELS rating

A previous study by Gilbert and Park (1994) concluded that off-site monitoring systems often provide an early sign of financial recession at banks eventually failing than on-site examinations. Therefore, they pointed out that the on-site inspection process and the CAMEL rating it creates have numerous important applications. Meanwhile, Cole and Gunther (1995, 1998) found that the information content of CAMEL ratings obtained from on-site bank examinations can decay rather quickly. Specifically, they found that the model of using publicly available financial data outperformed the CAMEL ratings. Also, they concluded that the main purpose of the CAMEL rating is not to identify bank failures in the future but to provide an assessment of the overall conditions of the banks at the time of the examinations.

Another study by Hirtle and Lopez (1999) also showed that monitoring information tends to decay faster for banks with weaker CAMELS ratings (3, 4 or 5). They found that CAMELS ratings ceased to provide any useful information about a bank's current status after about six to twelve quarters. Therefore, exams should take place at least at this frequency, as supervisors may want to check a bank while information from the previous exam continues

to be valid. Besides, they also concluded that CAMELS ratings are only known by its senior management and appropriate supervisors at the relevant supervisory agencies. The CAMELS ratings are never publicly available, even on a deferred basis.

Cargill (1989) found that CAMEL ratings are not merely a proxy for market information in general, but rather appear to correlate specifically with interest rate and credit risk. In contrast, Hirschhorn (1987), and Flannery and Houston (1994) provided evidence that on-site bank examinations led to the dissemination of private information about each bank's financial status. In the light of Hirschhorn (1987), and Flannery and Houston (1994), Berger and Davies (1994) examined the information content of CAMEL ratings by examining stock price responses when new ratings were assigned. Even though the CAMEL ratings are confidential, they found that the downgrade seems to result in a negative excess stock return. They interpreted the results as evidence that examinations created valuable private information and the downgrading showed detrimental private information about bank conditions. Similarly, DeYoung, Flannery, Lang, and Sorescu (1998) found that CAMEL ratings contain useful information for the market.

Bovenzi, John, and Marino and McFadden (1983) concluded that although the CAMEL rating system was never used as an early warning model, it could be a viable replacement for financial ratios-based model and availability for regulatory agencies.

Barker and Holdsworth (1993) found evidence that CAMEL ratings are a significant predictor of bank failure, even after controlling a series of publicly available information on the condition and banks' performance. Taken together, they suggested that supervisory ratings containing information on the condition and banks' performance are not available to the public.

In summary, through many debates, the CAMELS rating system is still considered an effective tool to assess and monitor the performance of banks.

3 Data sampling and methodology

3.1 Data sampling

The authors employ an unbalanced dataset of 37 commercial banks (including 06 state-owned commercial banks³, 28 joint-stock commercial banks⁴, 02

³ State-owned commercial banks: Vietnam Bank for Agriculture and Rural Development (Agribank), Joint Stock Commercial Bank for Investment and Development of Vietnam (BID), Vietnam Joint Stock Commercial Bank for Industry and Trade (CTG), Ocean Commercial One Member Limited Liability Bank (Oceanbank), Bank for Foreign Trade of Vietnam (VCB), and Construction Bank (VNCB).

⁴ Joint-stock commercial banks: An Binh Commercial Joint Stock Bank (ABBank), Asia Commercial Bank (ACB), Bac A Commercial Joint Stock Bank (BAB), Bao Viet Joint Stock Commercial Bank (BaoVietBank), Dong A Commercial Joint Stock Bank (DongABank), Vietnam Export Import Commercial Joint Stock Bank (EIB), Housing Development Commercial Joint Stock Bank (HDB), Kien Long Commercial Joint Stock Bank (KLB), Lien Viet Post Joint Stock Commercial Bank (LPB), Military Commercial Joint Stock Bank (MBB), Vietnam Maritime Commercial Joint Stock Bank (MSB), Nam A Commercial Joint Stock Bank (NamABank), National Citizen Commercial Joint Stock Bank (NCB), Orient Commercial Joint Stock Bank (OCB), Petrolimex Group Commercial Joint Stock Bank (PGBank), Vietnam Public Joint Stock Commercial Bank (PVcomBank), Sai Gon Joint Stock Commercial Bank (SCB), Southeast Asia Commercial Joint Stock Bank (SeABank), Saigon Bank for Industry and Trade (SGB), Saigon Hanoi Commercial Joint Stock Bank (SHB), Sai Gon Thuong Tin

foreign bank branches⁵, and 01 joint venture bank⁶) covering the period 2006–2018.

3.2 Methodology

In this paper, to measure the financial soundness based on the CAMELS rating system, the authors firstly evaluate and score six components, respectively. Where, C (Capital) shall be evaluated and scored according to capital adequacy ratio, A (Asset quality) shall be evaluated and scored according to ratio of non-performing loans to total loans, M (Management) shall be evaluated and scored according to ratio of operating expenses to gross operating income, E (Earnings) shall be evaluated and scored according to ratio of the profit after tax to the average equity and ratio of the profit after tax to total average assets, L (Liquidity) shall be evaluated and scored according to ratio of outstanding loan balance to total deposits, and S (Sensitivity to market risk) shall be evaluated and scored according to ratio of the difference between interest-sensitive assets and interest-sensitive liabilities to the equity. The score of each indicator in six rating criteria maybe 1, 2, 3, 4 or 5 and ranges from 1 (equivalent to Poor) to 5 (equivalent to Excellent). In the second step, the authors add the weight for each indicator to measure composite ranking, the first two steps are explained and simplified in illustrated in Table 1, Table 2, and Table 3. Based on the ratings achieved, banks are classified into one of the following categories: A (Excellent) if their total score is either greater than or equal to 4.5; B (Good) if their total score is less than 4.5 and greater than or equal to 3.5; C (Average) if their total score is less than 3.5 and greater than or equal to 2.5; D (Fair) if their total score is less than 2.5 and greater than or equal to 1.5; and E (Poor) if their total score is less than 1.5, and explained in detail in Table 4.

Commercial Joint Stock Bank (STB), Vietnam Technological and Commercial Joint Stock Bank (TCB), Tien Phong Commercial Joint Stock Bank (TPB), Vietnam Thuong Tin Commercial Joint Stock Bank (VBB), Vietnam International Commercial Joint Stock Bank (VIB), Vietnam Asia Commercial Joint Stock Bank (VietABank), Viet Capital Commercial Joint Stock Bank (VietCapitalBank), and Vietnam Prosperity Joint Stock Commercial Bank (VPB).

⁵ Foreign bank branches: ANZ Bank Vietnam (ANZB), and Limited HSBC Bank Limited (HSBC).

⁶ Joint venture bank: Indovina Bank (Indovinabank).

Table 1: Evaluation under the CAMELS rating system (for large banks with average assets > VND 100.000 billion)

| Component | Financial Measurement | Weight | Ratio's Rating | | | | |
|--------------------|---|--------|----------------|---------------|---------------|---------------|-------|
| | | | 5 | 4 | 3 | 2 | 1 |
| C Capital adequacy | Capital adequacy ratio (CAR) | 20% | ≥15% | ≥12% & <15% | ≥8% & <12% | ≥5% & <8% | <5% |
| A Assets quality | Non-performing loans/Total loans | 30% | ≤1% | >1% & ≤2% | >2% & ≤3% | >3% & ≤5% | >5% |
| M Management | Operating expenses/Operating income | 10% | ≤35% | >35% & ≤45% | >45% & ≤50% | >50% & ≤60% | >60% |
| E Earnings (ROA) | Net profit after tax/Average assets | 20% | ≥1.5% | ≥1.1% & <1.5% | ≥0.8% & <1.1% | ≥0.6% & <0.8% | <0.6% |
| E Earnings (ROE) | Net profit after tax/Average equity | | ≥15% | ≥13% & <15% | ≥10% & <13% | ≥8% & <10% | <8% |
| L Liquidity | Total loans/Total deposits | 15% | ≤70% | >70% & ≤80% | >80% & ≤90% | >90% & ≤95% | >95% |
| S Sensitivity | (Interest sensitive assets – Interest sensitive liabilities)/Equity | 5% | ≤50% | >50% & ≤65% | >65% & ≤80% | >80% & ≤95% | >95% |

Source: State Bank of Vietnam, 2018

Table 2: Evaluation under the CAMELS rating system (for small banks with average assets ≤ VND 100.000 billion)

| Component | Financial Measurement | Weight | Ratio's Rating | | | | |
|--------------------|---|--------|----------------|-------------|-------------|---------------|-------|
| | | | 5 | 4 | 3 | 2 | 1 |
| C Capital adequacy | Capital adequacy ratio (CAR) | 20% | ≥15% | ≥12% & <15% | ≥8% & <12% | ≥5% & <8% | <5% |
| A Assets quality | Non-performing loans/Total loans | 30% | ≤1% | >1% & ≤2.5% | >2.5% & ≤4% | >4% & ≤6% | >6% |
| M Management | Operating expenses/Operating income | 10% | ≤40% | >40% & ≤50% | >50% & ≤60% | >60% & ≤70% | >70% |
| E Earnings (ROA) | Net profit after tax/Average assets | 20% | ≥1.3% | ≥1% & <1.3% | ≥0.7% & <1% | ≥0.5% & <0.7% | <0.5% |
| E Earnings (ROE) | Net profit after tax/Average equity | | ≥14% | ≥12% & <14% | ≥8% & <12% | ≥6% & <8% | <6% |
| L Liquidity | Total loans/Total deposits | 15% | ≤60% | >60% & ≤70% | >70% & ≤80% | >80% & ≤90% | >90% |
| S Sensitivity | (Interest sensitive assets – Interest sensitive liabilities)/Equity | 5% | ≤55% | >55% & ≤70% | >70% & ≤85% | >85% & ≤100% | >100% |

Source: State Bank of Vietnam, 2018

Table 3: Evaluation under the CAMELS rating system (for foreign bank branches)

| Component | Financial Measurement | Weight | Ratio's Rating | | | | |
|--------------------|---|--------|----------------|-------------|--------------|---------------|-------|
| | | | 5 | 4 | 3 | 2 | 1 |
| C Capital adequacy | Capital adequacy ratio (CAR) | 20% | ≥15% | ≥12% & <15% | ≥8% & <12% | ≥5% & <8% | <5% |
| A Assets quality | Non-performing loans/Total loans | 30% | ≤1% | >1% & ≤2.5% | >2.5% & ≤4% | >4% & ≤6% | >6% |
| M Management | Operating expenses/Operating income | 10% | ≤40% | >40% & ≤50% | >50% & ≤60% | >60% & ≤70% | >70% |
| E Earnings (ROA) | Net profit after tax/Average assets | 20% | ≥1.3% | ≥1% & <1.3% | ≥0.7% & <1% | ≥0.5% & <0.7% | <0.5% |
| E Earnings (ROE) | Net profit after tax/Average equity | | ≥14% | ≥12% & <14% | ≥8% & <12% | ≥6% & <8% | <6% |
| L Liquidity | Total loans/Total deposits | 15% | ≤60% | >60% & ≤70% | >70% & ≤80% | >80% & ≤90% | >90% |
| S Sensitivity | (Interest sensitive assets – Interest sensitive liabilities)/Equity | 5% | ≤80% | >80% & ≤90% | >90% & ≤100% | >100% & ≤120% | >120% |

Source: State Bank of Vietnam, 2018

Table 4: The CAMELS composite rating

| Rating | Rating Range | Rating Analysis | Interpretation |
|--------|--------------|-----------------|--|
| 1 (A) | ≥4.5 | Excellent | The bank is good in every aspect. |
| 2 (B) | ≥3.5 & <4.5 | Good | The bank is primarily good but has several identified weaknesses. |
| 3 (C) | ≥2.5 & <3.5 | Average | The bank has financial, operational, or compliance weaknesses that would give reasons for supervisory concern. |
| 4 (D) | ≥1.5 & <2.5 | Fair | The bank has serious financial weaknesses that could damage future capability to ensure normal growth and development. |
| 5 (E) | <1.5 | Poor | The bank has critical financial weaknesses that will give a probability of failure to be extremely high shortly. |

Source: State Bank of Vietnam, 2018

4 Empirical findings

4.1 Capital

As mentioned in the methodology, the capital indicator is measured by the capital adequacy ratio (CAR). This is an economic indicator reflecting the relationship between equity capital and risk-adjusted assets of the bank. The first capital adequacy ratio is prescribed in Vietnam according to Decision No. 297/1999/QĐ-NHNN with a minimum of 8%. After that, the SBV issued many decisions to amend to suit Basel II standards, including Decision No. 457/2005/QĐ-NHNN, Circular No. 13/2010/TT-NHNN, and Circular No. 36/2014/TT-NHNN. Currently, Circular No. 41/2016/TT-NHNN is being applied to commercial banks and foreign bank branches. This circular applies to Basel II standard with many changes compared to previous circulars such as adjusting CAR from 9% to 8% but adding capital requirements for market risks and operational risks.

