Vietnam

ADD

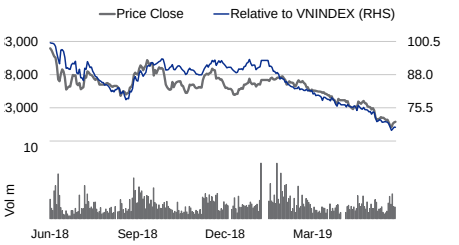
Consensus ratings*:	Buy 7	Hold 1	Sell 0

Current price:	VND20,900
Target price:	VND27,400
Previous target:	*N/A*
Up/downside:	31.1%
CGS-CIMB / Consensus:	-21.0%
Reuters:	TCB.HM
Bloomberg:	TCB VN
Market cap:	US$3,138m
	VND73,078,776m
Average daily turnover:	US$1.51m
	VND35,106m
Current shares o/s:	3,497m
Free float:	34.8%

**Source: Bloomberg*

Key changes in this note

- N/A



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	-9.9	-19.9	-34
Relative (%)	-9.1	-17.3	-31.9

Major shareholders	% held
Masan Group	15.0
Chairman and related parties	15.9
Others	69.1

Analyst(s)

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Techcombank

Sharp fall in share price suggests an entry point

- TCB's ecosystem banking model gives it a competitive advantage over other banks in Vietnam, in our opinion.
- We expect its strong individual loan growth and rising CASA ratio to improve FY19-21F NIM.
- We forecast a solid net profit CAGR of 16.7% over FY19-21F.

Initiate with an Add rating and potential upside of 31.1%

We initiate coverage on Techcombank (TCB) with an Add rating and TP of VND27,400, based on residual income valuation (COE: 13.3%, LTG: 4%) and 1.5x FY19F P/BV. We like TCB for: 1) its unique business model of ecosystem banking; 2) its strongest and most diversified non-interest income (non-II) franchise in Vietnam, and 3) its advanced technology that is customer-centric. TCB trades at 1.2x FY19F P/BV, vs. regional peers' average of 1.6x despite good returns and low leverage; thus, we think it is undervalued.

Unique ecosystem banking approach that is unmatched by rivals

TCB has a long-standing relationship with large-scale conglomerates that allows the bank to extend its reach to the supply chain and customer base of these conglomerates. Its ecosystem approach helps TCB to diversify its loan portfolio across participants in the ecosystem with different risk weights rather than focused on a few large borrowers. TCB also manages the cash flow of the ecosystem, which helps the bank monitor the financial performance of borrowers. The ecosystem approach also creates opportunities for cross-selling, helping TCB to build a strong non-II franchise.

TCB has the strongest and most diversified non-II franchise

TCB's non-II is attributed to payment services, bancassurance, corporate bond advisory and brokerage. In FY18, TCB's non-II accounted for 39.4% of total operating income, the highest proportion among Vietnamese banks. It is the No.1 player in both bancassurance and corporate bond brokerage in terms of annual premium equivalent and volume of bonds market share, at 20% (at Sep FY18) and 82%, respectively (at end-FY18).

Advanced technology enables customer-centric system

TCB was the first private bank to make a big investment in the centralised online real-time exchange (core) system in 2001, with total investment equal to 20% of its charter capital at that time. This bold investment and continuous improvement helped TCB to build a customer-centric system that provides comprehensive view of transactions and analytical tools for better understanding of customers. Customer centricity and ecosystem banking are powerful tools for TCB to expand its customer base and product penetration.

Potential re-rating catalysts and downside risks

Potential re-rating catalysts are higher CASA ratio than our forecast of 35.0% in FY20F and higher-than-expected credit growth, while inflation remains stable. Downside risks are increase in bad debt as interest rates are on the rise.

