Banking Industry Report

New Cycle: Opportunities and Challenges

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After the 1st restructuring period from 2012 to 2015, SBV was successful in reducing the NPLs to below 3%. However, the actual figures, which includes NPLs transferred to VAMC, have not actually dropped. In the beginning of 2017, we have noticed that the government has been showing its desire to speed up the "cleaning" progress to narrow the gap between the real NPLs and reported NPLs from commercial banks; omissions and legal obstacles to create bad debt markets, as well as handling of collateral, are recognized. Although we are not optimistic about the debt recovery making progress in 2017, we expect that there will be special mechanisms to remove the barriers in order to provide a more optimistic scenario for the banking sector in 2018.

There are still concerns regarding capital raising pressures aligning with Basel II requirements. CARs of banks which participate in pilot projects are higher than the minimum as regulated in Circular 36, but still do not fulfill the minimum of 8% under Basel II terms. Meanwhile, banks are facing trade-offs between capital raising and profit growth, and profitability or interest of shareholders, as shareholders will not receive cash dividends for a few years. Searching for strategic partners is another difficult task, since the real level of NPLs is high. It is even harder for state-owned banks as they must be approved by SBV in some conditions (such as issued price) when looking for strategic partners. Therefore, it might take longer to bring Vietnam's risk management quality closer to international standards. The domino effect is that Vietnam's commercial banks are constrained from approaching low cost capital from overseas, causing challenges for the objective of lowering the lending rate of the government to 5%.

Listed banks holding 47% of the credit market share benefited greatly from strong credit growth in 2015 and 2016. Net interest income and total operating profits saw double digit growth for 2 years in a row, which these banks can use to offset operating expenses and loan loss provisions. There is also an increasing need for investment in IT infrastructure, expansion and human resources, besides the escalating provisions for special bonds which will peak in 2016 – 2019.

Growth and recovery will be strongly diversified between different banks. Those which have nearly surpassed the restructuring period will have stable growth in bottom lines while banks which begin to restructure will need more time to complete this process before thinking of growth phases. Regulations on capital adequacy and liquidity from Circular 36, adjusted Circular 06 and Basel II will consolidate diversification between banks. However, most of the banks that we observed have been optimizing their wide liquidity room to increase its capital usage factor (ex. MBB) or promptly accelerating deposits from customers to offset the shortfall of liquidity ratios (such as BID) during 2016. We forecast that the NIM of these banks could recover in 2017. On the other hand, as banks have different conditions to satisfy the minimum requirements of capital adequacy, ROE and ROA will also be strongly diverse.

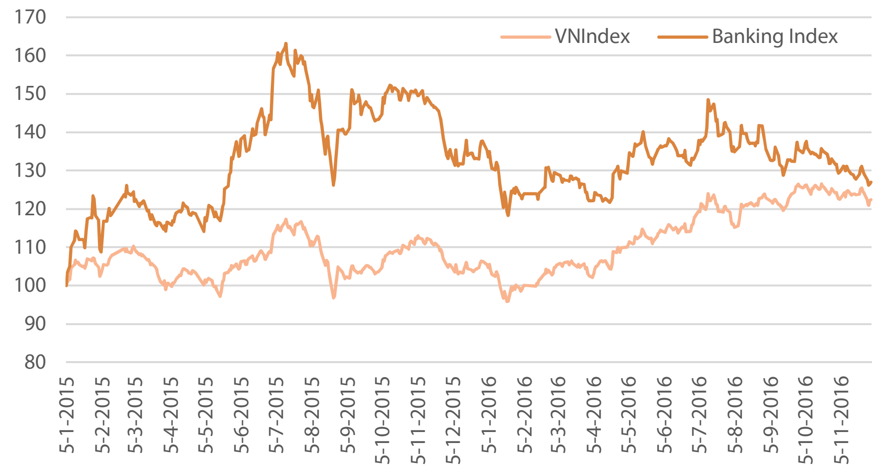
In the end of 2016, the valuation of banking stocks decreased to the lowest value since initially being listed. Stock picks will heavily depend on internal changes and long term prospects. While MBB is likely the most attractive option in terms of valuation, VCB and ACB are currently our top two picks. Investors will have more choices when more joint stock commercial banks are listed in the future, such as VIB, Techcombank and VPBank in 2017.

Contents

After experiencing stellar performance during 2015, the performance of banking stocks later became gloomy during 2016. The price index of the banking sector fell by more than 6% YTD while the VN index rose 16% YTD. The vast majorirty of banks, with the exception of VCB and ACB, experienced declines.

With the exception of VCB, the ratio of capitalization/deposits of listed banks dropped, and even reached a new low since these banks were listed. This indicator reflects the preference of investors between banking shares and deposits. Generally, the decline in this index is an indicator of " the fear" for the banking sector and suggests that is befitting to continue to place banking stocks on a watchlist.

Figure: Variation of VNIndex and Banking Index in 2015 - 2016



Source: Bloomberg, RongViet Research

Figure: PB and ROE of Listed Banks

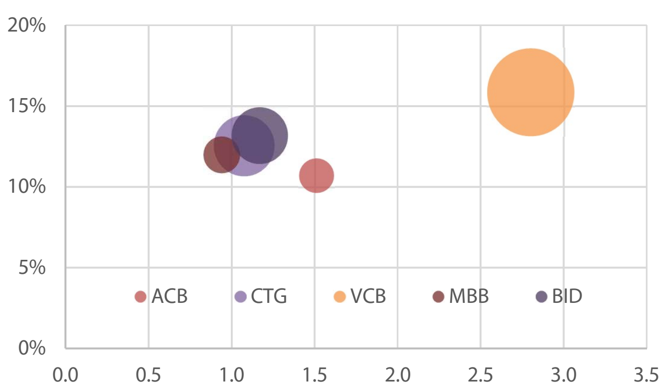
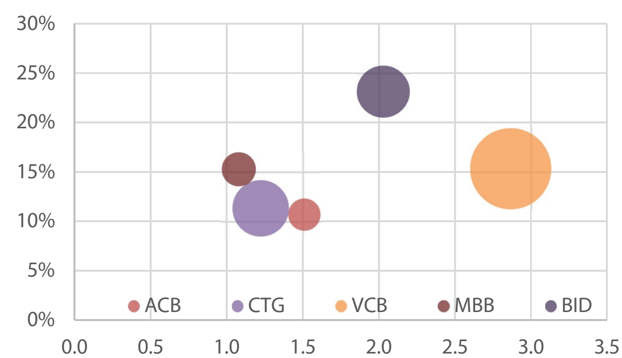


Figure: PB and ROE of Listed Banks after Adusted for VAMC's Special Bonds



Source: RongViet Research; Price @ Jan 13th 2017

RongViet Research believes the banking system has just completed it 1st restructuring stage, yet it still needs to make more progress. Two key drivers that make banking stocks attractive at the moment include (1) debt recovery, especially bad debt transferred to VAMC and (2) Positive signs from capital raising issues. Therefore, the best investment strategy is the careful selection of individually successful banking stocks, with a long term investment horizon.

ACB – HNX

As one of the first banks to participate in SBV's project, the bank has completed handling unconventional deposits as well as interbank loans as of the end of 2016. The bank has gradually *returned to the core businesses of a commercial bank; credit growth has been accelerating the bank's interest income, which recorded double-digit growth in 2015 and is projected to maintain this growth in the next few years.*

In the short and medium term, ACB still has to use it earnings to resolute legacy problems relating to Group 6 and also spends most of its income to invest in core banking activities. Amid the increasingly fierce competition in the retail segment, we believe this investment is suitable and necessary. At present, ACB has sufficient funds from its operations for these items.

ACB has been paid stock dividends and issued long-term bonds to improve its capital as it is among the ten banks that volunteered for Basel II pilot project. Since its capital adequacy ratio is far above the requirements under Circular 36 with the minimum level of 9%, we believe that the bank will soon meet CAR under Basel II regulations (minimum 8%).

Thanks to these aggressive moves, the bank has realized many achievements and its prospects are gradually becoming more encouraging. We believe that ACB can be accepted at a higher PBR, as compared to other similar listed banks.

BID – HSX

BID is expected to be the largest beneficiary bank from the recovery of the manufacturing, commercial and construction industries as the bank controls the large market share (12%) of credit and deposits, and many of its clients are from these industries. Nowithstanding the shift from boosting credit to deposits to keep sufficient liquidity, net interest income is forecasted to grow by 14% in 2016; this is adequate for BID to cover operating expenses and loan loss provisions, which are also predicted to be quite high.

The CAR calculated under Circular 36 was quite low, as BID is facing larger pressures as compared to other members. Increasing its capital is not easy for BID either for several reasons: (1) Its Capital Tier 2/Capital Tier 1 ratio is touching the limit; (2) SBV will no longer fund commercial banks and (3) private placements for strategic partners often face challenges in agreeing on a price. If there is support from the SBV to solve the constraints on these issues, BID would be successful in increasing its capital in 2017. However, capital raising could hurt BID's profitability.

We are concerned about its asset quality, as BID has a high level of real NPLs. Special bonds were more than VND20,000 billion as of the end of Q2/2016 and its debt recovery rate is lower than the industry average; BID has mostly used provisions to resolve bad debt. Adjusted for this issue, it is likely that the PBR of BID is not relatively cheap.

CTG – HSX

CTG is in its transition period with relatively high investment demand, not only to meet expenses in IT its network and human resources. CIR is projected to be 47% in 2016 and 2017, with an average growth rate of over 10% per year. In addition, the value of the special bond also rose sharply in 2015 while the debt recovery rate was only about 3% in 6M2016; its provision is consequently forecasted to remain high in the period of 2016 - 2018. However, due to the company having a large market share (10%), the improvement of the economy's demand for capital will help to push CTG's income growth (+12% YoY), making up for the increase in operating and provision expenses.

CTG has no room to increase capital Tier 1 (except for not paying dividend) but the bank can increase capital Tier 2 via issuing long-term bonds. Of course, this is a temporary solution and CTG will have to bear a higher cost of capital.

After excluding all debts relating to VAMC, CTG is quite attractive relative to VCB and BID. However, foreigners have less of an opportunity to increase ownership at CTG and investors might not receive cash dividends. These are all headwinds for CTG's stock price in the future.

MBB – HSX

Shareholders of MBB are enterprises back by the military; therefore, the bank is taking advantage of low cost of capital. Management is strict and it has low capital co-efficiency, and MBB is well-known for its good asset quality, capital safety and sufficient liquidity. After the banking crisis, MBB showed *its weak points, namely its low market share in credit and deposits (3.2% and 2.5% respectively). The bank also lacks experience in banking activities, which was also resulted in the reduction of its profitability.*

Insignificant capital pressure and stable cash dividends are bright spots for MBB. MBB sets a cash dividend of 10% annually. Even in the event of banking industry difficulties, MBB can still guarantee 5% cash and 5% stock dividends.

Apart from these concerns, one relative benefit of MBB is that it is always attractively priced. It is possible that MBB's foreign ownership is currently full as the bank has reserved room for a private placement for foreign investors at a discounted price. We think that MBB is an appropriate choice for investors who like dividend investing strategies.

VCB – HSX

VCB is a state-owned bank that we appreciate in terms of transparency, as well as its asset quality management. The bank is ranked 4th in term of total assets, and 3rd for capital. Despite having a lower market share than BID and CTG, VCB has high asset quality with a low capital usage factor, which allows the bank to increase its usage factor to push its income growth as well as profitability.

VCB has well-diversified clients and low operating expenses. Moreover, VCB managed to make full provisions for VAMC's special bond thanks to its strong earnings in 2016, allowing it to become the first bank to completely resolve issues relating to special bonds.

Like other peers such as BID and CTG, VCB needs to raise capital. Price barriers prevented VCB from issuing shares to GIC. Therefore, VCB will have another year to look for a strategic partner. The bank will issue long-term bonds and decrease the growth rate of credit to increase its CAR too. In spite of this, we like VCB as it is still able to guarantee cash dividends for investors.

VCB's valuation is not attractive compared to regional commercial banks. Considering the previously mentioned strong points above, we think that VCB's premium is justifiable, and that it will be a strong pick when the banking industry shows brighter signs in the future.

Ticker	Recommendation	Price @ Jan 13th (VND)	Target price (VND)	PE (x)		PB (x)	
				2016E	2017F	2016E	2017F
ACB	Neutral	21,500	23,100	17.3	14.4	1.5	1.4
BID	Neutral	16,250	17,000	10.1	9.1	1.2	1.2
CTG	Neutral	17,300	18,000	12.4	8.0	1.1	0.9
MBB	Accumulate	13,750	15,900	8.5	7.6	0.9	0.9
VCB	Neutral	37,450	39,500	24.9	16.9	2.8	2.6

Table: PBR After Being Adjusted for VAMC's Special Bond

	ACB	BID	CTG	MBB	VCB
Target Price (VND)	**23,100**	**17,000**	**18,000**	**15,900**	**39,500**
Book value 2016E (VND bil)	14,033	44,731	59,897	24,990	48,218
Special bond 2016E (VND bil)	1,259	17,348	7,327	3,231	1,213
NPAT 2016E (VND bil)	1,245	6,621	6,578	2,941	6,633
BV (excl. special bond) (VND bil)	12,774	27,383	52,570	21,759	47,004
NPAT (excl. special bond's provision) (VND bil)	1,421	9,499	7,782	3,599	8,633
BVPS (VND bil)	14,233	13,084	16,087	14,591	13,402
BVPS (excl. special bond) (VND)	12.957	8.010	14.119	12.704	13.065
ROAE 2016E (%)	11	13	13	12	16
ROAE (excl. special bond) (%)	11	23	11	15	15
PBR (x)	1.5	1.2	1.1	0.9	2.8
PBR (excl. special bond) (x)	1,7	2,0	1,2	1,1	2,9

Source: RongViet Research

Bad Debt Solutions: More Challenges in the 2nd Phase

- **VAMC: Key Contributor to Reducing NPLs in the Banking Industry**
- **The Second Phase of Restructuring: Focus on Bad Debt Solutions**
- **Provision for Special Bonds Caused Profit Fluctuations**

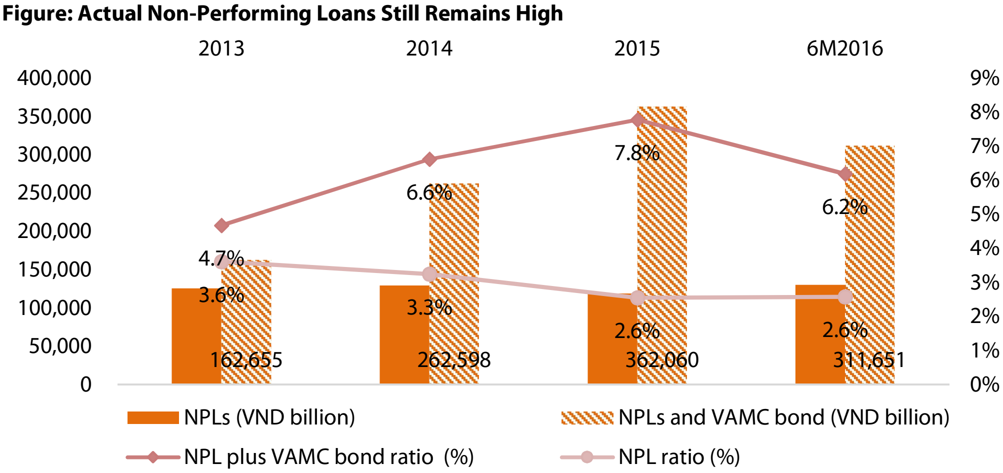
- *By exchanging its NPLs for VAMC's special bond, the banking system's NPL ratios significantly slumped to under 3% by the end of 2015. During 2015 – 2016, Decision 53/2013/ND-CP and Circular 19/2013/TT-NHNN were amended and added to enhance VAMC's capacity as well as its responsibility to push the reduction of bad debt. Despite these amendments, the progress has been slower than expected. The banking industry's top priority in 2017 is to reduce actual bad debt (announced bad debt and bad debt transferred to VAMC), and it is expected that there will be solutions for legal obstacles related to collateral disposal as well as the market for bad debt transactions, which will help to push the progress of bad debt resolution.*
- *The provision expenses for listed banks is expected to rally during 2016-2018, which significantly resulted from VAMC's special bond, as its value sharply increased in 2015. If we assume that the average provision ratio is 20% per annum and the bad debt recovery ratio is 0%, the profit of BID, CTG, MBB, and EIB will suffer the most. In the meantime, VCB is a unique case, as it will have earnings growth despite the special bond provision.*
- *By the end of Q2 2016, the special bond provision expenses for EIB and SHB were quite low compared to the low limit requirement under Circular 14. As a result, the timeframe for the special bond provision of these two banks will be extended.*

VAMC: Key Contributor to Reducing NPLs in the Banking Industry

The system's NPL ratio was recently announced to be 2.58%, equivalent to an amount of VND130 trillion by the end of Q2 2016. The bad debt amount declined by nearly 69%, as compared to September 2012. However, the ratio was a technical reduction because most of the NPLs have been transferred from the banks' balance sheet to VAMC, rather than being recovered. 80% of the decreased amount was transferred to VAMC while the VAMC's recovery ratio was a mere 14.5% by June 2016. If we add the NPLs in VAMC to the announced NPLs, the actual NPL ratio was 6.2% in Q2 2016 (i.e. VND312 trillion).