Table 1A (Appendix) shows that the average CAR of the entire Vietnamese commercial banking system in the period of 2010-2018 is compliant with regulations (greater than 9%). In particular, most banks have CAR much higher than the minimum, except Agribank. Table 1A (Appendix) also shows that the CAR of Vietnamese commercial banks has a clear differentiation between foreign banks branches and domestic banks as well as large commercial banks and small commercial banks. Specifically, large commercial banks have low CAR, while foreign bank branches and small commercial banks have higher CAR. Typically, some small banks with high CAR such as EIB, KLB, PGBank, and SGB. Meanwhile, large commercial banks like BID, and CTG have CAR only around the required level of 9%.

4.2 Asset Quality

Asset quality is a measure of a bank's strength and is reflected in its non-performing loans ratio. Therefore, the indispensable requirement for a bank that wants to improve its asset quality is to control the non-performing loans ratio at a low level. If the non-performing loans ratio is high, banks' operations will be paralyzed because it is difficult for banks to recover capital or recover capital on time. To be more serious, the non-performing loans ratio is too high, which will lead to bank bankruptcy. In this study, therefore, the non-performing loans ratio is employed.

Table 2A (Appendix) shows that at VCB, the non-performing loan (NPL) at the end of 2018 was VND 6,223 billion. Banks' non-performing loan amounts tended to decrease compared to previous years. NPL ratio of this bank is currently at 0.98%, one of the lowest in the entire banking system. For Agribank, the NPL ratio at the end of 2018 was 1.6%, much lower than in 2017. STB is one of the banks that handled many non-performing loans in the past year when the non-performing loans decreased to VND 5,463 billion, decreased equivalent to 47.5%, bringing the NPL ratio from 4.67% in 2017 to 2.13% in 2018. At SGB, the rate of non-performing loan reduction was also high, NPLs decreased by 28.77%, to VND 299 billion at the end of 2018, the NPL ratio decreased from 2.98% to 2.19%. Previously, there was a time when the NPL ratio at SGB increased to 4.75%. PGBank also controlled the NPL ratio to 3.06% at the end of 2018, compared with 3.34% in 2017. Notably, the non-performing loan ratio of foreign bank branches and joint-venture banks. These

banks always control this ratio at a low level (below 3%) and tend to decrease over the years.

Besides banks with a sharp decline in NPL ratio, many banks still have not been able to handle non-performing loans well, leading to high-risk provisions. For example, at VPB, by the end of 2018, the bank's NPL ratio was 3.5%, an increase of 25.26% over the previous year.

4.3 Management

The management indicator is evaluated according to the cost-income ratio (CIR). This is one of the important ratios to evaluate the operational efficiency of commercial banks. CIR is calculated by dividing operating expenses (excluding provision for credit losses) by total operating income. The lower the CIR, the more effective the bank is because the banks spend less operating costs to generate revenue. Usually, the larger the bank is, the lower the CIR will be. Figure 1 shows that in 2018 CIR has a clear differentiation among banking groups, ranging from 30% to more than 80%. The banks with the lowest CIR include TCB (31.84%), VPB (34.21%), Indovinabank (34.42%), VCB (34.65%), BID (36.23%), OCB (37.28), and HSBC (39.04%). These banks are also the most profitable in the entire banking system. Next, banks with average CIR of 40-60% include MBB (44.70%), Agribank (45.31%), HDBank (47.05%), SHB (47.80%), ACB (47.83%), CTG (49.61%), TPB (50.59%), ABBank (57.35%). Besides, there are also banks with CIR of more than 60% include SCB (63.40%), VBB (64.51%), EIB (65.17%), STB (67.12%), KLB (73.91%), VietCapitalBank (74.16%), ANZB (79.06%) and more than 80% such as NCB (81.69%), PVcomBank (85.39%).

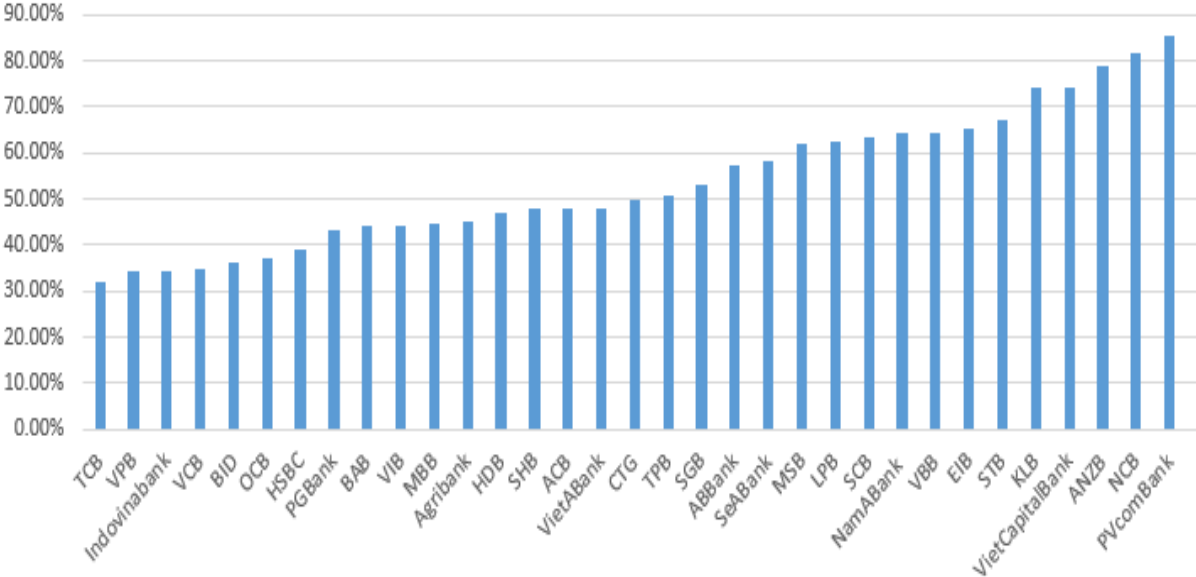


Figure 1: Cost – Income ratio of banks in 2018
 Source: Financial Statement of commercial banks

Also, Table 3A (Appendix) shows that among the banks with low CIR, BID is the most impressive bank when its CIR decreased from 83.78% in 2011 to 36.23% in 2018. Similar to BID, the CIR of HDB also decreased from 70.04 % in 2013 to 47.05% in 2018 thanks to lower operating costs. OCB is also constantly improving CIR and is considered one of the two joint-stock commercial banks with the best CIR. This improvement shows that these bank's

labor productivity is getting higher and higher and their cost management is more effective.

Meanwhile, the CIR of most other banks has increased over the years. For TCB, the increase in CIR is quite understandable because the total operating income only slightly increased, whereas the operating costs increased rapidly. Similar to TCB, the CIR of MBB increased from 43.26% in 2017 to 44.70% in 2018 due to operating costs increased.

While the CIR of TCB and MBB increased slightly, many other banks such as EIB, KLB, and LPB saw a rapid increase of CIR due to declining revenue. Specifically, the CIR of EIB increased from 57.63% in 2017 to 65.17% in 2018, KLB increased from 38.35% in 2010 to 73.91% in 2018, LPB increased from 38.50% in 2010 to 62.47% in 2018.

4.4 Earnings

The Vietnamese banking system has been growing very rapidly in recent years with an average credit growth rate in 2018 of 13.88% (SBV, 2018). Besides the growth, the efficiency of commercial banks has also been significantly improved. Based on Table 4A, and Table 5A (Appendix), in 2018, the ROA of the entire banking system reached 0.7%, ROE reached 9.06%. This is quite a good signal of the industry and much improved compared to ROA of 0.57%, ROE of 7.64% in 2017.

For ROA, in 2018, a special feature of this ratio is that there are several small banks in the top 10 such as HDB (1.58%), OCB (1.91%), and TPB (1.39%). In which, leading was TCB with 2.87%, followed by HSBC with 2.62%, VPB with 2.45%, MBB with 1.83%, ACB and VIB with 1.67%, and Indovinabank with 1.47%.

For ROE, most banks in the top 10 have ROE higher than the average of the entire banking system. In which, leading was ACB with 27.73%, followed by VCB with 25.49%, OCB with 23.58%, VPB with 22.83%, VIB with 22.55%, TCB with 21.53%, HSBC with 21.16%, TPB with 20.87%, HDB with 20.27%, and MBB with 19.41%.

In general, compared to state-owned commercial banks, the profitability of joint-stock commercial banks is better although their capital costs are higher due to higher interest rates. Banks with outstanding in terms of profitability is ACB, TCB, MBB, TPB, HDB, and VIB.

For state-owned commercial banks, the ROA and ROE ratios of these banks are still at a low level. The reason is that these banks focus on restructuring and handling non-performing loans to improve financial soundness to prepare for the equitization process. Among these banks, only VCB has the ROA and ROE ratios outstanding higher than that of the entire banking system and equivalent to that of leading joint-stock commercial banks such as ACB and TCB.

4.5 Liquidity

Liquidity is measured by the ratio of outstanding loans to total deposits (LDR). This indicator is to compare the bank's total loans to its total deposits for the same period, meaning that the higher the LDR is, the greater the profitability of the bank obtain, but in return, the liquidity risk is also higher and vice versus. In Vietnam, the liquidity of commercial banks is regulated by Circular 36/2014/TT-NHNN. According to this regulation, state-owned commercial banks must maintain the LDR of 90%, joint-stock commercial banks, joint-

venture banks, and branches of foreign banks must maintain the LDR of 80%. In terms of deposits from customers, it is undeniable that customers' trust in state-owned commercial banks is always high, although their deposit rates are often lower than their competitors. Figure 2 shows that in addition to Agribank, a 100% state-owned bank, BID has surpassed the two largest banks in the entire banking system to occupy the second position in terms of deposits from customers with VND 989,671 billion. Followed by CTG and VCB with 825,816 billion and 801,929 billion, respectively. For joint-stock commercial banks, SCB is the leading bank in terms of deposits from customers, with VND 384,914 billion.