Financial Summary	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Net Interest Income (VNDb)	8,930	11,127	13,065	15,717	19,032
Total Non-Interest Income (VNDb)	7,413	7,223	7,717	8,327	9,380
Operating Revenue (VNDb)	16,344	18,350	20,781	24,044	28,413
Total Provision Charges (VNDb)	(3,609)	(1,846)	(2,563)	(3,040)	(3,845)
Net Profit (VNDb)	6,446	8,463	9,348	10,756	12,736
Core EPS (VND)	2,050	2,412	2,664	3,065	3,629
Core EPS Growth	82.9%	17.6%	10.5%	15.1%	18.4%
FD Core P/E (x)	10.19	8.67	7.85	6.82	5.76
DPS (VND)	-	-	-	-	-
Dividend Yield	0%	0%	0%	0%	0%
BVPS (VND)	7,702	14,790	17,463	20,539	24,182
P/BV (x)	2.71	1.41	1.20	1.02	0.86
ROE	27.7%	21.4%	16.5%	16.1%	16.2%
% Change In Core EPS Estimates					
CIMB/consensus EPS (x)			0.95	0.91	1.03

SOURCES: VND RESEARCH, COMPANY REPORTS

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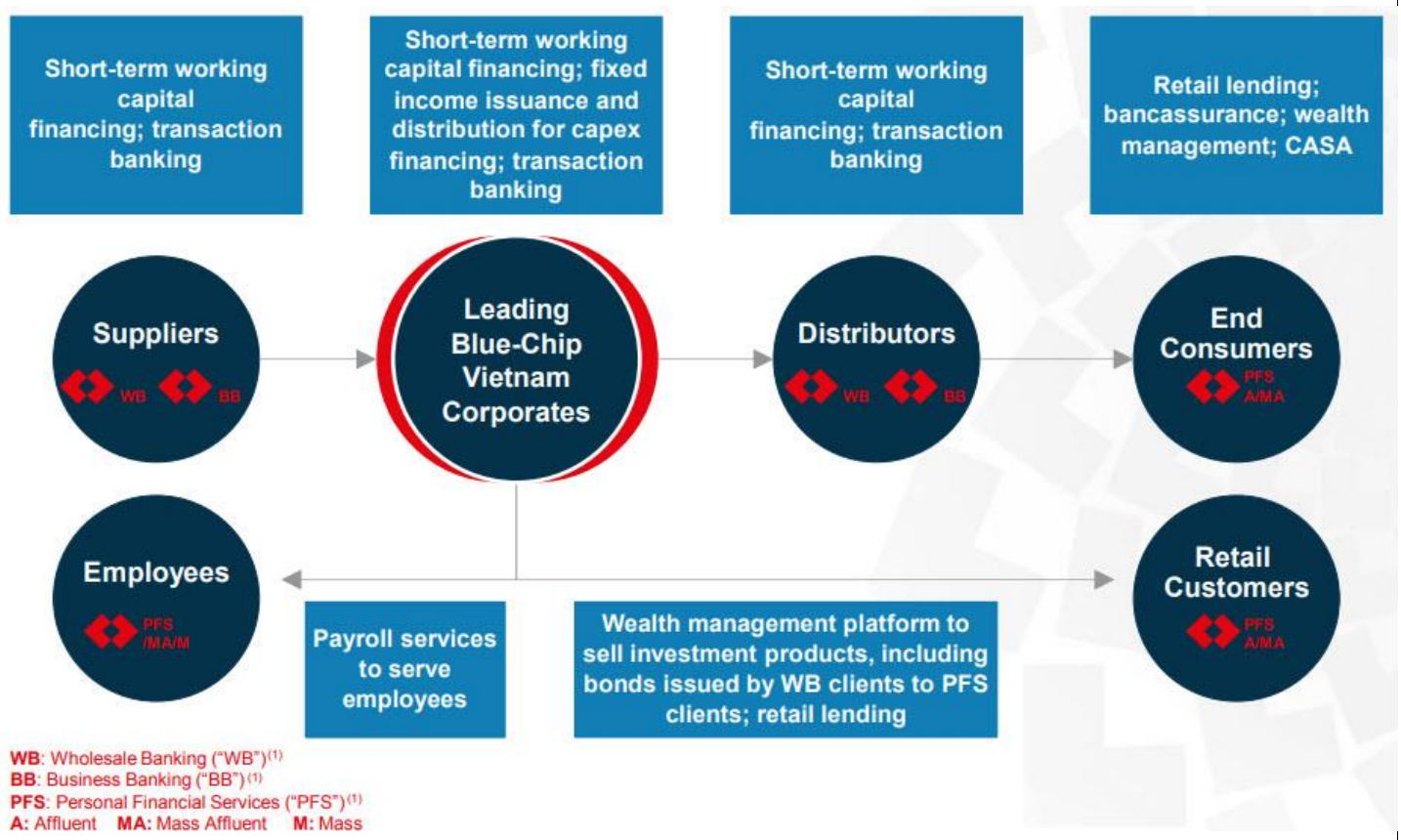
Unique business model supports solid growth