(*) Vietnam Asset Management Company (VAMC) was initiated since Jul 9th 2013 under Decision 53/2013/ND-CP. Following the Decision, SBV issued Circular 19/2013/TT-NHNN defined regulars on VAMC's bad debt transactions.

Figure: Actual Non-Performing Loans Still Remains High



Source: SBV, VAMC, RongViet Research database

Regarding listed banks, the special bond value of BID, CTG and STB is the highest and accounts for 66% of the listed group's total special bond. The data also shows that around 40 – 50% of the total bad debt sold to VAMC occurred in 2015. Consequently, with a five year period for provision, the expense is assumed to be high during 2016 – 2019.

Figure: Gap Between NPLs to Non-Performance and Group 2 Loan Is Narrowed

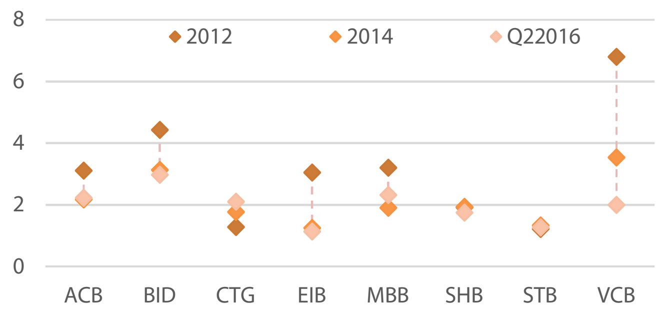
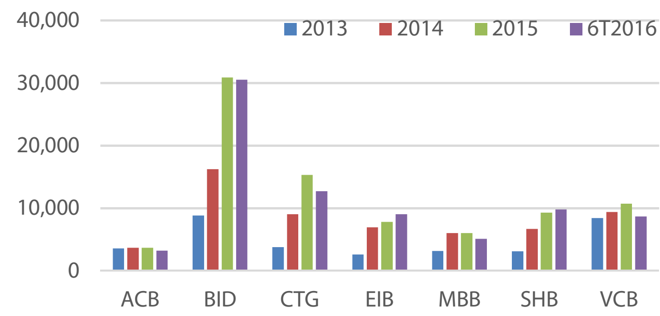


Figure: NPLs and Special Bond Value (VND billion)



Source: Listed banks' financial statement and RongViet Research calculation

The Second Phase of Restructuring: Focus on Bad Debt Solutions

VAMC's bad debt recovery ratio was 14.5% by June 2016, higher than that of 2015 but lower than the target. This mostly resulted from some objective reasons like drawback of legal documents to solve, the recovery of bad debt and collateral, and the resources and market for bad debt transaction.

In early 2015, when more than 50% of the banking industry's bad debt was collected by VAMC, the government amended the Decision 53 and Circular 19 to enhance VAMC's capacity for pushing the recovery progress. Two key amended points in Decision 34/2015/ND-CP and 18/2016/ND-CP that are expected to push the progress are (1) raising VAMC's chartered capital to VND2,000 billion since early Q2 2015, and (2) allowing VAMC to issue corporate bonds for exchanging the credit institutes' bad debt at the market price.

Following Decision 34, the SBV issued Circular 14/2015/TT-NHNN and Circular 08/2016/TT-NHNN which adjusted Circular 19. Under the adjustment, VAMC's responsibilities and power are strengthened so that it is able to specifically act in certain cases. Moreover, the mechanism for bad debt transactions and collections, special bond provision requirements, as well as buying bad debt at the market price, are all clearly defined.

Notable Supplement and Amendment Terms

**** Bond valued at market price of bad debt (VAMC's bond)***

- ✓ VAMC's bond can be traded among SBV and CIs. This term is not allowed with special bond.
- ✓ The value of VAMC's bond is added into the CIs' core capital and its risky coefficient is 0%.
- ✓ The interest rate of VAMC's bond and special bond is 0%, but they can be used to refinance with the SBV. It is believed that with the refinancing allowance, CIs will benefit in terms of liquidity, especially those who hold large amount of the special bond and those that are having temporary issues with liquidity.
- ✓ The VAMC's bond will be used in OMO transactions.
- ✓ Adjustment to buying bad debt at market price conditions: The bad debt is required to satisfy "The collateral can be put on sale" **OR** "The borrower can restore their repayment ability" instead of being required to satisfy these two requirements.

**** VAMC's bond and special bond maturity***

- ✓ VAMC's bond: Maturity is defined under an agreement between VAMC and the CI and the minimum term is one year. In the event the collection from the bad debt is not enough to repay the bond at its due date, VAMC can decide to extend the bond's term. It is expected that CLs will be accepted to hold VAMC's bond, and the extended time will be no more than 3 years.
- ✓ Special bond's maximum term is 5 years. In the case the CIs selling bad debt is in restructuring period or under financial difficulties, the term can be extended by no longer than 10 years. The new Circular also adds detailed instructions for progress for CIs to propose new term.
- ✓ Regulations to CIs who ask to be extended the special bond's maturity:
  - (1) There are two kinds of CIs who can be ask for extending: (1) CIs that are restructuring under approved restructure plan and (2) CIs under financial troubles in which if they make full provisions within 5 years, and their pretax profit will be a negative amount in such years, the CIs can propose to be extend the special bond term.
  - (2) Requirements after approved to prolong the special bond's term: if the realized pre-tax profit is higher than projected figure, the CIs must increase the provision expense for the special bond until it equals to the provision amount without extended terms. The CIs are not also allowed to pay cash dividends until the special bond with new term comes due.
  - (3) Total timeframe to make provisions will not be longer than 10 years.
- ✓ Regulations of making provision on special bond: replaced "the average provision expense per annum" phrase (~face value of special bond/maturity term) by "the least provision expense in current year". Based on the new formula, the minimum provision amount within the current year will reduce if bad debt is collected or provisions in the preceding year is higher than required. This new rule aims to encourage CIs to make more provisions in high profitable years, or to add more provision liabilities in following years if they make a higher than forecasted profit.

**** Defined detail regulations on bad debt transactions***

- ✓ The specifically defined partners who are allowed to buy bad debt from VAMC includes the following: domestic and foreign individuals as well as institutes. Following the new rules, buyers of bad debt now include "those who does not live in Vietnam territory".

**** Enhance VAMC's power and responsibilities***

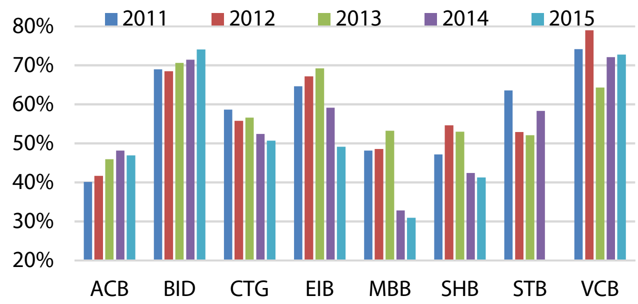
- ✓ VAMC is empowered to manage and use special bonds.
- ✓ Based on the borrowers' verbal propose, VAMC considers, makes decisions, and take responsibility on restructuring the bad debt which was bought at market price.
- ✓ Within 10 days since VAMC sent the document to ask for ideas of CIs, the CIs must provide feedback under writing documents about VAMC's requests. After that period, if the CIs does not send their feedback, VAMC can decide by themselves and take responsibility about their decision on restructuring debt.
- ✓ In the case that VAMC and CIs cannot agree on method or conditions to sell the bad debt, VAMC has the right to auction that bad debt.

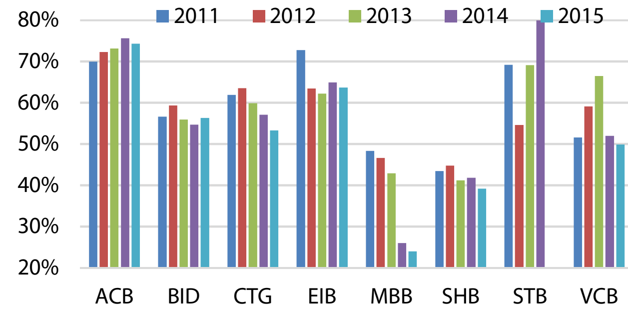
Although VAMC has been given more power, its charter capital of VND2,000 billion is considered too small to do bad debt transactions at a market price with the CIs selling. Until now, there is no case in which bad debt has been bought at market price. The solution for bad debt sold to VAMC is mostly based on making provisions of special bonds.

Meanwhile, the drawback and lacking drivers to push the recovery pace are the market for bad debt transactions and legal law on disposal of collateral. The government and SBV have expressed their decisive will on handling and recovering the bad debt. Therefore, we expect that a special mechanism to address the mentioned shortcomings, so that they can attract social resources to buy bad debt. Moreover, the National Financial Supervisory Commission (the NFSC) assessed in 2013 that the combination of household consumption tightening, corporation difficulties and accumulated real estate inventories caused such extreme bad debt. Hence, the synchronization of legal framework improvement and solutions to support the economic as well as real estate sector's recovery will help to restore borrower's repayment ability, as well as to treat collateral (mostly real estate) more easily.

Figure: Loans Outstanding to Collateral Ratio

Figure: Proportion of Real Estate Assets in Total Collateral Value





Source: Listed banks' Financial Statements, RongViet Research collect

Provision for Special Bonds Caused Profit Fluctuation

Special Bond provision expenses have significant increased since 2016

The value of special bonds held by seven listed banks (ACB, BID, CTG, EIB, MBB, SHB, and VCB) was more than VND53,700 billion by the end Q2 2016, which slightly decreased from more than VND53,900 billion by the end of 2015. However, there is differentiation in movement of special bonds among these listed banks with a lower value in ACB, BID, CTG, EIB, and VCB and higher value in MBB and SHB. This decrease implies that banks collected a part of bad debt sold to VAMC, and vice versa. As observed in the figure below, it is likely that ACB has the highest bad debt recovery ratio with a 5% decrease in terms of special bond value, followed by EIB and CTG with a 2.9% and 2.5% decrease respectively.

Figure: Accumulated Value of Special Bond during 2014 – 2Q2016 (VND billion)

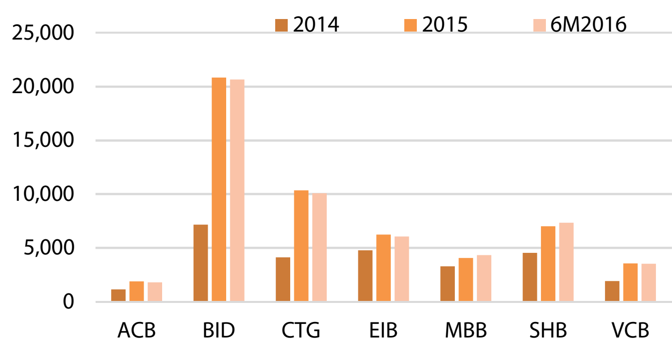
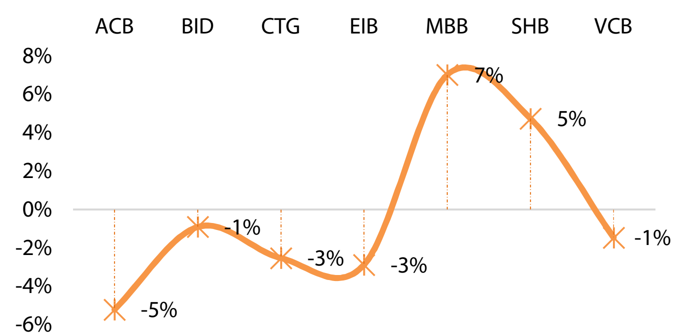


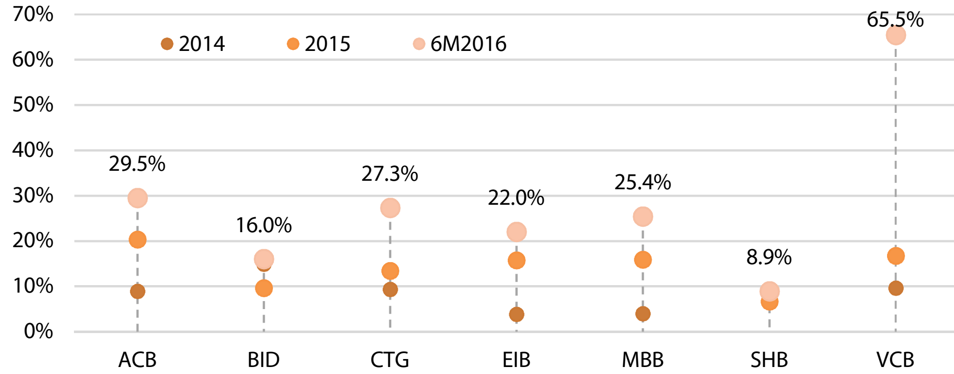
Figure: % Change of Special Bond During 6M2016



Source: Listed banks' Financial Statements, RongViet Research collect

In the first half of 2016, total provision expenses of these seven banks were VND 18,147 billion (+11% YoY), in which provisions for special bonds was assumed to account for 30% of this amount. The absolute amount was higher than total provision expenses for special bonds in 2015. Despite VCB, BID, and CTG making a large provision amount, each of the bank's purpose in doing so was different. The high provision in VCB was because of their conservative attitude while the high provision in BID and CTG resulted from the company having the highest value of special bonds among listed banks. Accumulated provisions for special bonds for these seven banks reached VND12,000 billion, corresponding to 22.3% of the face value of special bonds by the end of Q2 2016; VCB's provision ratio strongly outperformed the group at 65.5%.

Figure: Provision to Face Value of Special Bond Ratio



Source: Listed banks financial statements, RongViet Research calculation

To predict the extent to which banks' profit will be harmed if they make provisions at an average rate of 20% per annum for special bonds since 2016, we have done as follows:

- ✓ Forecast average profit-before-provision in the next five years by multiplying banks' preceding five years (2011 – 2015) profit by the actual CAGR of this period.
- ✓ Provision expenses to other loans (exclude special bond) equals the ratio of provision expenses to profit-before-provisions in 2011 – 2015, multiplied by the average profit-before-tax generated in this period.
- ✓ Estimate provision expense for special bond that listed banks must make in the next 4 years (2016 – 2019), the period that we assume provision expenses will be the highest. The provision amount per annum is 20% of special bond's face value with a 0% recovery rate.