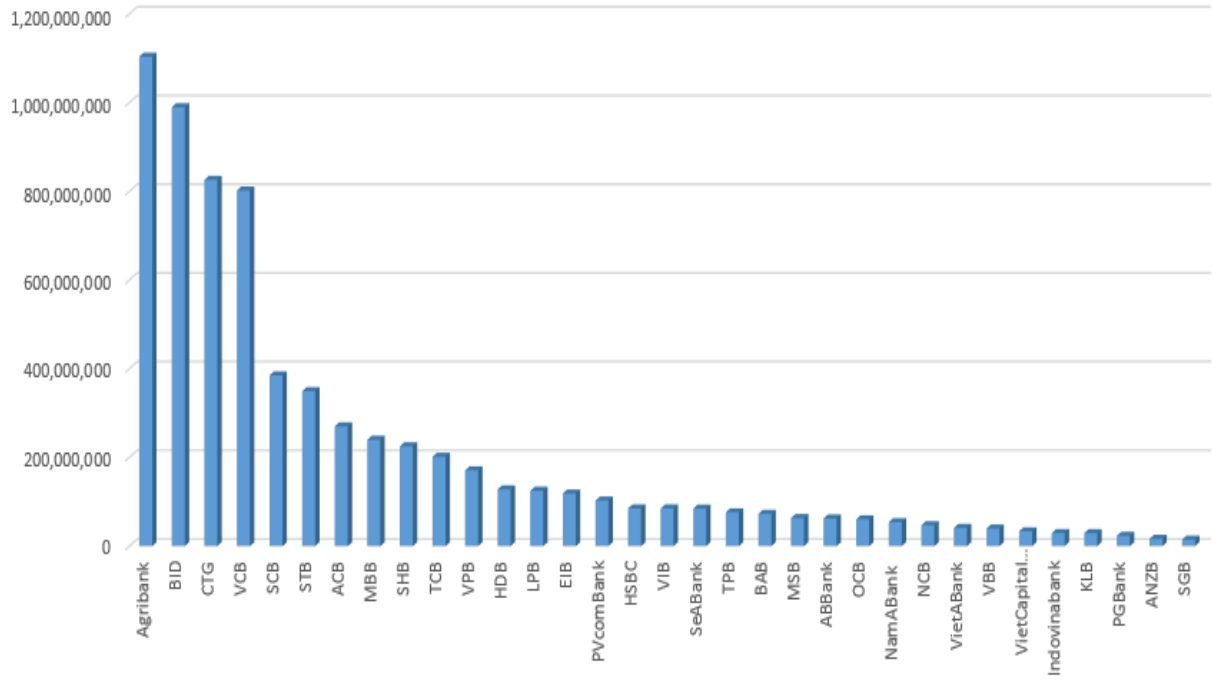


Figure 2: Deposits from customers of banks in 2018 (Unit: VND billion)
 Source: Financial Statement of commercial banks

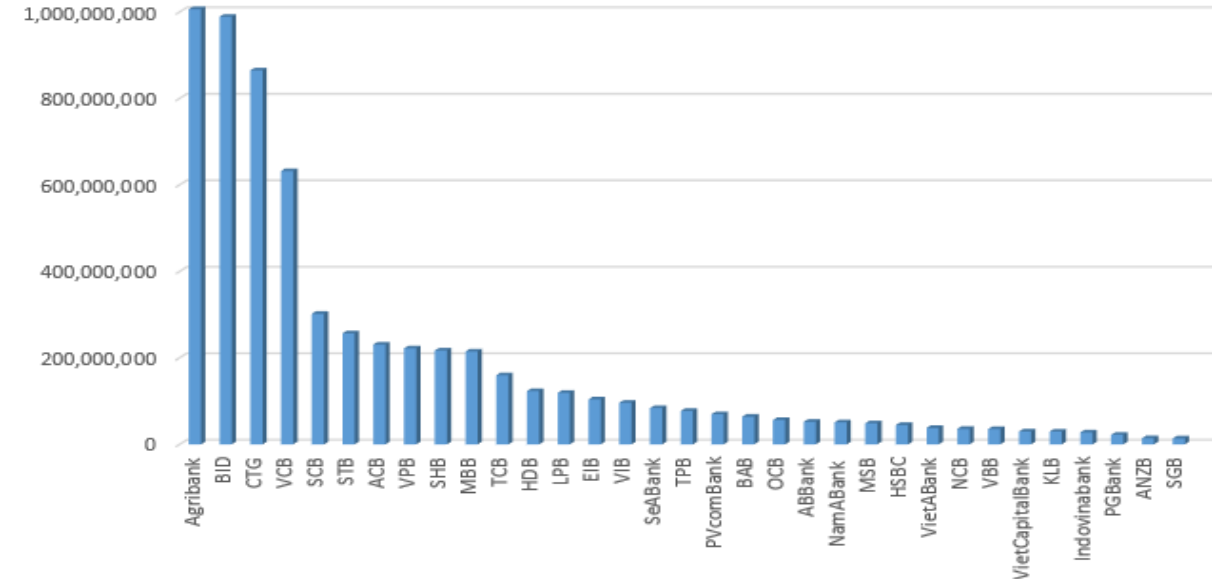


Figure 3: Outstanding loans to customers of banks in 2018 (Unit: VND billion)
 Source: Financial Statement of commercial banks

In terms of outstanding loans, Figure 3 shows that four large state-owned commercial banks such as Agribank, BID, CTG, and VCB still ranked first, reached VND 1,006,442 billion, VND 988,739 billion, and 864,926, and 631,867 billion, respectively. The remaining joint-stock commercial banks achieved outstanding loans of VND 100,000 - 300,000 billion such as SCB, STB, ACB, VPB, SHB, MBB, TCB, HDB, LPB, and EIB.



Figure 4: LDR ratio of the entire banking system (Unit: %) Source: State Bank of Vietnam

In general, the liquidity of the entire banking system has been stable in recent years because deposits from customers have grown steadily while outstanding loans have grown lower than in previous years. Based on Figure 4, the LDR of the entire banking system decreased from 90.23% at the end of 2017 to 88.74% at the end of 11/2018.

Table 6A (Appendix) also shows that currently, the LDR of most state-owned commercial banks has exceeded the benchmark of 90%, except VCB, reached 78.79%, at the same time, this ratio of most joint-stock commercial banks, joint-venture banks, and foreign bank branches have also exceeded the benchmark of 80%. Notably, VPB reached to 129.92%

4.6 Sensitivity to market risk

Sensitivity to market risk is measured by the ratio of the difference between interest-sensitive assets and interest-sensitive liabilities to equity. The ratio of the difference between interest-sensitive assets and interest-sensitive liabilities to the equity which is positive or negative is potentially risky for the bank. If this ratio is positive, the bank will be at risk when interest rates fell because income will fell faster than expenses, and conversely, if this ratio is negative, the bank will be at risk when interest rates rise due to a slower increase in income compared to increase in expenses. Therefore, the nearer to zero the indicator gets, the better this ratio becomes, the lower the risk level. Besides, the State Bank of Vietnam has also set standards so that banks can adjust this ratio so that risks are controlled at the lowest level. To be specific, for large commercial banks is 50%, for small commercial banks is 55%, and for joint venture banks and branches of foreign banks is 80%.

Figure 5 shows that in 2018, most banks had the ratio of the difference between interest-sensitive assets and interest-sensitive liabilities to equity was positive and within the limits set by the SBV, except for ANZB and HSBC. Among them, notably LPB and SeABank, the ratio of the difference between interest-sensitive assets and interest-sensitive liabilities to equity of these banks is very well controlled (less than 3%). Also, there are a few banks that have the ratio of the difference between interest-sensitive assets and interest-sensitive liabilities to equity was negative including KLB, MSB, NCB, PVcomBank, SCB, SHB, STB, TPB, VietABank, and VietCapitalBank. Among them, notably SCB, NCB, PVcomBank, and STB. These banks had the ratio of the difference between interest-sensitive assets and interest-sensitive liabilities to equity, which is too large, beyond the limits set by the SBV (SCB of 605.68%, NCB of 270.16%, PVcomBank of 169.01%, and STB of 152.85%).

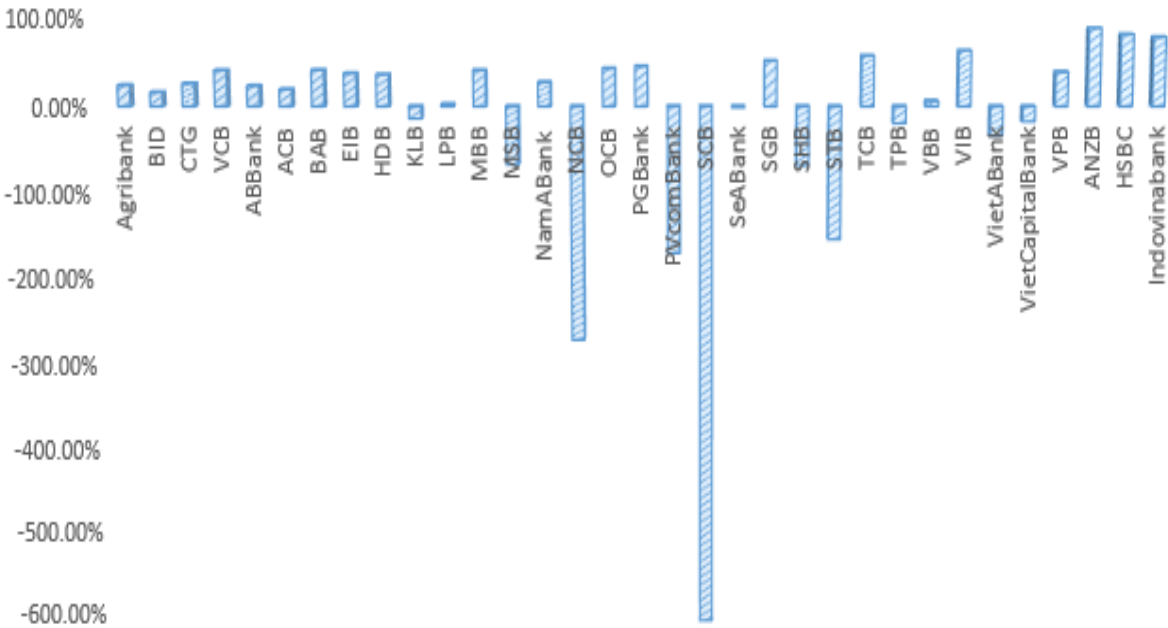


Figure 5: Sensitivity to market risk of banks in 2018
 Source: Financial Statement of commercial banks

4.7 Financial soundness of Vietnamese commercial banks

As mentioned in the methodology, the financial soundness of banks can be categorized from 1 (best) to 5 (worst). The following is a ranking of 37 Vietnamese commercial banks in the 2006-2018 period based on the CAMELS rating system.