INVESTMENT THESIS

Unique model of ecosystem banking to reduce risk and increase cross-selling »

One of TCB's competitive advantages is its strong connections with large conglomerates in Vietnam, such as Vingroup (VIC VN, Not Rated; VIC) and Masan Group (MSN VN, Not Rated; MSN). The large scale of these corporates allows TCB to implement an ecosystem approach, whereby TCB approaches the big corporates (which are called "anchor corporates") and taps into the entire supply chain of the anchor corporates. TCB provides credit and transaction banking services to the anchor corporates, as well as the suppliers and distributors of these corporates. In addition, the bank also provides retail loans, deposit, insurance and payment products to the customers and employees of these corporates.

Figure 1: TCB's ecosystem approach



SOURCES: COMPANY REPORTS

The ecosystem approach not only helps TCB to expand its customer base but also mitigates credit risks. Instead of centralising credit to the anchor corporates, TCB diversifies lending to companies in the supply chain and to customers of the anchor corporates. The loan portfolio is spread across different borrowers with different risk weights, from low to high; as a result, a diversified loan portfolio lowers the risk-weighted assets. In addition, shifting away from wholesale banking to retail banking lifts the blended net interest margin (NIM). Higher NIM and lower risk-weighted assets from a diversified portfolio increases the return on risk-weighted assets – a measure of profitability that takes into account the risk of assets. But more importantly, the ecosystem approach allows TCB to manage the

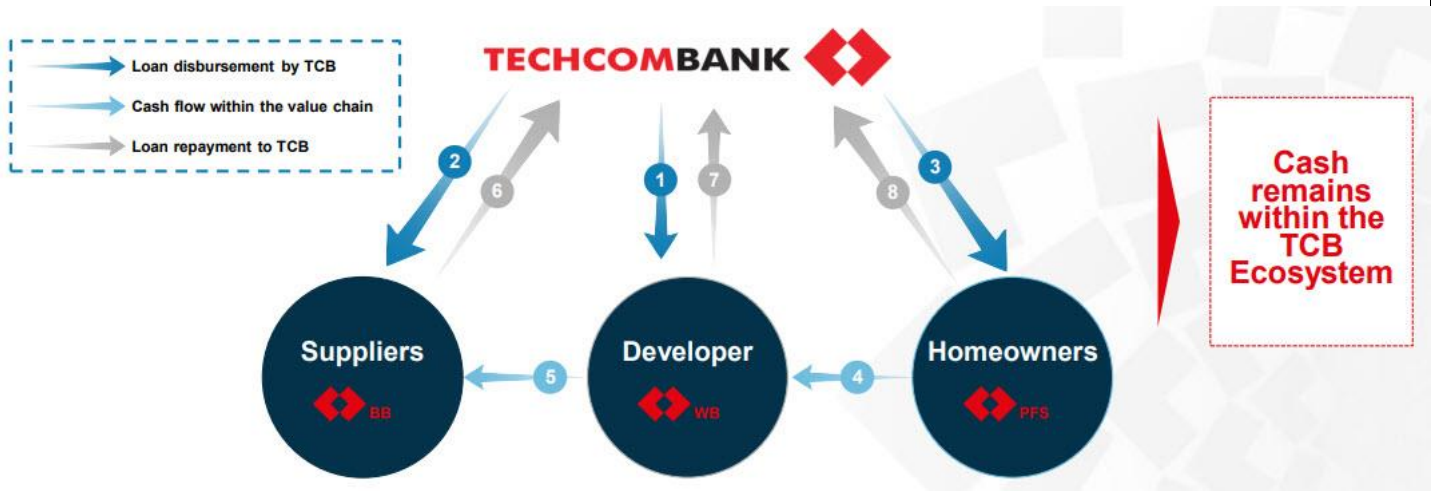
cash flow of borrowers within the ecosystem as borrowers are required to open payment accounts at TCB. As a result, the bank can track the financial performance of borrowers and ensure that borrowers have sufficient cash flow to repay their loans.