Table: Excluding VCB, profit of other banks will be harmed during the special bond provision period

	ACB	BID	CTG	EIB	MBB	SHB	VCB
Average profit-before-provision in 2011 - 2015	2,469	11,471	12,185	2,187	4,763	1,272	10,168
CAGR	*8%*	*8%*	*1%*	*15%*	*4%*	*91%*	*19%*
Forecast average profit-before-provision in next five years	2,663	12,340	12,262	2,517	4,957	2,436	12,057
Average ratio of provision in 2011 - 2015	*-26%*	*-48%*	*-34%*	*-19%*	*-34%*	*-1%*	*-40%*
Total estimated provision expense	-1,056	-10,035	-6,210	-1,727	-2,482	-1,416	-5,536
Average provision expense in 2011 – 2015	*-680*	*-5,868*	*-4,142*	*-481*	*-1,672*	*-16*	*-4,823*
Average provision for special bond per annum	*-377*	*-4,167*	*-2,068*	*-1,246*	*-810*	*-1,400*	*-713*
Profit-before-tax-and-after-provision per annum	1,606	2,305	6,052	790	2,475	1,020	6,522
Average profit-before-tax-and-after-provision in preceding 5 years	1,762	5,616	7,792	1,573	3,026	1,171	5,982

Source: RongViet Research

Calculations are based on the previously mentioned assumptions, and we have observed that the provision expenses for special bonds will sharply decrease or be fulfilled in 2020. VCB is a unique case that can ensure earnings growth even when making provisions if its earnings growth remains at the levels of 2011-2015. Meanwhile, the profit of BID, EIB, and MBB could be damaged the most during the provision period.

Based on our calculations, if the economy recovers at a slow rate resulting in a low rate of bad debt collection (assumed rate in our calculation is 0%), the profit of most banks will be hurt. Several banks that we talked to expressed that these banks will make provisions in accordance with the rate required by SBV (20% per face value per annum). In the meantime, VCB will fully make provisions for special bond in this year, thanks to its strong growth in terms of income in 2016. By the end Q2 2016, VCB made VND2,300 billion in provision expenses, equal to 65% of its special bond value. The remaining amount will be recorded during Q4 2016.

Under Circular 14/2015/TT-NHNN, "the average amount of provisions each year" is changed into "the minimum provisions each year". The new required formula implies that if the provision ratio of preceding years is below the average 20% rate, "the minimum" in following years will be higher; there is also not limit for the maximum value of provision that CIs plans to make. If the actual profit is higher than planned, CIs whose special bond term is extended, must save its profit to make provisions so that the total provision amount meets the requirements.

Required provision for special bond per annum under SBV's regulation

Circular 19/2013/TT-NHNN	Circular 14/2015/TT-NHNN
$Provision\ per\ annum = \frac{Special\ bond\ face\ value}{Special\ bond\ maturity\ term}$	$The\ minimum\ provision\ in\ the\ year\ m = \left(\frac{Y}{n} * m - (Z_m + X_{m-1})\right)$ Y: Special bond's face value; n: Special bond maturity term Z_m: Accumulated collection to the current year (the m[th] year) $X_{(m-1)}$: Accumulated provision to the preceding year (m-1)

Source: Circular 19, Circular 14, RongViet Research collect

Based on Circular 14, we estimated that banks' provision expenses for special bonds in the upcoming years. We did not make estimations for VCB because the bank fulfilled its liabilities in 2016. Our assumption and calculation is:

- Although initiated in 2013, the bad debt transactions with VAMC have actively occurred since 2014. Therefore, we assumed that 2014 is the first year of the bad debt transaction plan.
- Despite the fact that the bad debt collection rate is isolated among banks in the first six months of 2016, the special bond value that the group held was down a mere 3% during this period. Therefore, we still applied this rate of decrease per annum in the next five years (2016 – 2020). Banks having rates higher than our assumption will have provision expenses lower than our forecast.

Table: Estimation of provision expenses in 2016 – 2018 with a 3% decrease of special bond value per annum (VND bil)

	ACB	BID	CTG	MBB	EIB	SHB
The required minimum provision in 2016	221	3,598	1,505	823	1,224	1,844
Provision made in 1H2016	*144*	*1,303*	*1,367*	*459*	*352*	*188*
The remaining for 2H2016	*77*	*2,295*	*138*	*364*	*872*	*1,657*
The required minimum provision in 2017	322	3,561	1,767	683	1,065	1,187
The required minimum provision in 2018	325	3,560	2,048	552	917	542

Source: RongViet Research

We have observed that ACB, BID, CTG and MBB have been doing well with special bond's provision by the end of Q2 2016. In the meantime, the expenses of EIB and SHB were quite low compared to the requirement, which is not to say that SHB sold more bad debt to VAMC in the first six months of 2016. This implies that EIB and SHB could be asked to extend the special bond maturity term.

Motivation for Income Growth

- **Income of Banks is Intensively Fluctuating During the Restructuring Period**
- **Circular No.36: Factors that Impact bank's usage ratio and NIM**
- **Promising NIM in 2017 under Circular No. 06**

- *The sharp growth in credit between 2011-2015 has affected rates, as well as the income of banks. Government bonds have become a safety investment, as they guarantee both liquidity and income. This has occurred at a time when the economy's capital absorbing has slackened, which has resulted in difficulties in credit output.*
- *Credit growth, coupled with an improvement in NIM, are necessary conditions for banks to achieve growth in profitability. Circular No.36 enforces capital adequacy controlling regulations while also loosening liquidity requirements by lowering the risk factor in real estate & securities loans to 150%, lifting the short-term capital for long-term loan ratiso to 60%, and also consequently creating room for banks to improve capital usage ratio by recovering NIM. ACB and VCN are two success stories that have experienced the quickest recoveries in NIM.*
- *The degree of the impactiation of Circular No.06 (which began on Jan 1st 2017) is upon of which capital usage ratio & NIM would vary depending on actual capital distribution; this is based on the loan maturity, the loans classified by industry and the banks's current usage capital ratio. In addition to witnessing the early recovery in NIM for ACB and VCB, we have also observed that MBB is making use of its liquidity room to increase its capital usage ratio. BID and CTG increased mobilization rather than credit growth in 2016, aiming to improve its liquidity indicator; there was consequently not much pressure when Circular No.06 was put into place. BID's and MBB's NIM is forecasted to increase in 2017, while CTG needs more time to increase Its NIM.*

Income of Banks is Intensively Fluctuating During the Restructuring Period

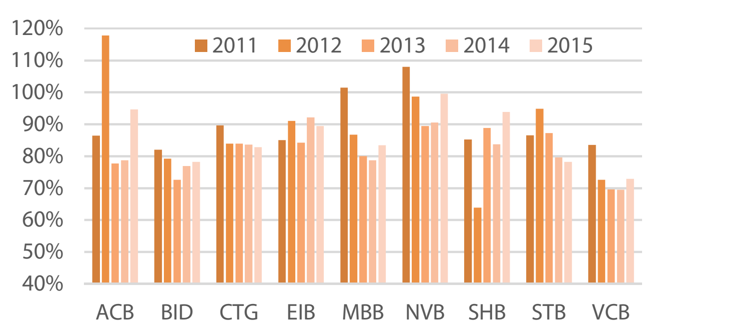
CAGR in operating income for 8 listed banks was 11.6% between 2011 and 2015. However, growth between BID, MBB, SHB and VCB varied significantly, and STB led in growth overall. In addition, the growth in these years fluctuated significantly, as growth in 2011 and 2015 was 40% and 12%, respectively. Growth remained in the single digits between 2012-2014. The primary cause is interest income, which contributes an average of 80% of operating income , and was very volatile between 2011-2015.

Table: Growth of Operating Income (%)

	2011	2012	2013	2014	2015	CAGR 2011 - 2015	6M2016 (YoY)
SHB	49.9	31.9	-19.4	37.6	20.9	21.5	29.8
BID	34.2	8.2	15.2	14.0	12.8	16.6	23.7
MBB	25.9	48.0	0.6	8.4	5.6	16.5	-6.7
VCB	29.0	1.4	2.8	11.5	22.7	13.0	26.0
STB	33.6	1.5	10.9	8.5	2.6	10.9	-14.9
CTG	50.6	-1.8	-0.8	-3.5	8.1	8.9	17.6
ACB	39.3	-23.7	-3.2	7.2	2.7	2.5	7.8
EIB	70.0	-13.6	-39.7	-9.4	29.1	0.7	7.2

Source: RongViet Research

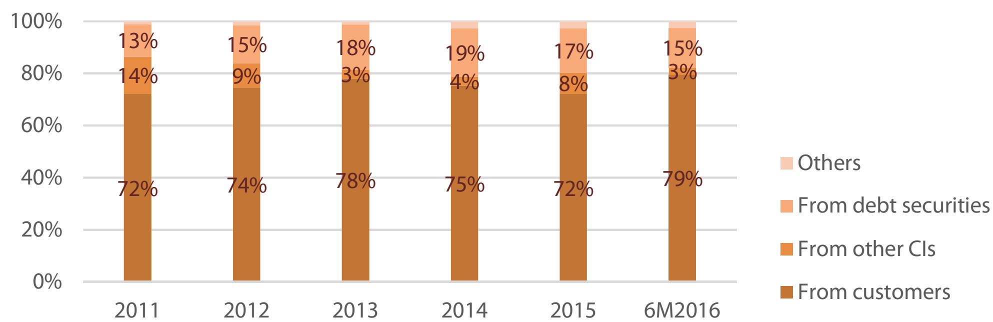
Figure: NII Always Makes up a Large Portion of Listed Bank's Operating incomes



Net interest income (NII) from Debt Securities Helped Banks to Overcome Critical Restructuring

Net interest income from customer lending, debt securities, and other credit institution contributes the most to bank's total interest income. However, there was a rapid increase in the interest rate of both credit and inter-bank loans which later caused difficulties in the economy; this later resulted in a strong decline in interest income from other credit institutions (this mainly applied to ACB, BID, CTG, EIB, and MBB). This decline was offset by interest income from customer lending and debt securities, and therefore, debt securities contribution was a bit larger, especially in 2013-2014 when credit to the economy faced many difficulties. For example, the CAGR for interest income between 2012-2015 was -4%, and interest income from lending and other credit institutions was -4% and -16% respectively; debt securities income growth was +4%. The average contributed proportion to interest income rose from an average of 15% in 2012 to 17% in 2015.

Figure: Interest Income Structure



Source: RongViet Research

Figure: Average Government Bond Winning Rate (%)

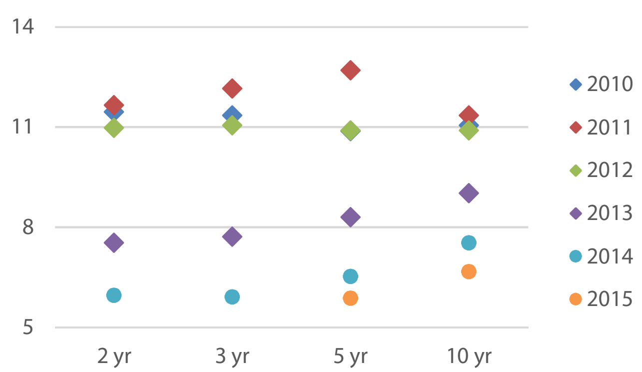
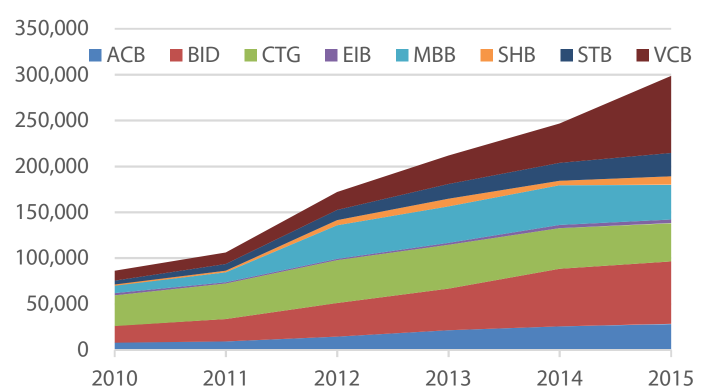


Figure: Government Bond and Guaranteed Bond Investing Value (VND billion)



Source: SBV, RongViet Research collect

The total asset fluctuation for banks clearly reflected this change. Specifically, CAGR (2012-2015) for total assets reached 13%, mainly from growth in customer lending and debt securities, which had 17.6% and 21.3% in CAGR, respectively. In 2012-2015, investing in public bonds comprised up to 56% of total securities investments on average. This proportion was especially high in 2012-2014 because of the slow down in credit to the economy as well as in the inter-bank market.

However, public bond rates decreased rapidly from its peak in 2011 (over 11% a year) to around 8% in 2013; this continued in 2014-2015, which led investing securities interest income to be split among banks. However, government bonds are highly liquid and secure investments without provision requirements. Given the lack of quality loans, government bonds have become a safe option for commercial banks to achieve a profit. BID, MBB, and VCB were the three banks that experienced positive growth in CAGR (2012-2015), at 23%, 25% and 11%, respectively, ACB's securities interest income sharply declined in 2012-2013 because of one state enterprise bond and insolvency of Group 6 loans.

Table: Public Bond and Guaranteed Bond Proportion in Investment Sercurities and Trading Securities Portfolio.

	2011	2012	2013	2014	2015
ACB	34.9	57.4	63.3	63.7	68.9
BID	77.2	76.3	67.0	66.0	50.4
CTG	56.7	63.4	58.5	44.9	31.4
EIB	6.2	11.0	12.5	13.9	15.6
MBB	52.0	87.7	85.9	78.3	75.2
SHB	12.9	45.8	44.5	27.4	32.9
STB	29.0	52.5	76.0	71.3	48.1
VCB	41.7	24.7	46.7	65.7	69.0

Source: RongViet Research

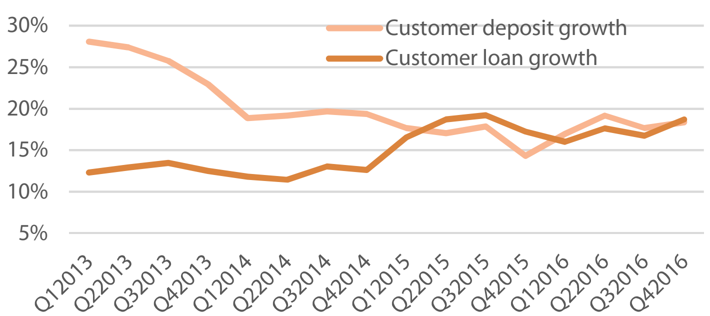
Table: Growth in Debt Securities Interest Income(%)

	2012	2013	2014	2015	CAGR (2012 - 2015)
ACB	-19	-29	18	-2	-10
BID	20	76	0	9	23
CTG	5	-1	1	-3	0
EIB	1	-53	20	-2	-14
MBB	83	44	18	-21	25
SHB	3	-28	-14	-1	-11
STB	-8	-16	3	-9	-8
VCB	17	35	-12	10	11

Key Driving Force was Credit Growth and improved NIM

Customer lending interest income contributed to over 70% of total interest income, which was equivalent to over 55% of bank's operating income. When credit to the economy was suddenly cut off from 29% in 2010 to 9% in 2011, and 12% in 2012, this negatively impacted the bank's rate movement in the following years. Income for banks was able to experience double digit growth after credit growth sped up from 2013, and then sharply increased in 2015.

Customer Loan and Deposit Growth



Source: RongViet Research collect

Credit, NII, % Operating income Growth

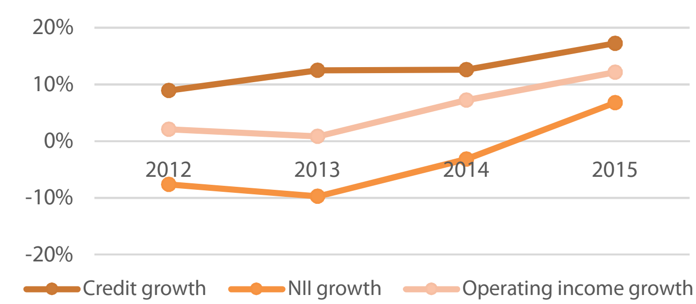


Figure: Lending and Deposit Rate Gap (2011 – 2015)

Source: RongViet Research

After examining each bank separately, we noticed that credit growth was not enough for banks to achieve growth in both interest income and total income. Between 2012-2015, others bank's credit growth was significantly higher than the industry average, with the exception of EIB and ACB.