Table 5 shows that although there are more competitive advantages than joint-stock commercial banks due to cheaper capital thanks to the state's reputation, the financial soundness of state-owned commercial banks is still at a low level. It is worth mentioning that Agribank, a 100% state-owned commercial bank, has poor financial soundness (almost ranked 4 over the years). Meanwhile, foreign bank branches and joint-venture banks almost always ensure financial soundness over the years. For joint-stock commercial banks, their financial soundness has improved significantly over the years, such as MBB, TCB, ACB, and VPB.

Table 5: Composite CAMELS rating

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| State-Owned Banks | | | | | | | | | | | | | |
| Agribank | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| BID | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 4 |
| CTG | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |
| Oceanbank | - | - | - | - | - | 3 | 3 | 2 | 2 | 2 | 3 | 2 | - |
| VCB | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 2 |
| VNCB | - | - | - | - | - | - | - | 3 | 2 | 2 | 2 | - | - |
| Private Joint-Stock Commercial Banks | | | | | | | | | | | | | |
| ABBank | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 3 | 2 | - |
| ACB | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 2 |
| BAB | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 3 | - | - | - | - | - |
| BaoVietBank | - | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | - | - | - | - |
| DongABank | - | - | - | - | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 2 | 2 |
| EIB | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| HDB | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 3 | 2 | - |
| KLB | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | - | - |
| LPB | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 1 | - | - | - | - |
| MBB | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| MSB | 3 | 3 | 2 | 3 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 |
| NamABank | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 2 |
| NCB | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 3 | 3 | - | - |
| OCB | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 |
| PGBank | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | - |
| PVcomBank | 3 | 3 | 3 | 3 | 3 | 4 | - | - | - | - | - | - | - |
| SCB | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 4 | 4 | 3 | 2 | 2 | 2 |
| SeABank | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 |
| SGB | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | - | - |
| SHB | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 2 | 2 | 2 | - | - | - |
| STB | 4 | 4 | 4 | 4 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 |
| TCB | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 |
| TPB | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | - | - | - |
| VBB | 3 | 3 | 3 | - | - | - | - | - | - | - | - | - | - |
| VIB | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | - |
| VietABank | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 3 | 2 | - |
| VietCapitalBank | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | - |
| VPB | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 2 |
| Branches of Foreign Banks | | | | | | | | | | | | | |
| ANZB | 3 | 2 | 2 | - | - | - | - | - | - | - | - | - | - |
| HSBC | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | - | - | - | - |
| Foreign Joint-Venture Banks | | | | | | | | | | | | | |
| Indovinabank | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | - | - | - | - |

5 Conclusions

Among international rating systems, the CAMELS rating system is considered to be a useful tool for performing banking supervision. Therefore, this rating system is used by the SBV to evaluate the financial soundness of Vietnamese commercial banks. This applying not only strictly adheres to U.S. banking laws and regulations but also adjusts to adapt to the Vietnamese market.

The findings indicate that although there are more competitive advantages than joint-stock commercial banks, the financial soundness of state-owned commercial banks is still at a low level.

References

- [1] Barker, D., Holdsworth, D., The Causes of Bank Failures in the 1980s, *Research Paper No. 9325*, Federal Reserve Bank of New York, 1993.
- [2] Berger, A. N., and Davies, S. M., The Information Content of Bank Examinations, *In proceeding of the 1994 conference on bank structure and competition*, Federal Reserve Bank of Chicago, 1994, 615-28.
- [3] Bovenzi, J. F., Marino, J. A., and McFadden, F. E., Commercial Bank Failure Prediction Models, *Economic Review*, Federal Reserve Bank of Atlanta, 1983, 14–26.
- [4] Cargill, T. F., CAMEL Ratings and the CD Market, *Journal of Financial Services Research*, 3, 1989, 347–358.
- [5] Cole, R. A., and Gunther, J. W., A CAMEL Rating’s Shelf Life, Federal Reserve Bank of Dallas, *Financial industry studies*, 1995, 13-20.
- [6] Cole, R. A., Gunther, J. W., Predicting Bank Failures: A Comparison of On and Off-Site Monitoring Systems, *Journal of Financial Services Research*, 13, 1998, 103-117.
- [7] DeYoung, R., Flannery, M. J., Lang, W., and Sorescu, S., The Informational Advantage of Specialized Monitors: The Case of Bank Examiners, Federal Reserve Bank of Chicago Research Department, *Working Paper*, 1998, 98-4.
- [8] Flannery, M. J., and Houston, J. F., Market Responses to Federal Examinations of U.S. Bank Holding Companies, *mimeo*, University of Florida, 1994.
- [9] Gilbert, R. A., and Park, S., The Value of Early Warning Models in Bank Supervision, *mimeo*, Federal Reserve Bank of St. Louis, 1994.
- [10] Hirschhorn, E., The Information Content of Bank Examination Ratings, *Federal Deposit Insurance Corporation Banking and Economic Review*, 1987, 6–11.
- [11] Hirtle, B. J., Lopez, J. A., Supervisory Information and the Frequency of Bank Examinations. *Federal Reserve Bank of New York Economic Policy Review* 5, 1999, 1-20.
- [12] Circular No. 52/2018/TT-NHNN
- [13] Circular No. 13/2010/TT-NHNN
- [14] Circular No. 41/2016/TT-NHNN
- [15] Decision No. 297/1999/QD-NHNN
- [16] Decision No. 457/2005/QD-NHNN
- [17] Decision No. 06/2008/QD-NHNN

Appendix

Table 1A: Capital Adequacy Ratio (CAR)

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| State-Owned Banks | | | | | | | | | | | | | |
| Agribank | 9.54% | 4.21% | 11.05% | 9.17% | 5.39% | 9.11% | 9.49% | 8.00% | 6.00% | 4.86% | 7.90% | 7.20% | 4.90% |
| BID | 10.34% | 10.90% | 9.50% | 9.81% | 9.27% | 10.23% | 9.65% | 11.07% | 9.33% | 7.55% | 8.94% | 6.67% | 5.90% |
| CTG | 10.00% | 10.00% | 10.40% | 10.60% | 10.40% | 13.20% | 10.33% | 10.57% | 8.02% | 8.06% | 12.02% | 11.62% | 5.18% |
| Oceanbank | - | - | - | - | - | 9.23% | 10.36% | 11.74% | 11.70% | 9.50% | 12.00% | 14.00% | - |
| VCB | 12.14% | 11.63% | 11.13% | 11.04% | 11.35% | 13.13% | 14.63% | 11.14% | 9.00% | 8.11% | 8.90% | 9.20% | 9.30% |
| VNCB | - | - | - | - | - | - | - | 12.73% | 17.34% | 19.14% | 20.34% | - | - |
| Private Joint-Stock Commercial Banks | | | | | | | | | | | | | |
| ABBank | 12.10% | 12.60% | 15.07% | 17.47% | 14.90% | 9.97% | 10.65% | 11.37% | 19.37% | 27.02% | 41.25% | 33.54% | - |
| ACB | 12.81% | 11.49% | 13.19% | 12.80% | 14.10% | 14.70% | 13.50% | 9.25% | 10.60% | 9.73% | 12.44% | 16.19% | 10.90% |
| BAB | 11.15% | 11.40% | 12.96% | 13.05% | 11.75% | 12.20% | 12.46% | 16.04% | - | - | - | - | - |
| BaoVietBank | - | 9.00% | 9.87% | 10.95% | 13.83% | 18.97% | 42.00% | 22.00% | 21.00% | - | - | - | - |
| DongABank | - | - | - | - | 10.17% | 10.42% | 10.85% | 10.01% | 10.84% | 10.64% | 11.30% | 14.36% | 13.57% |
| EIB | 15.05% | 15.98% | 17.12% | 16.52% | 13.62% | 14.47% | 16.38% | 12.94% | 17.79% | 26.87% | 45.89% | 27.00% | 15.97% |
| HDB | 12.10% | 13.50% | 12.53% | 13.70% | 9.24% | 9.97% | 14.01% | 15.00% | 12.71% | 15.67% | 25.33% | 6.96% | - |
| KLB | 16.62% | 15.78% | 16.35% | 19.77% | 18.38% | 20.74% | 33.42% | 19.36% | 22.01% | 21.62% | 13.20% | - | - |
| LPB | 10.85% | 10.28% | 13.23% | 7.06% | 7.33% | 9.14% | 15.48% | 15.89% | 41.00% | - | - | - | - |
| MBB | 10.90% | 12.00% | 12.50% | 12.85% | 12.11% | 12.91% | 11.15% | 9.59% | 12.90% | 12.00% | 12.35% | 14.21% | 15.47% |
| MSB | 12.17% | 19.48% | 23.59% | 24.53% | 15.70% | 10.56% | 11.31% | 10.05% | 9.18% | 8.93% | 14.55% | 31.90% | 23.77% |
| NamABank | 11.15% | 12.63% | 11.18% | 12.92% | 10.66% | 13.47% | 21.44% | 20.29% | 18.04% | 19.24% | 29.81% | 21.07% | 32.63% |
| NCB | 9.58% | 9.27% | 11.30% | 11.08% | 10.83% | 16.03% | 19.09% | 17.18% | 19.47% | 8.87% | 14.00% | - | - |
| OCB | 12.04% | 11.59% | 11.70% | 12.00% | 17.10% | 22.41% | 28.00% | 24.88% | 20.59% | 28.71% | 21.64% | 20.78% | 16.84% |
| PGBank | 14.55% | 14.89% | 18.13% | 21.35% | 12.95% | 19.10% | 22.60% | 16.70% | 20.64% | 13.10% | 26.94% | 19.76% | - |
| PVcomBank | 9.35% | 10.70% | 11.00% | 13.90% | 11.35% | 12.71% | - | - | - | - | - | - | - |
| SCB | 9.69% | 9.83% | 11.17% | 9.95% | 9.39% | 9.95% | 10.35% | 12.42% | 10.32% | 11.54% | 9.91% | 9.36% | 9.40% |

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| SeABank | 12.60% | 13.39% | 15.59% | 17.55% | 17.61% | 14.29% | 15.50% | 13.29% | 13.72% | 17.91% | 18.59% | 12.83% | 10.35% |
| SGB | 22.16% | 19.00% | 23.36% | 19.98% | 22.03% | 24.05% | 23.94% | 22.83% | 21.02% | 15.87% | 14.42% | - | - |
| SHB | 12.14% | 11.30% | 13.00% | 11.40% | 11.33% | 12.38% | 14.18% | 13.37% | 13.81% | 17.06% | - | - | - |
| STB | 10.71% | 11.30% | 9.61% | 10.96% | 10.40% | 10.22% | 9.53% | 11.66% | 9.97% | 11.41% | 12.16% | 11.07% | 11.82% |
| TCB | 14.30% | 12.68% | 13.10% | 14.70% | 15.70% | 14.03% | 12.06% | 11.43% | 13.11% | 9.60% | 13.99% | 14.30% | 17.28% |
| TPB | 10.24% | 9.40% | 9.80% | 12.13% | 15.04% | 19.81% | 40.15% | 18.50% | 18.08% | 18.00% | - | - | - |
| VBB | 11.10% | 9.36% | 10.50% | - | - | - | - | - | - | - | - | - | - |
| VIB | 12.88% | 13.07% | 13.25% | 18.04% | 17.71% | 17.33% | 19.14% | 14.48% | 10.11% | 8.60% | 10.88% | 10.04% | - |
| VietABank | 10.09% | 10.24% | 15.77% | 14.78% | 15.28% | 15.20% | 13.68% | 12.44% | 11.21% | 17.94% | 27.38% | 28.50% | - |
| VietCapitalBank | 10.76% | 11.06% | 13.18% | 15.70% | 13.20% | 20.10% | 27.48% | 34.40% | 54.92% | 45.11% | 55.50% | 77.90% | - |
| VPB | 12.30% | 14.60% | 13.20% | 12.20% | 11.30% | 12.50% | 12.50% | 11.90% | 14.29% | 16.00% | 19.00% | 21.00% | 26.00% |
| Branches of Foreign Banks | | | | | | | | | | | | | |
| ANZB | 17.97% | 17.46% | 13.87% | - | - | - | - | - | - | - | - | - | - |
| HSBC | 14.00% | 14.00% | 16.00% | 20.00% | 16.00% | 13.00% | 12.00% | 13.00% | 13.00% | - | - | - | - |
| Foreign Joint-Venture Banks | | | | | | | | | | | | | |
| Indovinabank | 11.90% | 13.43% | 13.66% | 17.84% | 19.57% | 20.78% | 17.38% | 18.04% | 17.12% | - | - | - | - |
| Entire system | 12.14% | 12.23% | 12.84% | 13.00% | 12.75% | 13.25% | 13.75% | 11.92% | 11.02% | - | - | - | - |