However, net interest income did not deliver similar growth during the same period; NIM was supposed to have an important role in bank's income growth.

Table: Customer Lending Growth for Banks(%)

	ACB	BID	CTG	EIB	MBB	SHB	STB	VCB
2012	0.0	15.6	13.6	0.3	26.1	95.3	19.6	15.2
2013	4.3	15.0	12.9	11.3	17.8	34.4	14.8	13.7
2014	8.5	14.0	16.9	4.5	14.6	27.5	15.8	17.9
2015	15.2	34.6	22.5	-2.6	21.7	26.2	45.0	19.7
6M2012 (*)	1.0	10.8	-3.0	1.0	10.9	5.3	-0.3	2.9
6M2013 (*)	7.5	7.3	0.4	7.4	7.0	2.7	13.4	-1.5
6M2014 (*)	3.3	1.6	0.5	-3.7	7.8	12.1	9.6	6.6
6M2015 (*)	10,3	16.3	9.3	-4.2	10.2	13.9	9.9	5.4
6M2016 (*)	16.6	9.9	10.2	-4.6	16.6	7.2	7.1	10.4

Source: RongViet Research; (*) TTM

As shown in the table below, the downwrd trend of NIM has dragged on since 2012, after reaching its peak in 2011. In 2013 (ACB, EIB and SHB), 2014 (VCB), and 2015-2016 (BID, CTG and MBB), NIM tended to bottom out for a large number of banks. Notably, ACB was the first bank to recover its NIM, while other banks took up to two years to do so on average. After bottoming out in 2013, ACB's NIM began to recover. Many bank's NIM was estimated to recover to 2012's level by the end of Q2/2016.

Table: NIM in 2013-2015

	2011	2012	2013	2014	2015	6M2016 (*)
ACB	3.4	3.7	2.9	3.0	3.3	3.7
BID	5.1	3.2	3.0	3.1	2.7	3.1
CTG	5.4	4.5	3.6	3.1	2.8	3.3
EIB	3.8	3.1	1.8	1.9	2.7	2.9
MBB	4.9	4.9	4.1	4.2	3.9	3.9
SHB	3.7	2.4	2.0	2.1	2.2	2.3
STB	5.1	5.7	5.1	4.5	3.4	3.0
VCB	3.9	3.0	2.6	2.4	2.6	3.1

Source: RongViet Research; (*) Q4 trailing

Net interest income also changed considerably, similar to NIM fluctuation, and had the highest growth in 2015.

Table: Income for Banks Started Growing after the Recovery in NIM (%)

		ACB	BID	CTG	EIB	MBB	SHB	STB	VCB
2012	**NIM**	3.7	3.2	4.5	3.1	4.9	2.4	5.7	3.0
	NII growth	4.0	4.5	-8.1	-7.6	48.0	48.0	11.2	1.4
	Operating income growth	-23.7	8.2	-1.8	-13.6	48.0	31.9	1.5	1.4
2013	**NIM**	2.9	3.0	3.6	1.8	4.1	2.0	5.1	2.6
	NII growth	-36.2	5.6	-0.8	-44.2	0.6	0.6	2.0	2.8
	Operating income growth	-3.2	15.2	-0.8	-39.7	0.6	-19.4	10.9	2.8
2014	**NIM**	3.0	3.1	3.1	1.9	4.2	2.1	4.5	2.4
	NII growth	8.6	20.7	-3.8	-1.0	8.4	8.4	-0.9	11.5
	Operating income growth	7.2	14.0	-3.5	-9.4	8.4	37.6	8.5	11.5
2015	**NIM**	3.3	2.7	2.8	2.7	3.9	2.2	3.4	2.7
	NII growth	23.5	14.7	7.2	2.5	5.6	5.6	0.8	22.7
	Operating income growth	2.7	12.8	8.1	29.1	5.6	20.9	2.6	22.7
6T2016 (YoY)	**NIM (TTM)**	3.7	3.0	3.2	3.0	3.8	2.3	3.0	3.1
	NII growth	19.3	20.1	17.1	7.2	-6.7	32.1	-27.5	29.6
	Operating income growth	7.8	23.7	17.6	7.2	-6.7	29.8	-14.9	26.0

Source: RongViet Research

Circular No.36: Factors that impacts bank's NIM and capital usage ratio

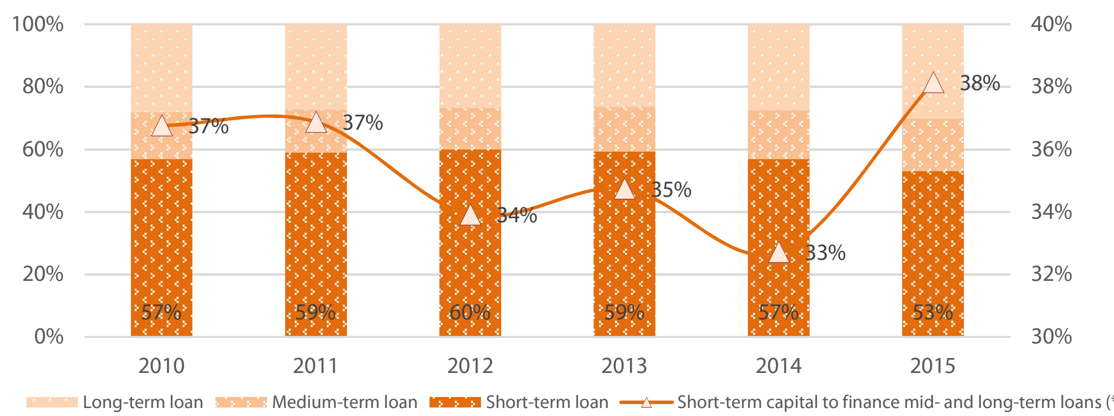
After observing the trend of NIM along with interest rate fluctuations, we asume that policy interference will also have an important role. Specifically, Circular No. 36 promulgated in Nov 20th 2014, and on Feb 1th 2015 it came into being. This was implemented to launch regulations to enhance safety in capital and operations of domestic credit institutions and foreign bank branches, and to scratch out cross-ownership step by step. Moreover, these regulations have helped banks to improve its capital usage ratio, which has consequently had a positive affect on NIM.

- ✓ *Reduce risk factor in real estate and securities bussiness from 250% to 150%.*
- ✓ Lifting short-term capital for mid and long term loan ratio from 30% to 60%. Following that, the outstanding mid and long term loan proportion has increased from over 41% in 2011-2014 to around 47% in 2015. The Listed Bank's Financial Statement Footnotes about outstanding deposit as well as loan (*) were used to caculate short-term capital for mid and long term loan ratios, showing that the average ratio in the listed bank group has strongly increased over 38% in the end of 2015, after oscillating around 32 – 35% in 2012-2014.

(*) Short-term capital to mid and long term loan ratio = (Outstanding mid and long term loan – mid and long term mobilization)/ Short-term mobilization.

Financial Statements explain in detail the classification of loans and deposits, which makes up to 60% total assets and total liabilities of credit institutions.

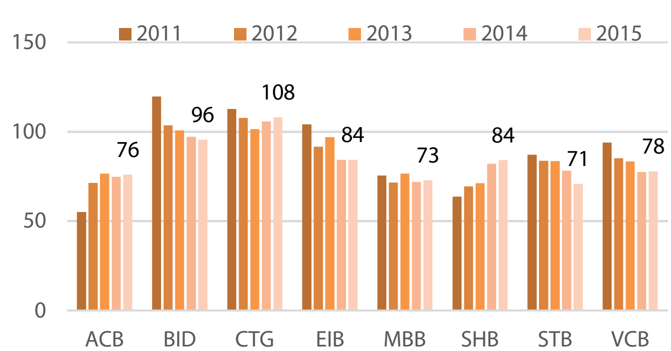
Figure: Eight Listed Banks' Loan to Customer by Type of Maturity



Source: RongViet Research

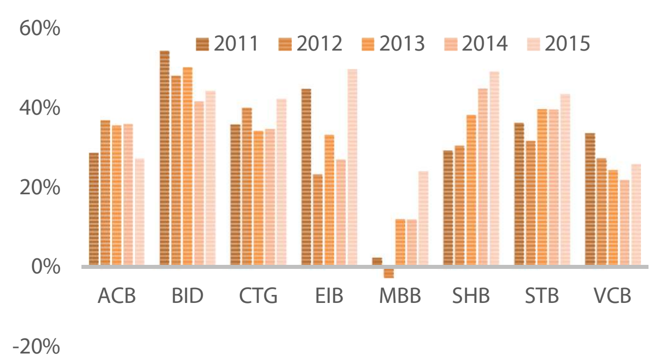
(*) In use number is customer loan and deposit on Listed Bank Financial Statement Notes

Figure: Listed Bank's LDR (%)



Source: RongViet Research

Figure: Short-term Capital for Mid and Long Term Loan Ratio



Due to the change of loan structure by term and improved capital usage ratio, as shown above, listed banks have experienced significant improvements in earning asset yields and interest expenses. Compared to the positive period of 2011-2012, earning asset yields as well as interest expense (as percentage of total liabilities) have significantly decreased in 2015. Interest expenses tended to decrease quickly and recovered slowly, as seen with BID, STB, ACB and CTG. On the other hand, earning asset yields began to differentiate since the end of 2015, and began to simultaneously increase in the first half 2016. The NIM for listed banks has begun to recover in the first half 2016, with the exception of MBB and STB.

Table: Average Earning Assets Yield Change

	2011	2012	2013	2014	2015	6T2016
ACB	13.1	11.9	10.1	8.6	8.0	8.6
BID	18.1	11.4	9.1	8.2	6.9	8.1
CTG	15.1	12.3	8.8	7.2	6.4	7.5
EIB	12.7	10.6	7.3	6.0	6.7	7.2
MBB	12.9	11.4	9.0	8.5	7.2	7.6
SHB	15.2	12.7	8.8	7.8	7.3	8.4
STB	15.6	14.7	12.5	10.4	8.3	9.5
VCB	10.4	8.7	6.9	5.6	5.4	6.1

Source: RongViet Research

Table: Average Interest Expense Change

	2011	2012	2013	2014	2015	6T2016
ACB	8.9	7.5	7.0	5.6	4.7	4.8
BID	13.6	8.1	6.1	5.0	4.3	4.8
CTG	9.9	8.0	5.6	4.5	3.8	4.3
EIB	9.6	8.2	5.7	4.2	4.2	4.3
MBB	8.1	6.5	4.7	3.9	3.4	3.6
SHB	10.7	10.0	6.5	5.5	4.9	5.8
STB	9.9	8.7	7.2	5.5	4.5	5.7
VCB	7.0	6.3	4.6	3.5	2.9	3.1

Projected NIM in 2017 under Circular No. 06 impaction

There are two changes in Circular No.06 as compared with Circular No.36 that will tighten bank's capital usage ratio: (1) Decrease short-term capital for mid and long term loan ratio from 2012 and (2) Risky factor of real estate receivables will be adjusted to 200% from Jan 1st 2017. The degree of impact depends on the practical apportionment of deposit to loans classified by term, as well as the bank's operations.

According to our estimations, the short term capital for mid and long term loan ratios was lower than 60% in the end of Q2 2016. Compared to the 2017 ceiling rate, SHB's is higher and EIB's is approaching 50%. So, EIB and SHB's NIM will decline in the future. In contrast, MBB, VCB and ACB's NIM is 18.3%, 28.4% and 30.7%, respectively, significantly above the ceiling for 2017 and even 2018. This means that these banks still have room to improve its capital usage ratio, and to consequently improve NIM as well. In 2015-2016, MBB and VCB have taken advantage of this opportunity to accelerate customer lending resulting in customer loans growing faster than deposits. ACB and VCB's NIM has been improving in recent years, so we hope that MBB's NIM will increase in 2017.

In BID and CTG's case, both banks have been accelerating customer lending to grow more than customer deposit, and to decrease LDR, which is higher than regulated under C. 36. In addition, Decision No.2509/QĐ-NHNN dated Dec 27th 2016, entered Jan 1st 2017 allows State-owed Bank Group (BID, CTG and VCB)'s LDR to remain at 90% which will ease BID's and CTG's pressure of pushing mobilization or curbing credit growth in 2017. Furthermore, BID and MBB's estimated short-term capital for mid and long term loan ratios is 40.9% and 33.8%, respectively, as of the end of Q2 2016. Therefore, we assume that BID and CTG may improve the interest rate gap between loans and deposits, which will consequently slightly increase NIM in 2017.

Table Short-term Capital for Mid and Long Term Loan Ratio Adjustment Agency

(%)	Circular No. 36	Circular No.06		
		01/07 - 31/12/2016	2017	From 2018
Commercial Bank	60	60	50	40
State-owned Bank Branch	60	60	50	40
Non-bank credit institution	200	100	90	80
Co-operate Bank	60	60	50	40

Source: RongViet Research

Table: Short-term capital for mid and long term loan ratio Q2/2016 (%)

ACB	BID	CTG	EIB	MBB	SHB	STB	VCB
30.7	40.9	33.8	48.0	18.3	51.8	43.3	28.4

Operating Expenses: Pressure from Infrastructure Investments and Human Resources

- **CIR ratios are rising**
- **Promotions for individual customers and SMEs leads to higher operating expenses**

- *Vietnam's retail banking segment has strong potential due to the country's 60% working-age population, which consequently creates a new business field for commercial banks. Investment demand for human resources, technology and branch networks are all growing strongly. As the capital demand from the economy has begun to improve since 2015, employee and salary growth also begin to soar.*
- *Moreover, joint stock commercial banks are still pursuing this business segments, and state owned banks BID and CTG have also started to exploit SMEs and individual customers. In particular, CTG continues to achieve this goal by boosting technology investments and converting to a vertically operating model. As a result, the CIR of BID and CTG is projected to remain at high levels. Conversely, VCB's operating costs will increase slower than other banks and CIR can be below 41%, due to its extensive experience and because it targets the wholesale segment.*

CIR Ratio is Increasing

CIR ratios are clearly differentiated between banks. The CIR of state banks have consistently fluctuated around 43% (± 4%), while the CIR of commercial banks have remained at an average of 60% (± 5%). Although it is a joint stock, MBB has an organizational structure that is similar to state-owned banks, which helps its CIR to remain lower than the industry average of around 35%.

The CIR of CTG started to increase in 2013 - 2015 and was higher than VCB's CIR by about 8 pp. This is partially because the operating income of CTG declined for three consectutive years (2012-2014). In addition, the implementation plan of switching to vertical operational models and technology investments for the development of the retail banking segment has also expanded its operating costs, which led to higher CIR.

Table: CIR and Operating Expenses of Listed Banks in 2011- 6M 2016

Banks	Listed Bank's CIR indicator						Operating Expense Growth (YoY)					
	2011	2012	2013	2014	2015	6T2016	2011	2012	2013	2014	2015	6T2016
ACB	41.2	73.2	66.5	63.8	64.7	65.2	34.6	6.2	9.0	5.6	15.8	13.8
BID	43.2	27.4	38.7	39.4	44.9	42.2	20.0	-31.2	62.6	16.0	28.6	31.0
CTG	40.6	43.0	45.5	46.7	47.1	43.7	26.1	3.9	5.0	-0.8	9.1	23.4
EIB	30.6	42.6	65.3	69.6	60.7	61.8	86.0	20.3	-7.7	-3.4	12.5	11.5
MBB	36.5	35.4	35.9	37.5	39.3	42.5	50.0	43.4	1.8	13.4	10.8	17.3
SHB	50.5	57.1	78.6	49.9	52.8	56.1	65.7	49.1	10.8	-12.7	28.0	29.7
STB	53.1	60.6	55.3	54.1	57.4	71.3	64.8	15.7	1.2	6.1	9.0	20.3
VCB	38.3	39.9	40.3	39.7	39.2	40.7	25.4	5.5	3.8	9.9	21.0	53.9

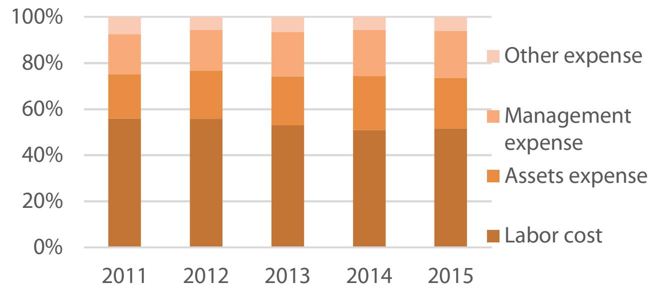
Source: RongViet Research

Staff expenses, expenditures for assets and management expenses are the three main contributors of operating costs. Staff expenses is the largest expense, accounting for 50% of the total costs.

VCB has advantages in the wholesale segment, while MBB has a particular advantage from its major shareholders; both should have an average income of each subsidiary or employee that is significantly higher than the average cost per branch or employee. Thus, the CIR ratio at these two banks has remained at low levels. Regarding BID and CTG, the gradual reduction in the proportion of loans to SOEs was offset by growth in SMEs and individual customers, which made the average cost per branch or employee relatively higher compared with VCB and MBB; this cost has tended to gradually increase over the past few years.

The remaining banks more clearly reflect the level of competition in the retail segment for commercial banks. There is no advantage to mobilizing low-cost funds, while the expansion of network, infrastructure and technology investments to meet the requirements in the retail sector result in high CIRs.

Table: Eight Listed Bank's Operating Expense Structure



Source: RongViet Research

Table: Staff Costs /Income (%)

	2011	2012	2013	2014	2015
ACB	20.6	32.3	27.5	28.8	32.1
BID	24.5	13.7	21.0	22.5	25.3
CTG	22.2	22.7	23.0	24.1	24.1
EIB	16.4	20.8	29.1	32.1	30.2
MBB	16.0	18.7	16.7	18.0	18.9
SHB	22.9	24.9	32.0	27.1	30.9
STB	28.8	30.7	29.6	31.2	33.8
VCB	21.4	22.2	21.3	20.2	20.2

Promoting the Development of Individual Customers and SMEs: Difficulty in Reducing Operating Costs

Faced with strong CIR in 2012 (except for BID and MBB), most of the banks had to implement cost-cutting policies for staff to improve CIR in 2013. The recruitment, as well as increased spending targets for employees, began to be promoted in 2015. Credit activities for the economy also started to grow faster this year, following the slowdown of 2013-2014.

Table: Changes of Staffs and Labor Cost

			2012	2013	2014	2015	CAGR	Notes
ACB	Staff	Quantity	9,906	8,791	9,296	9,935	9,816	ACB's staff costs continually decreased in 2012-2013. ACB began to increase spending on staff from 2014.
		% change	20.4	(11.3)	5.7	6.9	4.8	
	Average labor cost	VND mn/staff	190	177	187	201	0	
		% change	(0.6)	(7.1)	5.9	7.4	1.3	
BID	Staff	Quantity	18,546	18,231	19,130	23,854	23,960	After sharply decreasing in 2012, BIB's spending on staff began rising from 2012.
		% change	3.8	(1.7)	4.9	24.7	7.5	
	Average labor cost	VND mn/staff	123	221	257	262	0	
		% change	(41.7)	79.4	16.4	2.0	5.5	
CTG	Staff	Quantity	19,840	19,886	19,787	20,079	22,289	Decreased/no growth in staff costs in 2012-2013, and a slight increase in 2014.
		% change	6.5	0.2	(0.5)	1.5	1.9	
	Average labor cost	VND mn/staff	251	252	256	274	0	
		% change	(5.9)	0.1	1.6	7.0	0.6	
EIB	Staff	Quantity	5,800	5,362	5,728	6,239	5,959	Slower than the overall industry trends. EIB's sharply decreased in 2013 until 2014, and recovered from 2015.
		% change	6.8	(7.6)	6.8	8.9	3.5	
	Average labor cost	VND mn/staff	193	176	165	184	0	
		% change	2.2	(8.8)	(6.3)	11.6	(0.6)	
MBB	Staff	Quantity	5,806	6,128	6,939	7,810	8,723	MBB's average staff costs experienced uneven growth, and was higher than others bank.
		% change	13.9	5.5	13.2	12.6	11.3	
	Average labor cost	VND mn/staff	246	209	216	213	0	
		% change	52.0	(15.0)	3.3	(1.4)	7.1	
SHB	Staff	Quantity	4,996	5,002	5,553	6,083	6,226	After declining in 2012, SHB's staff cost have recovered from 2013. Growth in 2012 was modest.
		% change	75.9	0.1	11.0	9.5	21.0	
	Average labor cost	VND mn/staff	147	152	159	200	0	
		% change	(18.5)	3.5	4.9	25.9	2.7	
VCB	Staff	Quantity	13,637	13,864	14,099	14,755	14,930	VCB's costs were similar to ACB and CTG, but VCB's staff cost sharply increased in 2015.
		% change	8.5	1.7	1.7	4.7	4.1	
	Average labor cost	VND mn/staff	246	239	248	290	0	
		% change	(3.1)	(3.0)	3.9	17.1	3.4	

Source: RongViet Research collect

Vietnam has extremely favorable high-youth demographics (~59% population in working aged), as well as a large number of small and medium enterprises. SMES account for 90% of all firms, yet the banking usage primarily focuses on basic banking services (ATM, payment service). Exploiting these two potential customer groups is the main target of both commercial and state-owned banks.

The structural shift in outstanding credit classifying by customers in seven Listed Bank (except for NVB and STB) expresses this trend. SMEs and individual loan proportions have increased from around 60% in 2011 to 70% in 2015, offsetting the sharp decline in the state enterprises group (decreased from 26% in 2011 to 19% in 2015). With the exception of VCB, which has kept it customer structure consistent and well balanced, the rest of the banks have increased the proportion of outstanding loans to individual customers and SMEs.

In order to be successful in the individual customer and SME segments, banks must have large networks and also make significant investments in technology and human resources. Therefore, bank's operating cost are forecasted to increase in the next 3-5 years, which especially applies for banks that concentrate on the retail segment such as ACB, CTG or BID. VCB's operating cost will increase slower than others banks, due to its strong position and experience, as well as its focus on wholesale (large scale enterprises). Its CIR's is likely to remain under 41%.

Pilot Basel II From 2017

- **Balancing pressure between profitability targets and the the Capital Adequacy Duty**

- *Although piloted banks had a CAR higher than 9% regulated in circular 36, the deployment of Basel II has made their CAR decrease significantly. Therefore, the banks are applying solutions to improve CAR including raising capital and asset restructure as well.*
- *Raising chartered capital in state-owned banks group is not easy since (1) there is no more room to raise Capital Tier 1, as is the case of CTG; (2) there is no more room to raise Capital Tier 2, as is the case of BID; (3) the State shareholder will not invest additional capital (4) Private placement have encountered obstacles in price deals. Simultaneously, the joint-stock commercial banks group are raising chartered capital mainly through paying stock dividends and issuing long-term bonds. The pressure in raising charter capital in this group is not as high as that of state-owned banks group, since commercial banks' CAR is far higher than the regulation in circular 36.*
- *Regardless of the method, raising capital will negatively impact profitability (ROA and ROE) or NIM of listed banks in the short-term. We believe that BID will be the most heavily affected bank, in terms of the impact on profitability, while efforts to improve equity of VCB, CTG, and MBB will have a reasonable trade-off between profitability and core capital increasing.*

Balancing Pressure Between Profitability Targets and the Capital Adequacy Duty

Basel II standards about capital and risk management in credit institutions will be piloted in 10 commercial banks (*) from 2017. With Basel II standards, the risk management in credit institutions will be based on three key pillars: (1) minimum required capital, (2) approving and monitoring process, and (3) market discipline.

(*) These 10 banks include: BIDV, VietinBank, Vietcombank, Techcombank, ACB, VPBank, MBBank, Maritime Bank, Sacombank và VIB. Since STB is undergoing treatment after the merger of PNB, indices about this bank are not certain at the moment.

For capital adequacy requirements, CAR is defined at 8% (lower than the limit under Circular 36). The difference is that risky assets not only include credit risk but also account market and operating risks, implying that the total risky assets will significantly increase. Therefore, the banks must consider the riskiness of such business operation when planning their business strategy, rather than merely focusing on the profitability of projects.

CAR Formulation under Circular 36	CAR Formulation under Basel II Criteria
$CAR(\%) = \frac{Core\ capital}{Risky\ Assets} \geq 9\%$	$CAR\ (\%) = \frac{Core\ capital}{RWA\ Credit\ Risk + 12.5 * (K\ Market\ Risk + K\ Operating\ Risk\ )} \geq 8\%$

Source: RongViet Research
Core capital = Capital Tier 1 + Capital Tier 2
*Risky assets = Total Assets * weigted of risky assets + Total debt*weighted of off-balance sheet items*
K market risk/Operating risk: Minimum capital reserve for market risk/operating risk

Table: Listed Banks' CAR (%)

	ACB	BID	CTG	MBB	VCB
2013	14.7	10.2	13.2	11.0	13.1
2014	9.8	9.5	10.4	10.7	11.6
2015	12.8	9.8	10.6	12.9	11.0

Source: Listed banks' announcement, RongViet Research

There are many ways for banks to strengthen their capital to meet new CAR requirements. The implementation, however, has not been as easy as it looks like, specifically for state-owned banks whose CAR is quite low currently.

Banks can improve their CAR through:

(1) Raising core capital by raising Capital Tier 1 :

- ✓ *Stock issuance to current shareholders*. State shareholders are likely to abandon the right to buy if this plan is implemented because the National Assembly's Resolution in 2016-2020 decided not to use state budgets for funding commercial bank. As a result, the additional capital in state-owned banks may experience insignificant increases.

- ✓ *Private Placement: The most likely strategic partners for banks are foreign investors*. However, banking is a conditional industry and if the FOL is allowed to be lifted, the ratio would not be higher than 35% (except for some special case which must be approved by the Government). If approved, there would be around 5% more room for ACB and MBB (foreign ownership is full), and CTG (FO is nearly 30%), while there would be much more for BID and VCB whose current FO room is still high. However, VCB's failure in a private placement for GIC recently-has proven that it is not easy for state-owned banks to do a private placements due to the difficulty in reaching an agreement on the issue price.

  Currently, the State ownership in CTG has fallen to a minimum rate (approximately 65%). Therefore, issuing to raise Capital Tier 1 by both mentioned methods is not currently feasible.

- ✓ *M&A*. Some banks have already done this and some banks are finalizing the merging stage. However, merging with a smaller and riskier banks, or even banks that are similar in size and risk, will not improve CAR for the bank after merging.

- ✓ *Stock dividend*. This is the most commonly used scheme. However, estimated charter capital/core capital ratio is lower than the Charter Capital to Equity Capital ratio by 0.6 - 1.9 pp. The reduction in ROE will be much stronger than the benefits received from paying stock dividends.

- ✓ *Retaining earnings instead of paying dividends*. This scheme may increase equity from 6% to 11%. However, they may experience shareholder resistance since dividends are their main income (e.g. BIB and CTG case in 2016).

- ✓ *Selling treasury stock*. STB and ACB are the only listed banks that have the source of funds to do this. However, if these banks sell treasury stocks without experiencing growth in profit, this will result in a reduction in ROE and ROA.

(2) Increase Capital Tier 2 by issuing long-term bonds. Although this method is applied by most banks, its weak point is high costs, and it is short- or medium-term capital (less than 5 year maturity bond will not be counted as Capital Tier 2). As calculated in the table below, ACB and BID have almost reached the ceiling to issue long-term bonds (Tier 2 equals to 50% of Capital Tier 1).

(3) Reduce risky assets (denominator) by limiting credit growth, pushing deposit growth and restructuring loan as well as investment portfolios. By applying this method, CAR can improve while the profitability ratio or NIM will be negatively affected.

Table: Listed Banks' Core Capital by the end 2015 (VND billion)

	ACB	BID	CTG	MBB	VCB
Capital Tier 1 (1)	10,863	36,007	49,600	20,759	41,340
Capital Tier 2 (2)	4,760	24,165	15,536	4,796	8,453
Tier 2 to Capital Tier 1 (%) (3) = (2)/(1)	*43.8*	*67.1*	*31.3*	*23.1*	*20.4*
Total Core Capital (4) = (1) + (2)	15,623	60,172	65,136	25,556	49,793
Charter Capital (excluding treasury stock) (5)	8,711	34,187	37,234	16,000	26,650
Equity Capital (6)	12.788	40.950	55.868	22.593	45.007
Charter Capital/Core Capital (%) (7) = (5)/(4)	*55.8*	*56.8*	*57.2*	*62.6*	*53.5*
Charter/Equity Capital (%) (8) = (5)/(6)	*68.1*	*83.5*	*66.6*	*70.8*	*5.,2*
Net Profit-after-tax (9)	1,028	5,822	5,698	2,496	5,332
NPAT/Core Capital (%) (10) = (9)/(4)	*6.6*	*9.7*	*8.7*	*9.8*	*10.7*
NPAT/Core Capital (%) (10) = (9)/(4)	*8.0*	*14.2*	*10.2*	*11.0*	*11.8*

Source: Listed banks' calculation, RongViet Research calculation

Table: Methods to Strengthen Core Capital of Some Listed Banks (VND billion)

	Capital Tier 1						Capital Tier 2		
	Private placement	**M&A**	**Stock dividend**	**Retained Earnings**	**Selling treasury stocks**	**Total increase of Capital Tier 1**	**Long-term bond issuance**	**Total core capital increased in 2016**	**Notes**
ACB			871		665.7 (*)	871	3,500	4,371	(*) Approved during its 2016 AGM; ACB will implement when market conditions becomes better
BID	x (*)								(*) IN progress of finding a partner
CTG		3,000 (*)							(*) M&A with PG Bank
MBB	x (*)		800			800		800	(*) In progress of finding a partner
VCB	3,598 (*)		9,328				8,000	17,328	(*) Private placement of GIC failed because of the issued price. VCB must have a reserve plan in 2017

Source: RongViet Research collect

ACB's Usage Ratio is still Under Control, Which Guarantees its Growth and Effectively Improved Profitability in Future. In Q2 2016, its announced LDR was 77%, and estimated ratio of short-term capital to mid- and long-term loans was 31%. These number are significantly lower than the regulated ratio by Circular No. 36 (and Circular No.6 also). A lower capital usage ratio creates opportunities for ACB to: (1) increase credit activities and actively controlled deposit growth and (2) restructure loans by maturity to maximize its benefit. Therefore, ACB's NIM is predicted to continue growing in 2016 and 2017.

Growth Cycle has Returned. Thanks to its room for its increasing capital usage ratio, ACB's loans to customer has growth faster than its deposits from customers, which has helped ACB's core activities to experience a positive recovery in 2015; ACB's net income increased by 24% compared with 2014. This trend is predicted to continue in 2016-2018, and its interest income CAGR is estimated to be above 17%.