Table 2A: Asset Quality

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|
| State-Owned Banks | | | | | | | | | | | | | |
| Agribank | 1.60% | 2.04% | 2.07% | 2.61% | 5.72% | 5.90% | 5.80% | 6.10% | 3.75% | 2.60% | 2.68% | 2.50% | 1.90% |
| BID | 1.90% | 1.62% | 1.99% | 1.68% | 2.03% | 2.26% | 2.70% | 2.76% | 2.53% | 2.68% | 2.54% | 3.60% | 8.81% |
| CTG | 1.58% | 1.14% | 1.02% | 0.92% | 1.12% | 1.00% | 1.47% | 0.75% | 0.66% | 0.61% | 1.81% | 1.02% | 1.41% |
| Oceanbank | - | - | - | - | - | 2.97% | 2.89% | 2.08% | 1.67% | 1.61% | 1.53% | 1.07% | - |
| VCB | 0.98% | 1.14% | 1.51% | 1.84% | 2.31% | 2.73% | 2.40% | 2.03% | 2.83% | 2.47% | 4.61% | 3.29% | 2.66% |
| VNCB | - | - | - | - | - | - | - | 1.65% | 0.29% | 0.04% | 0.12% | - | - |
| Private Joint-Stock Commercial Banks | | | | | | | | | | | | | |
| ABBank | 1.89% | 2.77% | 2.56% | 2.42% | 4.51% | 7.63% | 2.84% | 2.79% | 1.16% | 1.28% | 1.59% | 1.51% | - |
| ACB | 0.73% | 0.70% | 0.87% | 1.32% | 2.18% | 3.03% | 2.50% | 0.89% | 0.34% | 0.41% | 0.89% | 0.08% | 0.20% |
| BAB | 0.76% | 0.63% | 0.81% | 0.70% | 2.15% | 2.32% | 5.66% | 0.64% | - | - | - | - | - |
| BaoVietBank | - | 3.78% | 1.30% | 1.20% | 1.50% | 3.91% | 5.94% | 4.54% | 0.01% | - | - | - | - |
| DongABank | - | - | - | - | 3.76% | 3.99% | 3.95% | 1.69% | 1.59% | 1.32% | 2.55% | 0.44% | 0.77% |
| EIB | 1.85% | 2.27% | 2.95% | 1.86% | 2.46% | 1.98% | 1.32% | 1.61% | 1.42% | 1.83% | 4.71% | 0.88% | 0.85% |
| HDB | 1.53% | 1.52% | 1.46% | 1.59% | 2.04% | 3.67% | 2.35% | 2.11% | 0.83% | 1.10% | 1.93% | 0.30% | - |
| KLB | 0.94% | 0.84% | 1.06% | 1.13% | 1.95% | 2.47% | 2.93% | 2.77% | 1.11% | 1.17% | 1.66% | - | - |
| LPB | 1.41% | 1.07% | 1.11% | 0.97% | 1.40% | 2.48% | 2.71% | 2.14% | 0.42% | - | - | - | - |
| MBB | 1.33% | 1.20% | 1.32% | 1.61% | 2.73% | 2.45% | 1.84% | 1.59% | 1.26% | 1.58% | 1.83% | 1.01% | 2.82% |
| MSB | 3.01% | 2.23% | 2.36% | 3.41% | 5.16% | 2.71% | 2.65% | 2.27% | 1.87% | 0.62% | 1.49% | 2.08% | 3.76% |
| NamABank | 1.54% | 1.95% | 2.94% | 0.91% | 1.47% | 1.48% | 2.71% | 2.84% | 2.18% | 1.71% | 2.56% | 1.64% | 1.62% |
| NCB | 2.12% | 1.53% | 1.48% | 2.15% | 2.52% | 6.07% | 5.64% | 2.92% | 2.24% | 2.45% | 2.91% | - | - |
| OCB | 2.29% | 1.79% | 1.51% | 1.90% | 3.00% | 2.90% | 2.80% | 2.80% | 2.05% | 2.64% | 2.87% | 1.39% | 1.21% |
| PGBank | 3.06% | 3.34% | 2.47% | 2.75% | 2.48% | 2.98% | 8.44% | 2.06% | 1.42% | 1.23% | 1.42% | 0.06% | - |
| PVcomBank | 2.48% | 1.75% | 1.38% | 1.90% | 2.88% | 4.90% | - | - | - | - | - | - | - |
| SCB | 0.42% | 0.45% | 0.68% | 0.34% | 0.49% | 1.63% | 7.23% | 11.36% | 11.40% | 1.28% | 0.57% | 0.34% | 0.85% |

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| SeABank | 1.57% | 0.91% | 1.83% | 1.60% | 2.86% | 2.84% | 2.97% | 2.76% | 2.14% | 1.88% | 2.14% | 0.24% | 0.23% |
| SGB | 2.19% | 2.98% | 2.63% | 1.88% | 2.08% | 2.24% | 2.93% | 4.75% | 1.91% | 1.79% | 0.69% | - | - |
| SHB | 2.40% | 2.33% | 1.87% | 1.72% | 2.02% | 5.66% | 8.81% | 2.23% | 1.40% | 2.79% | - | - | - |
| STB | 2.13% | 4.67% | 6.91% | 5.80% | 1.19% | 1.46% | 2.05% | 0.58% | 0.54% | 0.69% | 0.62% | 0.24% | 0.72% |
| TCB | 1.75% | 1.61% | 1.58% | 1.67% | 2.38% | 3.65% | 2.70% | 2.83% | 2.29% | 2.49% | 2.53% | 3.00% | 3.11% |
| TPB | 1.12% | 1.10% | 0.71% | 0.67% | 1.11% | 2.33% | 3.66% | 0.67% | 0.02% | 0.00% | - | - | - |
| VBB | 1.25% | 1.35% | 1.69% | - | - | - | - | - | - | - | - | - | - |
| VIB | 2.20% | 2.49% | 2.58% | 2.07% | 2.51% | 2.82% | 2.62% | 2.69% | 1.59% | 1.27% | 1.85% | 1.21% | - |
| VietABank | 1.37% | 2.68% | 2.14% | 2.26% | 2.33% | 2.88% | 4.65% | 2.56% | 2.52% | 1.13% | 1.80% | 0.67% | - |
| VietCapitalBank | 2.10% | 1.80% | 1.30% | 1.20% | 1.54% | 4.11% | 1.90% | 2.70% | 4.07% | 3.42% | 1.24% | 0.44% | - |
| VPB | 3.50% | 3.39% | 2.91% | 2.69% | 2.54% | 2.81% | 2.72% | 1.82% | 1.20% | 1.63% | 3.41% | 0.49% | 0.41% |
| Branches of Foreign Banks | | | | | | | | | | | | | |
| ANZB | 0.00% | 0.00% | 0.49% | - | - | - | - | - | - | - | - | - | - |
| HSBC | 0.44% | 0.52% | 0.84% | 1.06% | 2.89% | 3.38% | 2.57% | 1.83% | 1.47% | - | - | - | - |
| Foreign Joint-Venture Banks | | | | | | | | | | | | | |
| Indovinabank | 0.86% | 1.78% | 2.22% | 4.00% | 1.20% | 2.50% | 3.30% | 1.62% | 0.18% | - | - | - | - |
| Entire system | 1.89% | 1.99% | 2.46% | 2.55% | 3.70% | 3.79% | 4.86% | 3.30% | 2.52% | 1.90% | 2.06% | 1.50% | - |

Table 3A: Management

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|--------------------------------------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|
| State-Owned Banks | | | | | | | | | | | | | |
| Agribank | 45.31% | 45.36% | 51.97% | 51.91% | 57.88% | 59.16% | 86.51% | 88.86% | 55.82% | 55.13% | 47.80% | 42.68% | 47.61% |
| BID | 36.23% | 39.74% | 44.45% | 44.87% | 39.37% | 38.57% | 39.83% | 83.78% | 52.50% | 55.14% | 42.59% | 44.18% | 41.38% |
| CTG | 49.61% | 46.20% | 48.64% | 47.13% | 46.72% | 46.55% | 42.96% | 40.57% | 48.57% | 58.28% | 57.02% | 41.60% | 46.92% |
| Oceanbank | - | - | - | - | - | 48.92% | 47.16% | 39.69% | 30.48% | 36.69% | 58.02% | 25.11% | - |
| VCB | 34.65% | 40.35% | 39.99% | 39.18% | 39.65% | 40.27% | 39.82% | 38.33% | 39.43% | 37.62% | 30.26% | 28.24% | 22.98% |
| VNCB | - | - | - | - | - | - | - | 51.86% | 35.91% | 51.75% | 58.60% | - | - |
| Private Joint-Stock Commercial Banks | | | | | | | | | | | | | |
| ABBank | 57.35% | 59.23% | 57.43% | 60.36% | 65.58% | 66.92% | 61.21% | 47.13% | 43.82% | 41.94% | 73.15% | 34.70% | - |
| ACB | 47.83% | 54.35% | 61.86% | 64.65% | 63.79% | 66.54% | 73.19% | 41.16% | 39.35% | 36.67% | 37.53% | 26.64% | 38.85% |
| BAB | 44.06% | 41.89% | 50.51% | 48.08% | 48.05% | 52.31% | 78.20% | 61.91% | - | - | - | - | - |
| BaoVietBank | - | 47.61% | 54.41% | 59.98% | 59.52% | 51.79% | 58.17% | 54.95% | 41.69% | - | - | - | - |
| DongABank | - | - | - | - | 71.70% | 60.98% | 49.38% | 45.51% | 48.60% | 43.82% | 38.25% | 40.71% | 45.44% |
| EIB | 65.17% | 57.63% | 60.38% | 60.66% | 69.62% | 65.28% | 42.64% | 30.62% | 27.98% | 35.20% | 31.85% | 34.79% | 31.30% |
| HDB | 47.05% | 54.25% | 60.48% | 58.31% | 62.79% | 70.04% | 52.32% | 47.69% | 47.55% | 40.69% | 61.56% | 32.19% | - |
| KLB | 73.91% | 71.53% | 73.67% | 67.35% | 65.54% | 55.25% | 51.22% | 38.72% | 38.35% | 46.37% | 59.73% | - | - |
| LPB | 62.47% | 55.13% | 52.47% | 62.85% | 63.94% | 55.69% | 44.85% | 44.72% | 38.50% | - | - | - | - |
| MBB | 44.70% | 43.26% | 42.36% | 39.32% | 37.49% | 35.85% | 34.51% | 36.54% | 30.67% | 29.55% | 33.91% | 35.70% | 31.29% |
| MSB | 61.99% | 63.61% | 49.86% | 72.54% | 62.15% | 69.91% | 70.83% | 52.06% | 35.82% | 30.39% | 36.32% | 31.70% | 35.58% |
| NamABank | 64.27% | 51.17% | 59.71% | 54.26% | 59.16% | 61.57% | 49.46% | 40.92% | 42.73% | 58.81% | 81.88% | 40.77% | 45.22% |
| NCB | 81.69% | 78.32% | 82.16% | 85.47% | 91.09% | 92.74% | 87.64% | 57.50% | 52.27% | 42.56% | 66.55% | - | - |
| OCB | 37.28% | 53.09% | 56.27% | 55.78% | 52.80% | 49.62% | 47.87% | 47.17% | 40.06% | 42.11% | 63.96% | 38.00% | 38.26% |
| PGBank | 43.40% | 46.85% | 54.03% | 64.88% | 63.84% | 69.94% | 48.07% | 38.76% | 42.53% | 36.57% | 48.65% | 28.06% | - |
| PVcomBank | 85.39% | 88.13% | 92.13% | 96.45% | 92.45% | 111.52% | - | - | - | - | - | - | - |
| SCB | 63.40% | 76.03% | 60.38% | 52.28% | 54.09% | 70.73% | 71.08% | 55.10% | 38.79% | 42.68% | 38.02% | 39.56% | 39.18% |