The process of clearing legacy issues was implemented faster than planned. ACB will be able to set its risk provision for special bonds soon. In the beginning of 2016, ACB's biggest issue that needed to be solved was its VND5,800 billion from Group 6's liabilities. It is estimated that ACB has already provisioned VND1,000 billion and recovered nearly VND2,500 billion via selling collateral in 2016. We hope that ACB can handle all of the remaining legacy issues within 2017 (faster than bank's restructure scheme). Besides that, ACB is also one of the few banks that has a low special bond amount and has been proactive in recovering bad debt selling to VAMC. By the end of Q2 2016, ACB's special bond value was VND 1,785 billion, decreasing more than 5% compared with the end of 2015. Based on such positive signs, we estimates that ACB's provision of special bond is around VND300 billion per annum. We expect that ACB would accelerate provisioning for risks before the deadline, after it finishes clearing its legacy issues.

Investing in Core Activities of Banking: Estimated CIR Remains High. ACB started to concentrate on its core banking activities since 2015, and has made changes in the brand recognition system as well as accelerated investment on technology infrastructure, human resource and network development. This scheme will take 4 years from 2015 to 2018 and its operating costs are expected to grow by 14% in this period, whereby CIR remains above 65%.

Preparing Equity for Basel 2. ACB utilizes the following capital raising solutions (1) Paying stock dividend in 2015-2017, (2) Issuing long-term stocks and (3) Selling treasury stocks. ACB issued a bond valued at VND3,000 billion in 2016 (5 year term), and as a result ACB's Capital Tier 2/Capital Tier 1 will probably approach 50%. Besides, ACB has still not announced when it will sell treasury stocks, although this has already been approved in the AGM (will be implemented when market conditions are favorable).

Valuations and Recommendation

As one of the first banks associated with bank restructuring scheme, ACB has almost finished processing deposits that varied from the regulations (deposited in other accounts at higher interest than allowed by the SBV) as well as inter-banks loans as of the end of 2016. ACB is also gradually returning to the orbital business characteristics of a commercial bank. The bank is speeding up credit activities, which allowed interest income to grow rapidly during 2015; this trend is projected to continue in upcoming years.

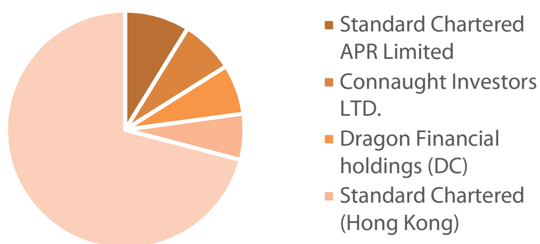
In the short-term and mid-term, ACB's profits will be used to handle the remaining legacy problems that are related to Group 6, special bond provision and IT infrastructure to develop the bank's core activities.

These investment are reasonable and necessary, since competition within the retail banking segment is fierce. ACB's main business has been able to make enough profit to meet these requirements.

By choosing to concentrate on the traditional customer segment which ACB has ample experience serving (SMEs and individual) and also focusing somewhat on the rich customer segment (Priority Banking), we expect that ACB's profit will increase between 2017-2019.

Using residual income method and PB comparing methods, we have calculated that the reasonable price for ACB is VND23,100 per share, 7.4% higher than the closing price on Jan 13th. Therefore, we are placing a NEUTRAL recommendation on ACB's stock in the LONG-TERM.

Figure: Shareholder structure (%)



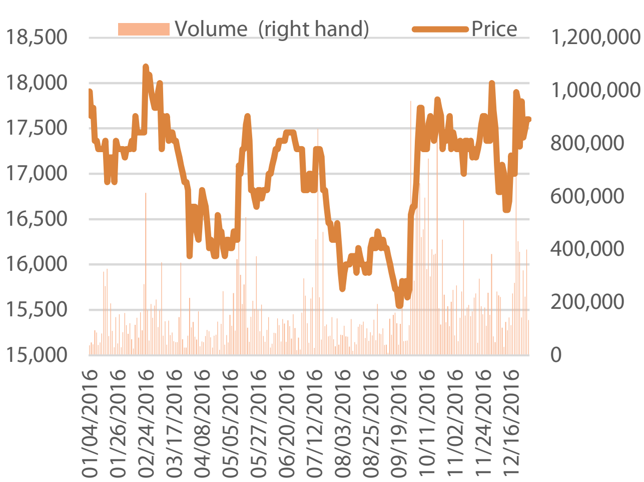
Source: FiinPro

Table: Stock information

Market Cap (VND B)	21,986
Outstanding Shares	985,901,288
Beta	0.77
Free Float (%)	71%
52 Week High	22,900
52 Week Low	15,600
Average trading volume (20 sessions)	207,272
Remaining room for foreign investors (%)	*1.47*

Source: CafeF

Figure: Price Movements



Source: FiinPro

Table: Financial Indicators and Forecast

VND billion	2014	2015	2016E	2017F
Total Assets	179,610	201,457	234,851	273,146
Growth (%)	*8%*	*12%*	*17%*	*16%*
Equity Capital	12,397	12,788	14,033	16,166
Growth (%)	*-1%*	*3%*	*10%*	*15%*
Loan to Customers	116,324	134,032	162,178	192,992
Growth (%))	*9%*	*15%*	*21%*	*19%*
Deposit from Customers	154,614	174,919	202,906	235,371
Growth (%)	*12%*	*13%*	*16%*	*16%*
Total operating income	6,056	6,220	7,133	8,427
Net interest income	*4,766*	*5,884*	*6,908*	*8,064*
PBT (after provision)	1,215	1,314	1,556	2,019
CIR (%)	64	65	66	65
NIM (%)	3.0	3.3	3.4	3.4
ROAA (%)	0.5	0.5	0.6	0.6
ROAE (%)	7.6	8.2	9.3	10.7
BVPS (VND)	13,831	14,267	14,233	14,906
EPS (VND)	1,021	1,136	1,243	1,489
P/E (x)	15.5	17.4	17.3	14.4
P/B (x)	1.1	1.4	1.5	1.4

Source: RongViet Research

Total Assets have grown dramatically after merging with MHB. After merging with MHB, BID's total assets increased by approximately 31% in 2015, making it the leading listed bank in terms of total assets. Its lending and deposit market shares have increased consistently in recent years and reached 13% and 12.2% respectively, at the end of Q3 2016.

In addition to increasing its total assets, this merger also helped BID to expand networks as well as the number of staff; it also affected its asset quality and cost indicators. The NPL ratio was 2% by the end of Q3 2016, a little higher than that of 2015, while its loan loss provision ratio was at a low level compared with other banks, at approximately 78%. Operating costs rose sharply at the same time, and the CIR had increased from an average of 39.4% in 2014 to around 45% in 2015.

Increasing of Provisions Expenses, mostly caused by special bonds. Its special bond value was VND20,800 billion as of the end of 2015, 3 times higher than that of 2014 ; it slightly decreased (less than 1%) at the end of Q2 2016. As a result, the estimated provisions for special bond in 2016 - 2019 will be 3.5 times higher than 2015. Total provisions expenses in 2016 is estimated to have increased by approximately 24% YoY.

Strong growth in deposits from customers and improvement of liquidity ratio. By Q3 2016, its deposit from customers grew 25.7%, two times higher than its lending growth. Thanks to that, BID's LDR (regulated by Circular No. 36) has fallen to 82% (2015: 95.5%). Short-term capital for mid- and long-term lending ratio is estimated to be around 41% as of the end of Q2 2016.

Temporary Slowdown in NIM: Profitability Indicators Become Negative. Due to the acceleration of deposit growth in order to secure liquidity, BID's NIM is forecasted to continue to decline significantly in 2016. However, as mentioned above, BID's liquidity ratio has basically met the SBV's required threshold by Q3 2016. Therefore, we think that mobilization pressure will subside from 2017 which will gradually help to improve BID's NIM.

In the short- and mid-term, BID's income could be used for operating and provision expenses, and profit growth will consequently not be able to be on pace with its growth in total assets and equity. Profitability ratios such as ROA and ROE are forecasted to decline.

Raising capital pressure to meet Basel II standards. BID's CAR is a little bit higher than the 9% requirement of Circular 36, which is the lowest ratio in the system. Therefore, it is likely that BID's capital buffers will have difficulties in meeting the Basel II criteria. While the ability to raise Capital Tier 2 has reached the limited threshold (estimated Capital Tier 2/Capital Tier 1 ratio was higher than 50%), the probability of increasing core capital totally depends on BID's ability to do a private placement in 2017 (State ownership is currently above 95%). Since there is still room for foreign investors to invest in BID, planning a private placement for foreign strategic shareholder is the most likely alternative for BID. However, VCB provides a clear precedent of the challenges of issuing a private placement of State-owned banks as it is difficult for those banks to issue at a discount price.

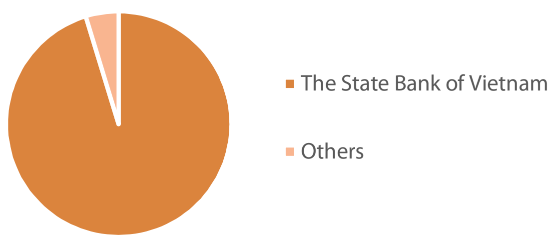
Valuations and Recommendation

BID is expected to be the largest beneficiary bank from the recovery of manufacturing, commercial and construction industries as the bank controls the large market share (12%) of credit and deposits, and many of its clients are from these industries. Although the deposits from customers growth is significantly faster than loans to customers growth; net interest income is forecasted to increase to around 14% in 2016, enough for BID to cover operating expenses and credit provisions for loan losses which are forecasted to stay high in this year as well.

Predictions for 2016, loans and deposit growth will be 15.5% and 29%, respectively, while operating expenses and loan loss provisions are expected to rise to 14% YoY and 24% YoY, respectively. PBT, which rises more than 7% YoY, is estimated to reach VND8,532 billion, surpassing the 2016 plan by about 8%. In the short-term, NIM will continue to decline due to the pressure to ensure liquidity safety. However, this basic problem is over, and NIM is expected to recover in 2017. In stark contrast, the profitability ratio is projected to continue its decline in upcoming periods due to pressure on capital raising to meet Basel II.

Using residual income method and PB comparing methods, we have calculated that the reasonable price for BID is 17,000 VND per share, 5% higher than the closing price on Jan 13th. Therefore, we have placed a NEUTRAL recommendation on BID's stock in the LONG-TERM.

Figure: Shareholder structure (%)



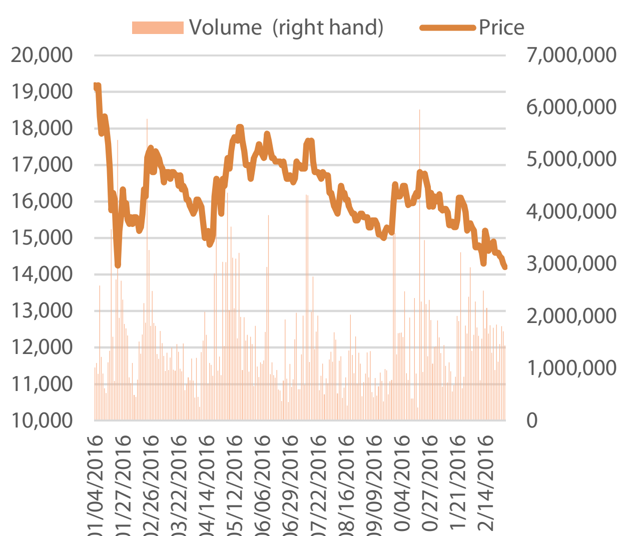
Source: FiinPro

Table: Stock information

Market Cap(VND B)	49,771
Outstanding Shares	3,418,715,334
Beta	0
Free Float (%)	5%
52 Week High	18,000
52 Week Low	14,200
Average transaction volume (20 sessions)	1,612,260
Remaining room for foreign investors (%)	28.75

Source: CafeF

Figure: Price Movement



Source: FiinPro

Table: Financial indicators and Forecast

VND billion	2014	2015	2016E	2017F
Total Assets	650,340	850,670	968,700	1,146,566
Growth (%)	*19%*	*31%*	*14%*	*18%*
Equity Capital	33,271	40,950	44,731	47,927
Growth (%)	*4%*	*23%*	*9%*	*7%*
Loan to Customers	445,693	598,434	691,192	807,312
Growth (%))	*14%*	*34%*	*16%*	*17%*
Deposit from Customers	440,472	564,583	728,312	888,541
Growth (%)	*30%*	*28%*	*29%*	*22%*
Total operating income	21,907	24,712	28,196	26,698
Net interest income	*16,844*	*19,315*	*21,976*	*21,115*
PBT (after provision)	6,297	7,949	8,532	7,882
CIR (%)	39	45	45	45
NIM (%)	3.14	2.74	2.52	3.16
ROAA (%)	0.8	0.8	0.7	0.6
ROAE (%)	15.3	15.7	15.5	13.2
BVPS (VND)	11,835	11,978	13,084	14,019
EPS (VND)	1,378	1,434	1,610	1,785
P/E (x)	9.2	14.4	10.1	9.1
P/B (x)	1.1	1.7	1.2	1.2

Source: RongViet Research

State-owned bank with largest equity capital. Right after BID merged with MHB, CTG became ranked 2nd in total assets, credit and deposit market share. However, it was still the leading listed bank in term of equity size and its operational network. By the end of Q3 2016, CTG's credit and deposit market share was 10.7% and 12%, respectively.

Period of operation model transformation and large investments in technology. After experiencing difficulties and slow growth between 2012-2014, CTG started to reconstruct its operating model as well as invest in technological infrastructure in order to improve its operational efficiency. However, this investment was costly and it will take a long time for the benefits to be realized. In 2015, its CIR was 47.1%, the highest in the State Bank Group; its CIR is estimated to remain around 47% in 2015-2018.

Selling bad debts to VAMC and provision burden. CTG has one of the lowest bad debt ratios, at around 1%, and has even been able to retain a low rate amid industry difficulties. However, the amount of bad debts sold to VAMC dramatically increased in 2015, only behind BID in the listed banks group. The company's bad debt recovery rate (after sold to VAMC) is quite good compared to other banks. Its holding special bond value has declined around 2.5% compared to that of 2015. The provision for its special bond is expected to reach it peak during 2017-2019, and subside in 2020. If the bab debt recovery rate improves, its provisioning will be complete in 2019.

The possibility of issuing long-term bonds to meet Basel II criteria. CTG's CAR was 10.5% as of the end of 2016, and its core capital buffer is small and did not satisfy the Basel II's criteria. Nevertheless, the most feasible core capital raising method is issuing long-term bonds because (1) There is no room for raising Capital Tier 1 when State ownership has fallen to 65% (the minimum) and National Assembly's Resolution decided not to use state budgets for funding commerical banks. Hence, CTG is unlikely to do a private placement or issue for current shareholders or retain dividend/pay stock dividends to raise Capital Tier 1; (2) Although CTG had issued VND8,000 billion in bonds to raise Capital Tier 2 in 2015, Capital Tier 2 was just 30% of Capital Tier 1. Thus, CTG still has large room for issuing bonds to increase its core capital.

If it merges with PG Bank, which has been planned for several years , CTG's charter capital will reach VND3,000 billion. However, merging with a smaller and higher risk bank will not help to improve its CAR.

Business Results in 9M 2016. In the first three quarters of 2016, there were widening gaps between lending & deposits growth in which lending growth was 60% of deposit growth, with lending and deposit growth reaching 16.2% and 26.9% growth, respectively. Individual loans saw an optimistic shift, offsetting the decrease of the state enterprise group. Total assets increased by 15.6% YTD, double the level of last year, and its bad debt ratio has remained below 1%.

Capital adequacy and liquidity margin of safety have almost reached the central bank's limit and CTG has had no room to improve its NIM. However, bank earnings have risen as compared with last year; net interest income and services income growth were 18.4% YoY and 12.7% YoY, respectively, while total operating income increased by 19.3% YoY. Operating expenses and loan loss provisions have also been rising, which has resulted in PBT increasing by 13.3% YoY, reaching VND 6,485 billion (82% of its annual plan).

Valuation and Recommendation:

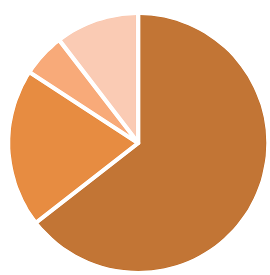
CTG is in its transition period with relatively high investment demand, not only to meet expenses in IT but also in its network and human resources. CIR is projected to be 47% in 2016 and 2017, with an average growth rate of over 10% per year. In addition, the value of the special bond also rose sharply in

2015 while its debt recovery rate is only about 3% in 6M2016; its provision is consequently forecasted to remain high in the period of 2016 - 2018. However, due to the company having a large market share (10%), the improving of the economy's demand for capital will help to push CTG's income growth (+12% YoY), making up for the increase in operating and provision expenses.

Since 2015, CTG has started to increase deposits much more than lending. As a result of this, LDR declined to 85% at the end of Q2 2016. Short-term capital for mid and long-term lending is estimated to be approximately 33.8%, lower than the current regulation by the SBV. However, the regulated short-term capital for mid- and long-term lending ratio will decline from 2017, and CTG consequently does not have much room for improving its NIM. On the other hand, CTG has no room to raise Capital Tier 1, so ROE is expected to improve in the near future.

Using the residual income method and PB comparing method, the estimated reasonable price for CTG is VND18,000 per share, 4% higher than its closing price on Jan 13th. Thus, we recommend investors to NEUTRAL for CTG in the LONG TERM.

Figure: Shareholder Structure (%)



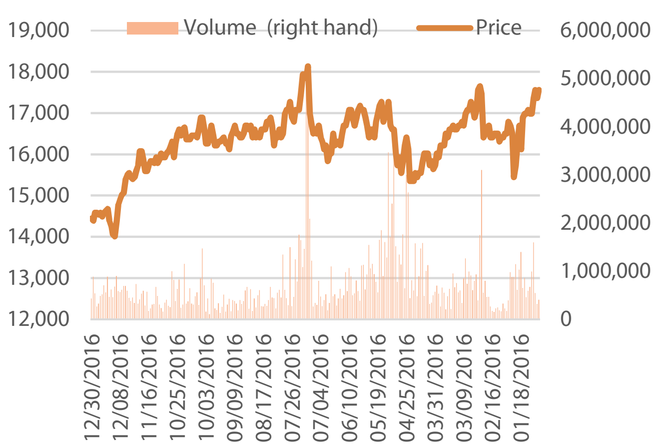
Source: FiinPro

Table: Stock information

Market Cap(VND B)	63,484
Outstanding Shares	3,723,404,556
Beta	0.96
Free Float (%)	10.4
52 Week High	18,100
52 Week Low	14,000
Average trading volume (20 sessions)	741,421
Remaining room for foreign investors (%)	0.14

Source: CafeF

Figure: Price Movement



Source: FiinPro

Table: Financial indicators and Forecast

VND billion	**2014**	**2015**	**2016E**	**2017F**
Total Assets	661,242	779,483	946,995	1,069,400
Growth (%)	*15%*	*18%*	*21%*	*13%*
Equity Capital	55,259	55,868	59,897	67,916
Growth (%)	*2%*	*1%*	*7%*	*13%*
Loan to Customers	439,869	538,080	636,010	737,772
Growth (%))	*17%*	*22%*	*18%*	*16%*
Deposit from Customers	424,181	492,960	641,834	770,201
Growth (%)	*16%*	*16%*	*30%*	*20%*
Total operating income	21,031	22,744	25,829	28,621
Net interest income	*17,580*	*18,839*	*21,089*	*23,629*
PBT (after provision)	7,302	7,345	8,249	10,056
CIR (%)	47	47	47	47
NIM (%)	3.1	2.8	2.6	2.5
ROAA (%)	0.9	0.8	0.8	0.8
ROAE (%)	10.5	10.3	11.4	12.5
BVPS (VND)	14,841	15,004	16,087	18,240
EPS (VND)	1,266	1,208	1,395	2,153
P/E (x)	10.9	15.4	12.4	8.0
P/B (x)	0.9	1.2	1.1	0.9

Source: RongViet Research

Top asset quality among commercial banks. Similar to VCB, MBB also applied two methods early on to classify debts qualitatively and quantitatively; therefore, the bad debt rate and loan losses provisions are quite higher than others banks in the same group. MBB is one of few banks that is not under pressure from the recent restructuring scheme in the banking industry. By the end of Q3 2016, its bad debt ratio declined to 1.3%, and the loan loss reserve ratio saw a dramatic rise of 117% over the same time period.

Fluctuated asset structure after state 1 of the bank industry restructuring scheme. In the past, MBB's main business not only provided credit to the economy but also contributed net lending for the inter-bank market and investing in debt securities. However, this trend has been on a turn since 2012, and its new item's structure include the following: lending and deposits for other credit institutions, customer lending, and investment securities have changed from 30% - 42% - 14% to 10% - 60% - 21%, respectively, by the end of Q3/2016.

Commercial banking activities are not highly effective. NIM has still been on a downward trend since 2011 due to the slowdown in earnings from debt securities and the inter-bank market. Meanwhile, economic credit has been maintaining strong growth and loans to customers now account for 50% of the asset structure, yet it has been unable to offset the drop in income which came from the inter-bank market. NIM is forecast to drop to 3.6% in the end of 2016 (2015: 3.9%).

According to our estimations, LDR has increased from approximately 73% in the end of 2015 to approximately 80% in the end of Q3 2016; this was a result of accelerate lending growth more than customer deposits. Meanwhile, short-term capital for mid-term and long-term lending ratios was estimated to be around 20%, quite low compared with Circular 36 (Circular 06) regulations. Therefore, there is not much room for improving NIM, although short-term capital for mid-term and long-term lending ratios is quite low. MBB still has a chance to restructure its loan's maturity to gradually restore NIM.

There is no vast pressure in piloting Basel II: The CAR indicator in the end of 2015 reached 12.9%, quite far from Circular 36's requirement of 9%. As of Q1 2016, MBB had issued more than 31 million shares to swap with Song Da Financial Corporation, raising more than VND300 billion worth of equity. Thus, if piloting Basel II , MBB's pressure to raise capital will not be serious as other banks.

Valuation and Recommendation

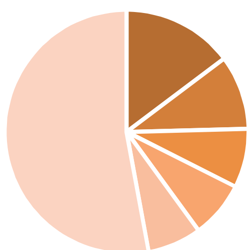
As a commercial bank whose shareholders are enterprises backed by the military, MBB always gains an advantage over other banks in mobilizing with low costs. With tightly classified loans and low capital usage co-efficiency, MBB is always known as a commercial bank with high quality assets and a safety capital and liquidity ratio as well.

However, MBB's weakness in businesses began to appear as the banking industry in Vietnam went through some serious struggles. It has a low credit and mobilization market share, at 3.2% and 2.5% respectively, and also has less experience in the commercial bank field causing MBB's profitability ratio to continually decrease. As of the end of Q3 2016, its mobilization growth was only 2.9% and its net interest income only grew by 4% YoY(much lower than VCB and ACB) despite the 20% growth in loans to customer. Although loan loss provisions have subsided compared with last year (-33% YoY), PBT just reached VND2,788 billion, increasing by 9% YoY and attaining 77% of its yearly business plan. According to its forecast for 2016, customer loans and deposits are estimated to reach 23% and 8%, respectively,whereby EBT will reach VND3,698 billion, increasing by 14.7% YoY, higher than its plan of 2.3%.

Many investors appreciate MBB due to its cash dividend policy, as well as it not being under capital raising pressure like others banks in piloted Basel II. MBB plans to pay a minimum dividend of 10%. MBB is able to maintain this rate while other banks face difficulties.

Using the residual income method and PB comparing method, the estimated reasonable price for MBB is VND15,900 per share, 16% higher than its closing price on Jan 13th. Thus, we recommend investors to ACCUMULATED MBB in the LONG TERM.

Figure: Shareholders Structure (%)



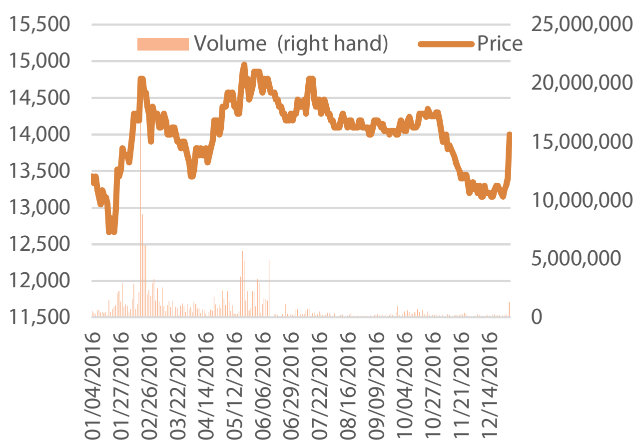
Source: FiinPro

Table: Stock information

Market Cap (VND B)	17,733
Shares Outstanding	1,712,740,909
Beta	0.9
Free Float (%)	52.9%
52 Week High	15,000
52 Week Low	12,700
Average trading volume(20 sessions)	829,414
Remaining room for foreign investors (%)	10

Source: CafeF

Figure: Price Movement



Source: FiinPro

Table: Financial indicators and Forecast

VND billion	2014	2015	2016E	2017F
Total Assets	200,489	221,042	248,835	274,967
Growth (%)	*11%*	*10%*	*13%*	*11%*
Equity Capital	16,561	22,593	24,990	26,356
Growth (%)	*9%*	*36%*	*11%*	*5%*
Loan to Customers	100,569	121,349	149,259	173,887
Growth (%))	*15%*	*21%*	*23%*	*17%*
Deposit from Customers	167,609	181,565	195,183	214,701
Growth (%)	*23%*	*8%*	*8%*	*10%*
Total operating income	8,307	8,772	9,387	9,818
Net interest income	*6,540*	*7,319*	*7,929*	*8,314*
PBT (after provision)	3,174	3,221	3,698	3,870
CIR (%)	37	39	40	40
NIM (%)	4.2	3.9	3.6	5.1
ROAA (%)	1.3	1.2	1.3	1.2
ROAE (%)	15.8	12.7	12.4	12.0
BVPS (VND)	14,284	13,851	14,591	15,388
EPS (VND)	2,136	1,800	1,614	1,797
P/E (x)	6.1	8.1	8.5	7.6
P/B (x)	0.9	1.1	0.9	0.9

Source: RongViet Research

Bad debts and asset quality are under control: In the end of Q3 2016, the company's credit growth reached 15.7%, which is considered a moderate level of growth when compared with other listed banks. However, this is the fastest growth in comparison with same period of the previous year. Its bad debt ratio slightly decreased to 1.7%, and its loan loss reserve ratio rose to 128% compared with 108% in the end of 2015.

The company's usage ratio is below the regulation level, which is an advantage to improve its profitability. The estimated LDR and short-term capital for mid-term and long-term lending is 79% and 28%, respectively, in the end of Q2 2016 , which is a slight increase as compared to 2015. However, when compared with Circular No.36 (and Circular No.06), VCB's usage ratio is quite low which creates room for restructuring the loan maturity as well as raising its initiatives in mobilization in a most beneficial way. Based on estimations from Q3 2016, NIM increased by over 3% and ROE improved over 14% in comparison with 2015(over 12%).

Earnings saw dramatic growth due to improved income and decreasing provisions for loan losses. Total operating income in the first 9 months of 2016 increased by 20% YoY due to (1) Positive growth in non interest income because of growth in net service income and others income(13%YoY, and 7% YoY, respectively). Meanwhile, the sharp increase in operating costs (26% YoY) in the first 9 months in 2016 (paying to staff, mainly) offset the decrease of provisions for loan losses (-4% YoY). By the end of Q3 2016, VCB's EBT increased by 36% YoY, attaining 84% of its yearly business plan.

VCB was the first bank to finish making provisions for its special bond. In the end of Q2 2016, VCB's special bond value was over VND3,500 VND(-1.4% YTD), and the special bond provisioning was approximately 65% of face value, the highest in the banking industry. With a solid foundation and strong growth in 2016, VCB continued to provision the remaining amount in the last quarter of 2016.

Preparing to pilot Basel II. VCB's CAR in the end of Q2 2016 reached 9.74%, the lowest among other banks that joined the piloting Basel II. VCB has been implementing several plans to raise equity capital: (1) issuing bonus shares (35% proportion, which has been completed); (2) Private placement with 10% proportion for GIC, which has not been approved due to the disagreement on price. VCB will have to figure out another plan in 2017 and (3) Issuing VND2,000 billion worth of 10 year-termed bonds (completed).

Opinions and Valuation:

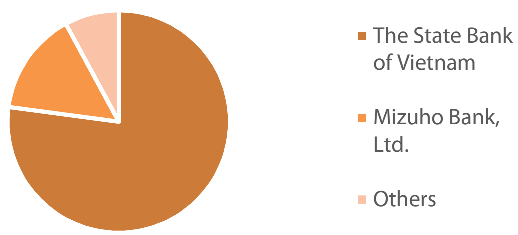
VCB is one of the most highly appreciated banks in terms of transparency and its position in the bank market. VCB is ranked 4th in total assets, 3rd in size of state banks despite its customer loan and deposit market share falls behind BID and GTG. However, its safety asset structure and low usage ratios are other advantages for VCB, which also provides room for improving its profitability.

In addition, the lending rate in public enterprises has been on a downward trend since 2013, only making up 23.3% of the credit structure. On the other hand, lending in SMEs and individuals significantly improved as of the end of 2015, growing by 21%, and 30% , respectively; CAGR in 2011-2015 was 16% and 30%, respectively. These results display VCB's efforts and its dynamic in capturing the retail market, which is a key destination of the banking industry. Even so, VCB's customer structure is quite evenly disbursed, and its operating costs are not a burden like other banks. CIR is predicted to slightly increase to 41% in 2016-2018 before falling to 39% in 2020.

In 2016, the estimated customer loan and deposits will grow by 20% and 17%, respectively. PBT is forecasted to reach VND 8,315 billion, increasing by 22% and overcoming its plan by 11%.

Using the residual income method and PB comparing method, the estimated reasonable price for VCB is VND39,500 per share, 5% higher than its closing price on Jan 13th. Thus, we recommend investors to NEUTRAL for VCB in the LONG TERM.