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|----------|--------|--------|--------|--------|--------|
| SeABank | 58.07% | 57.77% | 58.50% | 82.17% | 71.47% | 74.54% | 81.24% | 72.37% | 31.05% | 28.09% | 42.33% | 18.81% | 26.62% |
| SGB | 53.13% | 53.28% | 57.80% | 53.88% | 40.21% | 49.76% | 36.43% | 34.62% | 22.51% | 37.97% | 40.74% | - | - |
| SHB | 47.80% | 44.90% | 50.50% | 52.79% | 49.87% | 78.58% | 57.12% | 50.52% | 45.73% | 39.55% | - | - | - |
| STB | 67.12% | 73.30% | 86.96% | 62.19% | 54.07% | 55.33% | 60.62% | 53.13% | 43.07% | 40.01% | 51.75% | 30.36% | 38.43% |
| TCB | 31.84% | 28.75% | 36.01% | 39.41% | 47.22% | 59.42% | 57.17% | 31.51% | 33.65% | 30.21% | 29.01% | 35.62% | 36.84% |
| TPB | 50.59% | 53.79% | 57.63% | 51.10% | 57.77% | 47.58% | 63.28% | 8630.19% | 42.84% | 40.04% | - | - | - |
| VBB | 64.51% | 78.98% | 79.92% | - | - | - | - | - | - | - | - | - | - |
| VIB | 44.20% | 57.08% | 61.53% | 60.26% | 47.08% | 62.12% | 55.70% | 48.20% | 46.99% | 54.52% | 66.60% | 43.88% | - |
| VietABank | 47.84% | 56.51% | 50.84% | 50.14% | 82.74% | 76.36% | 59.30% | 50.54% | 41.99% | 38.74% | 54.66% | 31.16% | - |
| VietCapitalBank | 74.16% | 83.66% | 88.06% | 77.72% | 66.92% | 67.94% | 52.93% | 35.99% | 53.69% | 45.39% | 88.00% | 16.19% | - |
| VPB | 34.21% | 35.54% | 39.26% | 47.18% | 58.73% | 55.77% | 60.02% | 51.78% | 41.59% | 51.90% | 64.85% | 48.71% | 45.03% |
| Branches of Foreign Banks | | | | | | | | | | | | | |
| ANZB | 79.06% | 48.64% | 66.60% | - | - | - | - | - | - | - | - | - | - |
| HSBC | 39.04% | 44.60% | 49.76% | 58.98% | 57.22% | 46.89% | 44.58% | 46.32% | 49.19% | - | - | - | - |
| Foreign Joint-Venture Banks | | | | | | | | | | | | | |
| Indovinabank | 34.42% | 29.91% | 35.02% | 47.95% | 44.78% | 38.59% | 43.24% | 29.50% | 39.40% | - | - | - | - |

Table 4A: Earnings (ROA)

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| State-Owned Banks | | | | | | | | | | | | | |
| Agribank | 0.47% | 0.36% | 0.32% | 0.29% | 0.24% | 0.26% | 0.42% | 0.42% | 0.26% | 0.42% | 0.59% | 0.58% | 0.40% |
| BID | 0.60% | 0.63% | 0.67% | 0.85% | 0.83% | 0.78% | 0.58% | 0.13% | 0.89% | 0.94% | 0.80% | 0.89% | 0.44% |
| CTG | 0.48% | 0.73% | 0.79% | 0.79% | 0.93% | 1.08% | 1.28% | 1.51% | 1.12% | 0.59% | 1.00% | 0.76% | 0.48% |
| Oceanbank | - | - | - | - | - | 0.29% | 0.38% | 0.83% | 1.17% | 0.95% | 0.33% | 1.33% | - |
| VCB | 1.39% | 1.00% | 0.94% | 0.85% | 0.88% | 0.99% | 1.13% | 1.25% | 1.50% | 1.65% | 1.21% | 1.32% | 1.90% |
| VNCB | - | - | - | - | - | - | - | 0.70% | 1.67% | 0.79% | 1.00% | - | - |
| Private Joint-Stock Commercial Banks | | | | | | | | | | | | | |
| ABBank | 0.82% | 0.62% | 0.35% | 0.14% | 0.19% | 0.27% | 0.91% | 0.77% | 1.54% | 1.56% | 0.32% | 1.59% | - |
| ACB | 1.67% | 0.82% | 0.61% | 0.54% | 0.55% | 0.48% | 0.34% | 1.32% | 1.25% | 1.61% | 2.32% | 2.71% | 1.47% |
| BAB | 0.72% | 0.72% | 0.72% | 0.60% | 0.51% | 0.46% | 0.12% | 0.67% | - | - | - | - | - |
| BaoVietBank | - | 0.28% | 0.29% | 0.32% | 0.51% | 0.71% | 0.69% | 0.86% | 1.27% | - | - | - | - |
| DongABank | - | - | - | - | 0.03% | 0.46% | 0.83% | 1.53% | 1.40% | 1.49% | 1.69% | 2.05% | 1.56% |
| EIB | 0.44% | 0.59% | 0.24% | 0.03% | 0.03% | 0.39% | 1.21% | 1.93% | 1.85% | 1.99% | 1.74% | 1.78% | 1.74% |
| HDB | 1.58% | 1.15% | 0.71% | 0.61% | 0.51% | 0.31% | 0.67% | 1.07% | 1.01% | 1.35% | 0.51% | 1.36% | - |
| KLB | 0.58% | 0.60% | 0.43% | 0.68% | 0.79% | 1.57% | 1.93% | 2.59% | 1.95% | 1.76% | 1.45% | - | - |
| LPB | 0.57% | 0.90% | 0.85% | 0.34% | 0.52% | 0.78% | 1.42% | 2.14% | 2.61% | - | - | - | - |
| MBB | 1.83% | 1.22% | 1.21% | 1.19% | 1.31% | 1.28% | 1.48% | 1.54% | 1.95% | 1.93% | 1.90% | 2.28% | 2.01% |
| MSB | 0.69% | 0.12% | 0.14% | 0.11% | 0.14% | 0.30% | 0.20% | 0.69% | 1.29% | 1.60% | 1.26% | 1.32% | 1.23% |
| NamABank | 0.91% | 0.49% | 0.08% | 0.53% | 0.57% | 0.60% | 1.03% | 1.43% | 1.09% | 0.67% | 0.17% | 1.65% | 1.41% |
| NCB | 0.05% | 0.03% | 0.02% | 0.02% | 0.02% | 0.07% | 0.01% | 0.78% | 0.81% | 0.96% | 0.55% | - | - |
| OCB | 1.91% | 1.10% | 0.68% | 0.47% | 0.61% | 0.80% | 0.87% | 1.34% | 1.88% | 1.81% | 0.60% | 1.85% | 1.98% |
| PGBank | 0.43% | 0.24% | 0.50% | 0.16% | 0.52% | 0.17% | 1.30% | 2.63% | 1.63% | 2.11% | 1.21% | 1.39% | - |
| PVcomBank | 0.07% | 0.08% | 0.03% | 0.05% | 0.16% | 0.02% | - | - | - | - | - | - | - |
| SCB | 0.04% | 0.03% | 0.02% | 0.03% | 0.04% | 0.03% | 0.06% | 0.58% | 0.49% | 0.68% | 1.44% | 1.41% | 1.65% |

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| SeABank | 0.37% | 0.27% | 0.12% | 0.11% | 0.11% | 0.20% | 0.06% | 0.16% | 1.47% | 1.73% | 1.32% | 1.64% | 1.21% |
| SGB | 0.20% | 0.27% | 0.76% | 0.26% | 1.19% | 1.17% | 1.97% | 1.89% | 5.57% | 1.82% | 1.51% | - | - |
| SHB | 0.55% | 0.59% | 0.42% | 0.43% | 0.51% | 0.65% | 0.03% | 1.23% | 1.26% | 1.52% | - | - | - |
| STB | 0.46% | 0.34% | 0.03% | 0.27% | 1.26% | 1.42% | 0.68% | 1.36% | 1.49% | 1.94% | 1.44% | 3.13% | 2.40% |
| TCB | 2.87% | 2.55% | 1.47% | 0.83% | 0.65% | 0.39% | 0.42% | 1.91% | 1.71% | 2.24% | 2.37% | 1.79% | 1.84% |
| TPB | 1.39% | 0.84% | 0.62% | 0.88% | 1.28% | 1.62% | 0.58% | -5.99% | 1.02% | 1.95% | - | - | - |
| VBB | 0.69% | 0.67% | 0.19% | - | - | - | - | - | - | - | - | - | - |
| VIB | 1.67% | 0.99% | 0.59% | 0.63% | 0.66% | 0.07% | 0.64% | 0.67% | 1.05% | 1.01% | 0.46% | 1.11% | - |
| VietABank | 0.17% | 0.16% | 0.19% | 0.21% | 0.15% | 0.23% | 0.70% | 1.06% | 1.34% | 1.61% | 0.73% | 2.15% | - |
| VietCapitalBank | 0.22% | 0.09% | 0.01% | 0.19% | 0.64% | 0.45% | 1.08% | 2.14% | 0.98% | 1.64% | 0.18% | 4.57% | - |
| VPB | 2.45% | 2.54% | 1.86% | 1.34% | 0.88% | 0.91% | 0.69% | 1.12% | 1.15% | 1.27% | 0.78% | 1.61% | 1.40% |
| Branches of Foreign Banks | | | | | | | | | | | | | |
| ANZB | 0.15% | 3.27% | 1.16% | - | - | - | - | - | - | - | - | - | - |
| HSBC | 2.62% | 2.24% | 2.01% | 1.19% | 1.08% | 1.58% | 2.34% | 2.90% | 2.48% | - | - | - | - |
| Foreign Joint-Venture Banks | | | | | | | | | | | | | |
| Indovinabank | 1.47% | 1.36% | 1.26% | 0.59% | 1.36% | 1.23% | 1.07% | 1.89% | 1.59% | - | - | - | - |
| Entire system | 0.70% | 0.57% | 0.45% | 0.44% | 0.51% | 0.49% | 0.62% | - | - | - | - | - | - |