Figure: Shareholders Structure



Source: FiinPro

Table: Stock information

Market Cap (VND B)	136,895
Outstanding Shares	3,597,768,575
Beta	0.83
Free Float (%)	7.9
52 Week High	41,800
52 Week Low	28,100
Average trading volume(20 sessions)	932,623
Remaining room for foreign investors (%)	9.1

Source: CafeF

Figure: Price Movement

Source: FiinPro

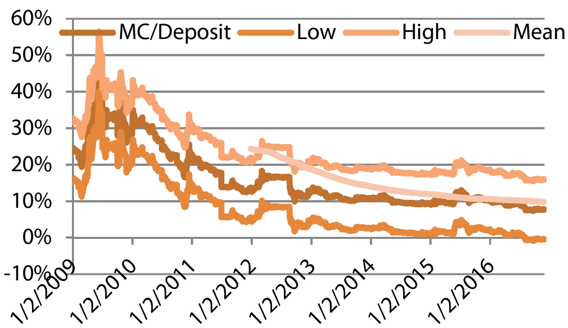
Table: Financial indicators and Forecast

VND billion	**2014**	**2015**	**2016E**	**2017F**
Total Assets	576,996	674,395	764,197	860,594
Growth (%)	*23%*	*17%*	*13%*	*13%*
Equity Capital	43,325	45,007	48,218	52,608
Growth (%)	*2%*	*4%*	*7%*	*9%*
Loan to Customers	323,338	387,152	464,582	543,561
Growth (%))	*18%*	*20%*	*20%*	*17%*
Deposit from Customers	422,204	500,528	585,618	667,605
Growth (%)	*27%*	*19%*	*17%*	*14%*
Total operating income	17,285	21,202	24,302	27,047
Net interest income	*12,009*	*15,453*	*18,717*	*21,537*
PBT (after provision)	5,844	6,827	8,315	10,009
CIR (%)	40	39	41	41
NIM (%)	2.4	2.7	2.7	2.7
ROAA (%)	0.9	0.9	0.9	1.0
ROAE (%)	10.7	12.1	14.2	15.8
BVPS (VND)	16,257	16,888	13,402	14,622
EPS (VND)	1,533	1,626	1,504	2,220
P/E (x)	20.8	27.0	24.9	16.9
P/B (x)	2.0	2.6	2.8	2.6

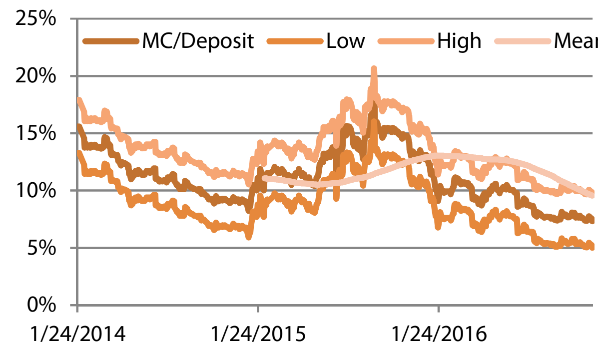
Source: RongViet Research

Figure: Listed banks' Market Cap to Deposits ratio

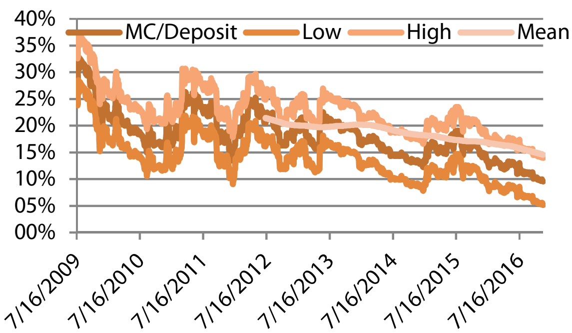
ACB



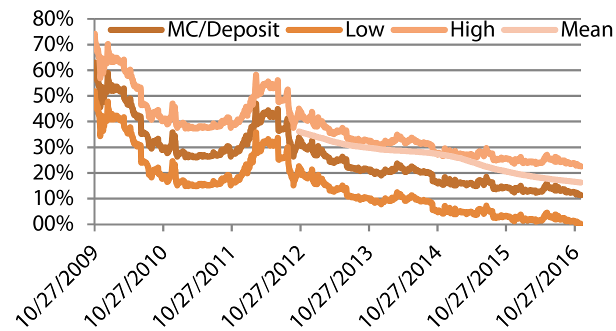
BID



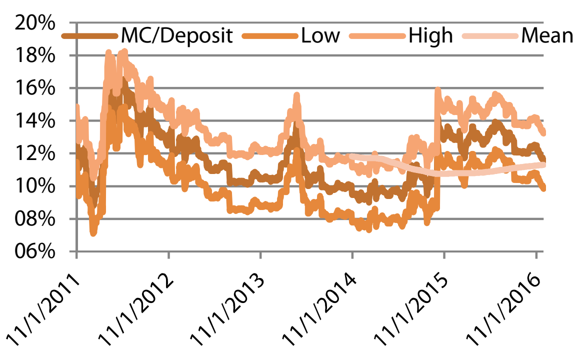
CTG



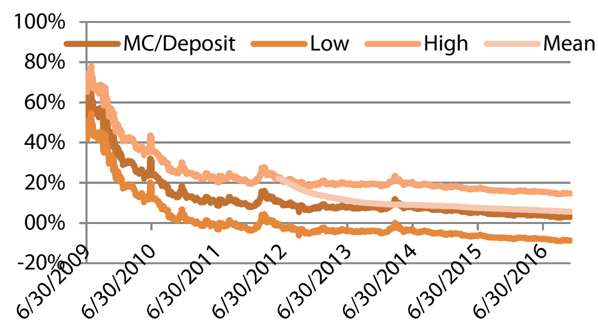
EIB



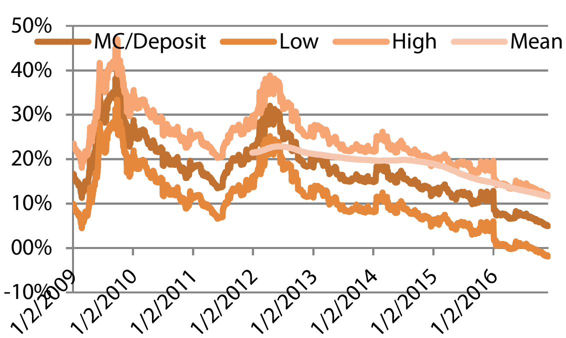
MBB



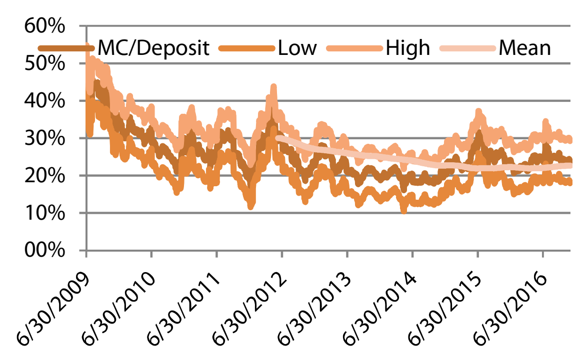
SHB



STB



VCB



Source: RongViet Research, Bloomberg

Figure: ACB's Loans by Customer Type

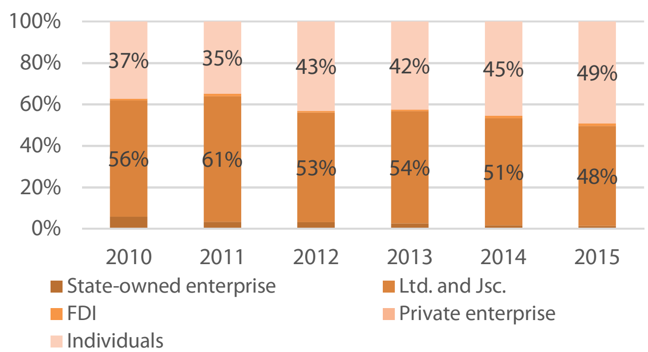
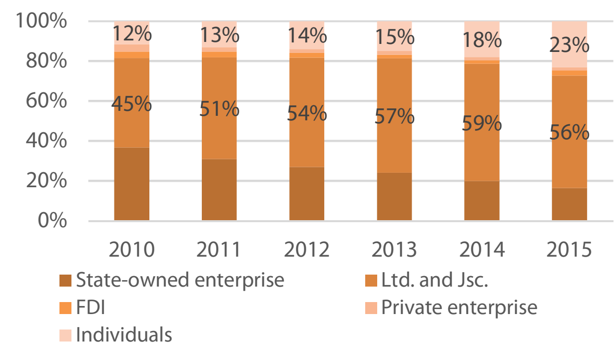


Figure: BID's Loans by Customer Type



Source: RongViet Research

Figure: CTG's Loans by Customer Type

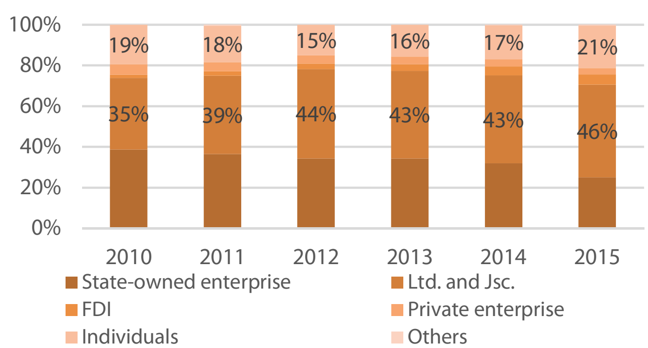
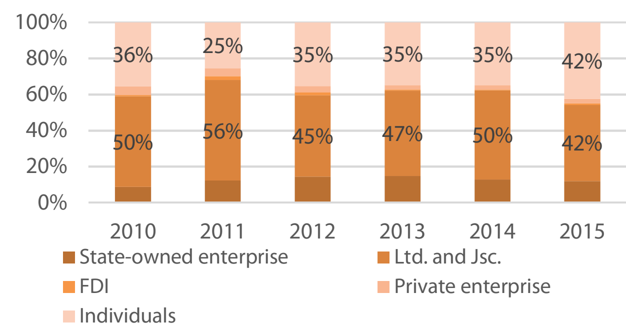


Figure: EIB's Loans by Customer Type



Source: RongViet Research

Figure: MBB's Loans Customer Type

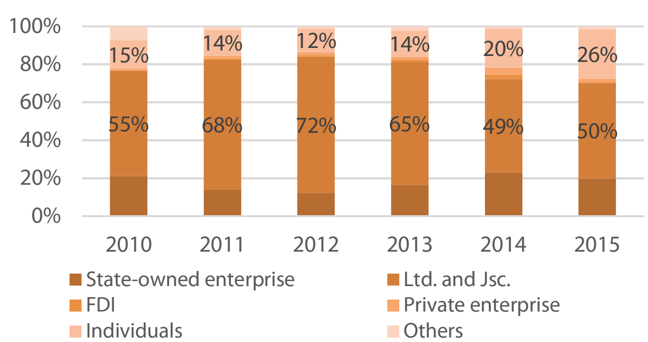
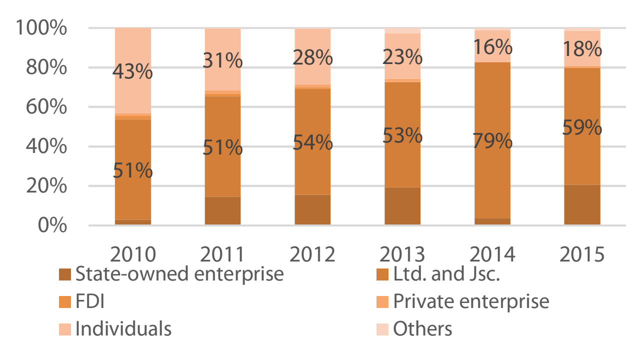


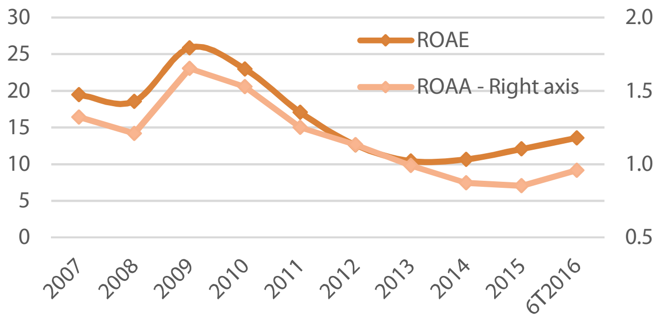
Figure: SHB's Loans by Customer Type

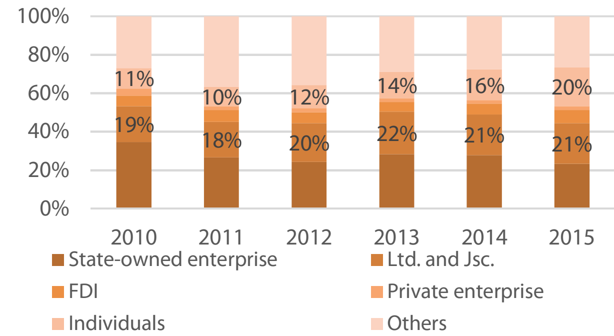


Source: RongViet Research

Figure: ROAE và ROAA của VCB (%)

Figure: VCB's Loans by Customer Type





Source: RongViet Research

Figure: ROAE và ROAA của ACB (%)

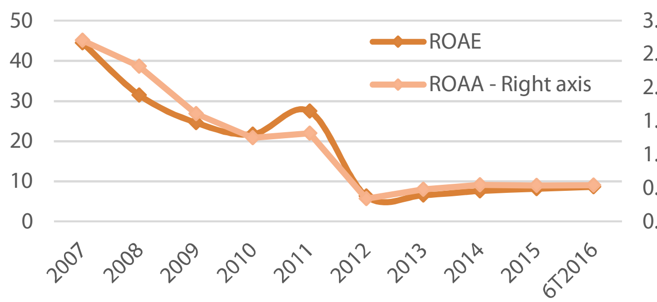


Figure: ROAE và ROAA của BID (%)

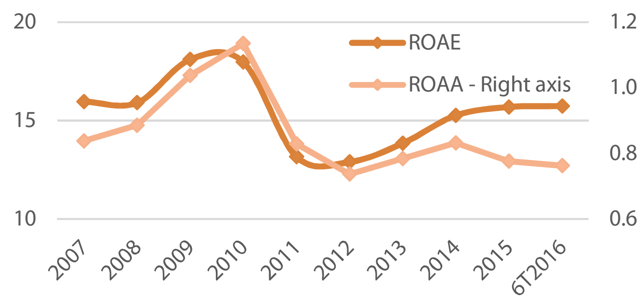


Figure: ROAE và ROAA của CTG (%)

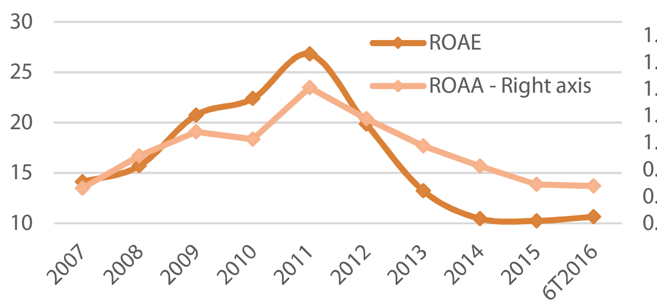


Figure: ROAE và ROAA của EIB (%)

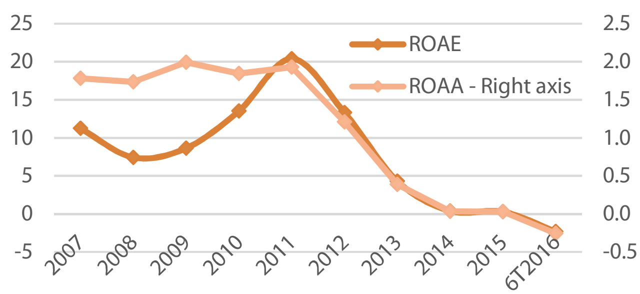


Figure: ROAE và ROAA của MBB (%)

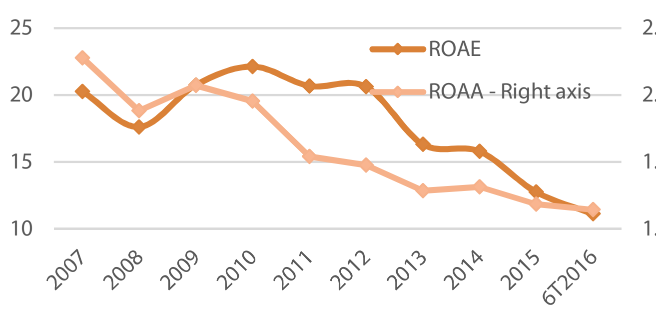
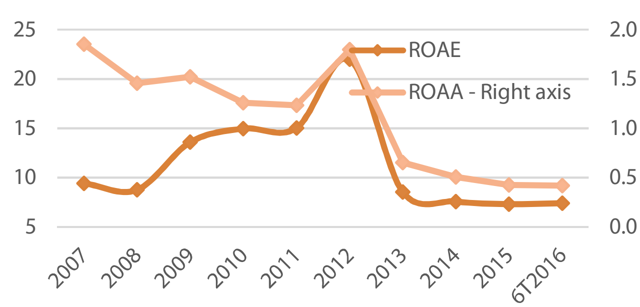


Figure: ROAE và ROAA của SHB (%)



Source: RongViet Research

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