Table 5A: Earnings (ROE)

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| State-Owned Banks | | | | | | | | | | | | | |
| Agribank | 10.81% | 8.47% | 6.89% | 5.67% | 4.53% | 4.59% | 7.90% | 8.13% | 5.36% | 9.72% | 12.78% | 12.79% | 9.02% |
| BID | 14.59% | 14.94% | 14.41% | 16.79% | 15.13% | 13.73% | 11.28% | 2.41% | 16.84% | 21.04% | 19.38% | 24.90% | 16.03% |
| CTG | 8.26% | 12.01% | 11.77% | 10.27% | 10.46% | 13.18% | 19.73% | 26.60% | 21.92% | 10.23% | 15.70% | 14.14% | 11.31% |
| Oceanbank | - | - | - | - | - | 4.27% | 5.33% | 11.18% | 16.42% | 13.65% | 4.13% | 15.05% | - |
| VCB | 25.49% | 18.10% | 14.69% | 12.05% | 10.76% | 10.43% | 12.61% | 17.11% | 22.60% | 25.64% | 18.45% | 19.45% | 29.22% |
| VNCB | - | - | - | - | - | - | - | 5.07% | 9.81% | 4.27% | 3.58% | - | - |
| Private Joint-Stock Commercial Banks | | | | | | | | | | | | | |
| ABBank | 11.01% | 8.17% | 4.19% | 1.59% | 2.04% | 2.64% | 8.30% | 6.55% | 10.85% | 7.38% | 1.54% | 8.82% | - |
| ACB | 27.73% | 14.08% | 9.87% | 8.17% | 7.64% | 6.58% | 6.38% | 27.49% | 21.74% | 24.63% | 31.53% | 44.25% | 33.93% |
| BAB | 10.06% | 9.89% | 9.26% | 7.89% | 7.37% | 5.95% | 1.08% | 4.88% | - | - | - | - | - |
| BaoVietBank | - | 3.42% | 2.77% | 2.58% | 3.18% | 3.35% | 3.78% | 6.96% | 8.30% | - | - | - | - |
| DongABank | - | - | - | - | 0.47% | 5.89% | 11.20% | 19.58% | 18.58% | 18.06% | 18.01% | 20.89% | 11.71% |
| EIB | 4.53% | 5.94% | 2.32% | 0.29% | 0.39% | 4.32% | 13.32% | 20.39% | 13.51% | 8.65% | 7.43% | 11.25% | 18.58% |
| HDB | 20.27% | 15.82% | 9.24% | 6.62% | 5.36% | 3.11% | 7.30% | 14.44% | 12.97% | 11.20% | 4.97% | 16.75% | - |
| KLB | 6.35% | 5.83% | 3.59% | 4.90% | 5.14% | 9.06% | 10.17% | 11.81% | 9.01% | 8.47% | 4.42% | - | - |
| LPB | 9.80% | 15.45% | 13.34% | 4.67% | 6.36% | 7.72% | 12.42% | 18.26% | 17.22% | - | - | - | - |
| MBB | 19.41% | 12.42% | 11.59% | 12.46% | 15.24% | 15.64% | 19.47% | 19.12% | 20.25% | 17.99% | 17.10% | 19.98% | 21.71% |
| MSB | 6.31% | 0.89% | 1.03% | 1.01% | 1.51% | 3.57% | 2.44% | 10.08% | 23.42% | 28.48% | 16.86% | 12.90% | 15.20% |
| NamABank | 14.97% | 6.74% | 0.96% | 5.70% | 5.68% | 4.13% | 5.49% | 8.79% | 7.89% | 4.29% | 0.99% | 11.87% | 9.89% |
| NCB | 1.12% | 0.68% | 0.34% | 0.20% | 0.25% | 0.58% | 0.07% | 6.35% | 9.84% | 12.70% | 6.90% | - | - |
| OCB | 23.58% | 15.05% | 8.65% | 5.08% | 5.53% | 6.20% | 6.07% | 8.79% | 11.13% | 10.84% | 4.44% | 14.73% | 16.65% |
| PGBank | 3.50% | 1.83% | 3.57% | 1.22% | 4.00% | 1.19% | 8.30% | 18.73% | 13.40% | 16.51% | 8.35% | 10.82% | - |
| PVcomBank | 0.86% | 0.90% | 0.37% | 0.57% | 1.73% | 0.23% | - | - | - | - | - | - | - |
| SCB | 1.10% | 0.80% | 0.51% | 0.56% | 0.69% | 0.35% | 0.79% | 8.37% | 5.98% | 8.51% | 16.93% | 14.91% | 21.54% |

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|
| SeABank | 6.82% | 5.06% | 2.01% | 1.60% | 1.52% | 2.68% | 0.95% | 2.24% | 11.21% | 9.52% | 8.51% | 13.52% | 14.63% |
| SGB | 1.22% | 1.58% | 4.04% | 1.25% | 5.18% | 4.91% | 8.69% | 8.90% | 29.20% | 12.34% | 11.12% | - | - |
| SHB | 10.78% | 11.02% | 7.46% | 7.31% | 7.59% | 8.55% | 0.34% | 15.04% | 14.98% | 13.60% | - | - | - |
| STB | 7.48% | 5.20% | 0.40% | 3.23% | 12.56% | 14.49% | 7.10% | 13.65% | 15.00% | 18.03% | 12.64% | 27.36% | 19.76% |
| TCB | 21.53% | 27.71% | 17.47% | 9.73% | 7.49% | 4.84% | 5.93% | 28.79% | 24.80% | 26.28% | 25.54% | 19.13% | 18.54% |
| TPB | 20.87% | 15.59% | 10.79% | 12.44% | 13.50% | 10.87% | 4.66% | -56.33% | 6.69% | 9.64% | - | - | - |
| VBB | 8.22% | 8.21% | 2.31% | - | - | - | - | - | - | - | - | - | - |
| VIB | 22.55% | 12.83% | 6.47% | 6.09% | 6.34% | 0.61% | 6.27% | 8.66% | 16.58% | 17.54% | 7.55% | 18.31% | - |
| VietABank | 2.84% | 2.43% | 2.51% | 2.17% | 1.31% | 1.69% | 4.62% | 7.12% | 10.43% | 13.14% | 5.14% | 14.07% | - |
| VietCapitalBank | 2.78% | 1.01% | 0.08% | 1.61% | 4.96% | 3.18% | 6.22% | 10.04% | 3.55% | 5.06% | 0.55% | 13.07% | - |
| VPB | 22.83% | 27.48% | 25.75% | 21.42% | 15.01% | 14.17% | 10.19% | 14.28% | 12.98% | 11.88% | 6.23% | 15.03% | 19.44% |
| Branches of Foreign Banks | | | | | | | | | | | | | |
| ANZB | 0.83% | 22.06% | 10.91% | - | - | - | - | - | - | - | - | - | - |
| HSBC | 21.16% | 16.31% | 13.98% | 9.22% | 9.62% | 16.36% | 24.14% | 29.90% | 24.96% | - | - | - | - |
| Foreign Joint-Venture Banks | | | | | | | | | | | | | |
| Indovinabank | 11.71% | 10.01% | 8.20% | 3.15% | 6.77% | 6.43% | 6.02% | 10.71% | 8.30% | - | - | - | - |
| Entire system | 9.06% | 7.64% | 5.66% | 4.95% | 5.49% | 5.18% | 6.31% | - | - | - | - | - | - |

Table 6A: Liquidity

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| State-Owned Banks | | | | | | | | | | | | | |
| Agribank | 91.20% | 87.37% | 86.49% | 82.59% | 85.13% | 94.39% | 95.74% | 108.41% | 112.92% | 110.91% | 98.19% | 109.44% | 119.18% |
| BID | 99.91% | 100.80% | 99.68% | 105.98% | 101.19% | 115.38% | 112.16% | 120.64% | 102.71% | 109.31% | 97.73% | 96.22% | 86.74% |
| CTG | 104.74% | 105.01% | 101.06% | 109.15% | 103.70% | 103.24% | 115.31% | 114.06% | 113.74% | 109.97% | 99.27% | 90.68% | 80.41% |
| Oceanbank | - | - | - | - | - | 54.85% | 60.68% | 49.72% | 41.64% | 43.59% | 92.62% | 194.80% | - |
| VCB | 78.79% | 76.70% | 78.04% | 77.36% | 76.58% | 82.56% | 84.79% | 92.25% | 86.35% | 83.76% | 71.81% | 68.88% | 56.56% |
| VNCB | - | - | - | - | - | - | - | 106.78% | 112.33% | 133.81% | 80.59% | - | - |
| Private Joint-Stock Commercial Banks | | | | | | | | | | | | | |
| ABBank | 83.82% | 82.74% | 77.24% | 65.04% | 57.58% | 63.63% | 65.27% | 98.35% | 84.74% | 85.88% | 97.98% | 101.21% | - |
| ACB | 85.38% | 82.24% | 78.92% | 76.63% | 75.24% | 77.61% | 82.10% | 72.29% | 81.54% | 71.74% | 54.24% | 57.54% | 57.88% |
| BAB | 88.21% | 87.50% | 81.31% | 78.94% | 78.68% | 69.59% | 76.90% | 180.50% | - | - | - | - | - |
| BaoVietBank | - | 90.31% | 73.81% | 85.24% | 78.90% | 92.50% | 107.71% | 95.49% | 77.01% | - | - | - | - |
| DongABank | - | - | - | - | 66.97% | 81.50% | 99.72% | 122.01% | 121.97% | 122.81% | 111.13% | 123.90% | 85.97% |
| EIB | 87.66% | 86.20% | 84.90% | 86.11% | 85.97% | 104.88% | 106.34% | 139.16% | 107.21% | 99.01% | 68.76% | 80.56% | 77.67% |
| HDB | 96.15% | 86.69% | 79.60% | 75.87% | 63.99% | 70.58% | 61.72% | 72.54% | 83.86% | 87.01% | 142.39% | 251.77% | - |
| KLB | 100.91% | 94.49% | 86.36% | 80.76% | 81.63% | 91.17% | 91.00% | 103.27% | 107.05% | 101.67% | 132.90% | - | - |
| LPB | 95.39% | 78.44% | 71.79% | 72.35% | 53.06% | 53.19% | 55.62% | 49.72% | 79.86% | - | - | - | - |
| MBB | 89.47% | 83.65% | 77.38% | 66.83% | 60.00% | 64.47% | 63.25% | 65.94% | 74.23% | 74.01% | 57.95% | 64.49% | 56.59% |
| MSB | 76.76% | 63.70% | 60.98% | 44.86% | 37.19% | 41.85% | 48.57% | 60.60% | 65.46% | 79.43% | 79.44% | 88.59% | 76.30% |
| NamABank | 93.78% | 91.18% | 70.54% | 85.63% | 78.06% | 84.58% | 71.76% | 96.89% | 91.70% | 111.39% | 109.86% | 96.32% | 108.06% |
| NCB | 75.66% | 70.23% | 60.66% | 60.04% | 68.09% | 73.33% | 104.99% | 87.13% | 100.42% | 103.43% | 90.91% | - | - |
| OCB | 93.30% | 90.56% | 89.42% | 93.86% | 89.81% | 105.56% | 112.88% | 141.39% | 133.35% | 126.89% | 126.50% | 130.94% | 185.77% |
| PGBank | 94.46% | 93.63% | 95.83% | 94.18% | 80.58% | 100.04% | 111.80% | 110.86% | 101.70% | 90.88% | 107.56% | 146.17% | - |
| PVcomBank | 67.63% | 66.17% | 59.61% | 62.36% | 59.73% | 83.78% | - | - | - | - | - | - | - |
| SCB | 78.43% | 76.93% | 75.28% | 66.59% | 67.50% | 60.51% | 111.32% | 103.11% | 94.47% | 103.98% | 101.35% | 121.96% | 229.52% |

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|-----------------------------|---------|---------|---------|--------|--------|--------|---------|---------|---------|---------|---------|---------|--------|
| SeABank | 99.48% | 88.11% | 81.78% | 75.07% | 71.21% | 57.84% | 53.09% | 57.17% | 82.74% | 77.97% | 88.34% | 102.76% | 95.77% |
| SGB | 93.14% | 94.99% | 88.46% | 88.36% | 94.84% | 98.77% | 103.92% | 125.24% | 115.71% | 114.63% | 110.49% | - | - |
| SHB | 96.34% | 101.74% | 97.48% | 88.31% | 84.47% | 84.30% | 73.38% | 83.83% | 95.09% | 87.44% | - | - | - |
| STB | 73.45% | 69.70% | 68.18% | 71.23% | 78.51% | 83.99% | 89.65% | 107.25% | 105.30% | 98.58% | 75.89% | 79.98% | 82.20% |
| TCB | 79.41% | 94.08% | 82.22% | 78.48% | 60.98% | 58.57% | 61.24% | 71.58% | 65.71% | 67.51% | 65.16% | 81.06% | 90.91% |
| TPB | 101.38% | 90.22% | 84.68% | 71.48% | 91.75% | 83.21% | 65.62% | 58.70% | 69.13% | 75.47% | - | - | - |
| VBB | 89.06% | 91.73% | 87.18% | - | - | - | - | - | - | - | - | - | - |
| VIB | 113.29% | 116.80% | 101.55% | 89.63% | 77.83% | 81.50% | 86.75% | 98.52% | 92.76% | 84.51% | 82.72% | 94.67% | - |
| VietABank | 91.66% | 99.49% | 94.49% | 82.93% | 79.99% | 76.44% | 85.95% | 159.77% | 141.47% | 111.40% | 89.06% | 125.94% | - |
| VietCapitalBank | 88.64% | 92.63% | 85.31% | 85.18% | 87.49% | 83.32% | 75.56% | 83.73% | 115.14% | 199.30% | 209.11% | 251.98% | - |
| VPB | 129.92% | 136.78% | 116.87% | 89.66% | 72.34% | 62.59% | 62.01% | 99.22% | 105.65% | 95.90% | 90.68% | 104.10% | 88.70% |
| Branches of Foreign Banks | | | | | | | | | | | | | |
| ANZB | 85.16% | 97.36% | 43.47% | - | - | - | - | - | - | - | - | - | - |
| HSBC | 52.55% | 53.67% | 58.04% | 47.72% | 51.16% | 63.81% | 71.82% | 58.12% | 69.35% | - | - | - | - |
| Foreign Joint-Venture Banks | | | | | | | | | | | | | |
| Indovinabank | 93.37% | 84.08% | 84.71% | 76.08% | 85.00% | 93.74% | 93.47% | 123.86% | 130.18% | - | - | - | - |

Table 7A: Sensitivity to market risk

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|----------|
| State-Owned Banks | | | | | | | | | | | | | |
| Agribank | 23.92% | 20.06% | 14.60% | 15.78% | 16.05% | 6.93% | 0.06% | -42.38% | -7.34% | -23.63% | -19.26% | 11.40% | 5.71% |
| BID | 15.87% | 17.86% | 19.73% | 17.37% | 1.57% | 10.99% | 13.28% | 31.95% | 33.84% | 27.67% | 23.78% | 3.51% | -33.55% |
| CTG | 25.89% | 23.40% | 24.51% | 27.32% | 28.56% | 38.83% | 19.26% | 24.33% | 10.96% | 32.39% | 51.36% | 60.07% | 62.38% |
| Oceanbank | - | - | - | - | - | -18.59% | -9.35% | -54.50% | -102.91% | -106.68% | -8.37% | -47.26% | - |
| VCB | 41.02% | 44.11% | 45.67% | 49.17% | 52.49% | 60.57% | 63.67% | 50.70% | 43.54% | 51.93% | 55.14% | 59.69% | 74.67% |
| VNCB | - | - | - | - | - | - | - | -58.89% | 14.05% | 2.73% | 25.51% | - | - |
| Private Joint-Stock Commercial Banks | | | | | | | | | | | | | |
| ABBank | 23.25% | 30.50% | 17.88% | 16.03% | -8.35% | 10.56% | -46.42% | -20.85% | 13.65% | 81.79% | 82.00% | 76.19% | - |
| ACB | 19.42% | 0.26% | -2.41% | -18.38% | -23.06% | -23.24% | -64.12% | -412.89% | -159.18% | -223.65% | -102.40% | -34.94% | -125.30% |
| BAB | 41.39% | 40.70% | 31.72% | 6.77% | -7.13% | -44.30% | -69.67% | -30.16% | - | - | - | - | - |
| BaoVietBank | - | 43.80% | 65.23% | 64.87% | 78.60% | 83.44% | 84.69% | 71.56% | 64.69% | - | - | - | - |
| DongABank | - | - | - | - | -159.16% | -93.30% | -64.33% | -121.02% | -76.35% | -16.25% | -32.98% | -7.62% | -20.79% |
| EIB | 37.50% | 35.79% | 34.06% | 28.55% | 25.97% | 29.27% | -38.60% | 4.78% | -1.66% | 39.00% | 57.89% | 61.01% | -71.26% |
| HDB | 36.19% | 23.48% | -29.59% | -34.67% | -42.61% | -83.00% | -117.86% | -179.28% | -147.58% | -10.95% | 73.30% | -62.23% | - |
| KLB | -13.82% | -16.39% | -16.67% | 4.03% | 23.22% | 43.55% | 53.82% | 59.71% | 57.33% | 64.52% | 83.97% | - | - |
| LPB | 2.32% | 8.76% | 3.12% | -61.70% | -63.77% | -39.36% | -30.81% | 18.41% | 19.84% | - | - | - | - |
| MBB | 40.97% | 42.73% | 42.23% | 45.66% | 30.46% | 21.47% | 26.89% | -6.97% | 15.76% | 70.45% | 70.63% | 76.82% | 75.18% |
| MSB | -66.67% | -35.08% | -12.38% | 3.60% | -113.75% | -96.19% | -62.43% | -7.55% | -275.06% | 22.55% | 33.49% | 79.35% | 70.80% |
| NamABank | 27.44% | 29.38% | -60.80% | 27.84% | 28.19% | 13.82% | 5.26% | -47.87% | -49.83% | 41.32% | 58.37% | 20.47% | 21.84% |
| NCB | -270.16% | -266.24% | -234.60% | -175.31% | -110.68% | -56.36% | -27.13% | 1.87% | -11.90% | 39.12% | 55.21% | - | - |
| OCB | 42.88% | 47.07% | 30.00% | 30.58% | 43.43% | 37.90% | 33.26% | 20.32% | 32.86% | 54.99% | 50.86% | 51.08% | 29.96% |
| PGBank | 45.37% | 50.96% | 59.92% | 57.29% | 58.66% | 62.76% | 68.37% | 45.07% | 21.34% | 41.72% | 47.31% | 1.02% | - |
| PVcomBank | -169.01% | -112.97% | -126.59% | -90.68% | -131.15% | -215.00% | - | - | - | - | - | - | - |
| SCB | -605.68% | -367.96% | -309.99% | -253.93% | -268.09% | -329.78% | -300.39% | -382.07% | -225.36% | -77.78% | -70.79% | 31.68% | 31.07% |

| Bank | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
|-----------------------------|----------|----------|----------|----------|---------|----------|----------|----------|---------|---------|---------|--------|---------|
| SeABank | -1.20% | -20.42% | -20.48% | -8.58% | -11.38% | -39.81% | -32.12% | -11.17% | 57.28% | 79.39% | 76.98% | 59.08% | 6.87% |
| SGB | 51.75% | 50.15% | 50.31% | 48.92% | 51.03% | 56.74% | 55.34% | 55.58% | 39.31% | 74.27% | 66.19% | - | - |
| SHB | -67.63% | -116.13% | -61.30% | -102.98% | -84.01% | -64.09% | -55.21% | -34.63% | -33.57% | 38.73% | - | - | - |
| STB | -152.85% | -174.64% | -160.21% | -164.03% | -18.20% | -8.33% | -69.19% | -64.49% | -45.91% | -16.80% | -43.22% | 31.96% | -26.52% |
| TCB | 57.46% | 39.11% | 25.79% | 9.46% | -15.48% | -38.23% | -103.42% | -72.06% | -78.80% | 2.16% | 45.75% | 68.16% | 70.67% |
| TPB | -19.43% | -73.12% | 32.90% | -7.02% | 58.52% | 50.80% | 67.09% | -171.42% | -65.26% | 20.20% | - | - | - |
| VBB | 6.07% | 23.69% | 23.38% | - | - | - | - | - | - | - | - | - | - |
| VIB | 63.40% | 58.11% | 61.86% | 65.72% | 25.81% | -36.27% | 0.44% | 51.96% | -3.39% | 38.37% | 47.35% | 29.89% | - |
| VietABank | -33.39% | -23.89% | -38.97% | -33.61% | -41.32% | -20.31% | -86.52% | -57.75% | -34.81% | -51.21% | -7.99% | 16.21% | - |
| VietCapitalBank | -17.23% | 9.93% | 33.24% | 50.67% | 19.89% | 24.03% | 38.16% | 41.39% | 82.31% | 51.49% | 42.64% | 85.98% | - |
| VPB | 39.06% | 35.62% | 11.08% | 11.65% | -78.78% | -133.46% | -113.87% | -57.03% | -69.64% | 60.85% | 56.15% | 62.76% | 49.73% |
| Branches of Foreign Banks | | | | | | | | | | | | | |
| ANZB | 88.69% | 88.75% | 81.55% | - | - | - | - | - | - | - | - | - | - |
| HSBC | 81.72% | 84.72% | 84.40% | 85.57% | 82.24% | 75.86% | 72.71% | 75.54% | 73.23% | - | - | - | - |
| Foreign Joint-Venture Banks | | | | | | | | | | | | | |
| Indovinabank | 78.56% | 78.05% | 77.93% | 79.02% | 78.95% | 79.55% | 78.15% | 80.64% | 78.13% | - | - | - | - |