Figure 2: Ecosystem financing generates higher returns on risk-weighted assets than the wholesale lending approach

	Ecosystem approach				Wholesale lending approach			
	Suppliers	Developer	Homebuyers	Overall value chain	Suppliers	Developer	Homebuyers	Overall value chain
Loan Amount	150	50	300	500	0	500	0	500
Risk-Weight	90%	200%	50%	77%	90%	200%	50%	200%
Risk-Weighted Assets (RWAs)	135	100	150	385	0	1,000	0	1,000
Net Interest Margin	3.5%	2.2%	2.0%	2.5%	3.5%	2.2%	2.0%	2.2%
Net Interest Income	5	1	6	12	0	11	0	11
Return on RWAs	3.9%	1.1%	4.0%	**3.2%**	N/A	1.1%	N/A	**1.1%**

SOURCES: COMPANY REPORTS

Figure 3: Cash flow within the ecosystem is managed by TCB

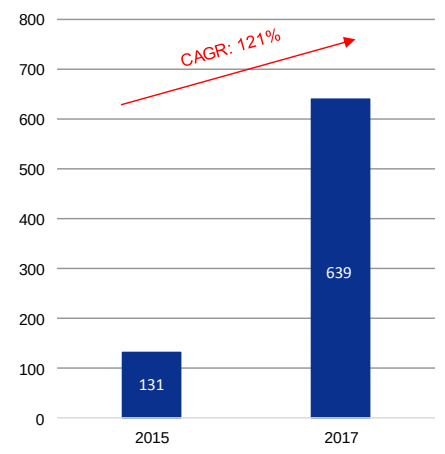


SOURCES: COMPANY REPORTS

Besides supply chain financing, the ecosystem approach provides TCB with opportunities to cross-sell non-credit products. TCB has access to the large customer base of anchor corporates to promote retail products such as credit cards, insurance and corporate bond brokerage. To illustrate the benefits of the ecosystem approach in cross-selling banking products, we look at the ecosystem encompassing TCB, VIC and homebuyers of VIC. VIC is a leading real estate developer in Vietnam and all of VIC's residential projects completed so far are in the high-end segment. TCB has been the major lender for homebuyers of VIC's projects. As a result, the bank can approach high-income customers, which the bank classifies as the affluent and mass affluent segments. TCB disclosed that in FY17, 87% of its total mortgages came from the ecosystem and 96% of mortgages from the ecosystem were contributed by affluent and mass affluent customers. The affluent and mass affluent are the ideal customer segments to target promotion of credit cards, insurance and corporate bonds as they have higher propensity to spend and invest. Moreover, these customers often maintain a high account balance at banks, therefore they help the banks to expand the deposit book. The cross-selling of card products and payment services to mortgage customers helped TCB's retail deposits to increase by a 15% CAGR over FY15-18, outpacing the overall deposit book CAGR of 12% over the same period. TCB's

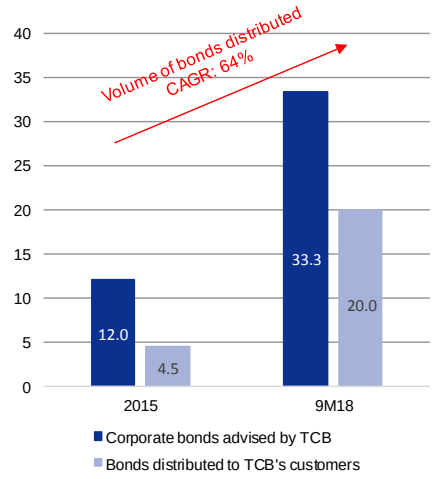
CASA deposits also rose by a 25% CAGR over FY15-18, thereby lifting the CASA ratio from 20.6% at end-FY15 to 28.7% at end-FY18.

Figure 4: Net fee income from mortgage customers of VIC (VND bn)



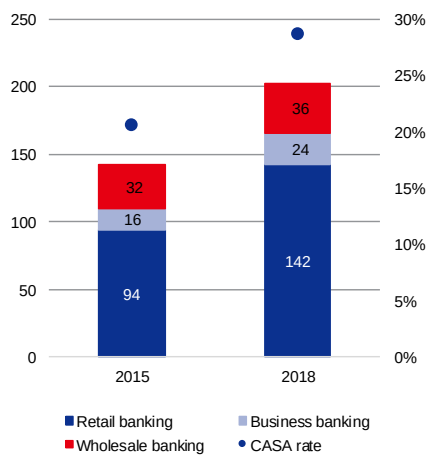
SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 5: Bond brokerage saw strong growth in FY15-9M18 (VND tr)



SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 6: Deposits by business segment (VND tr)

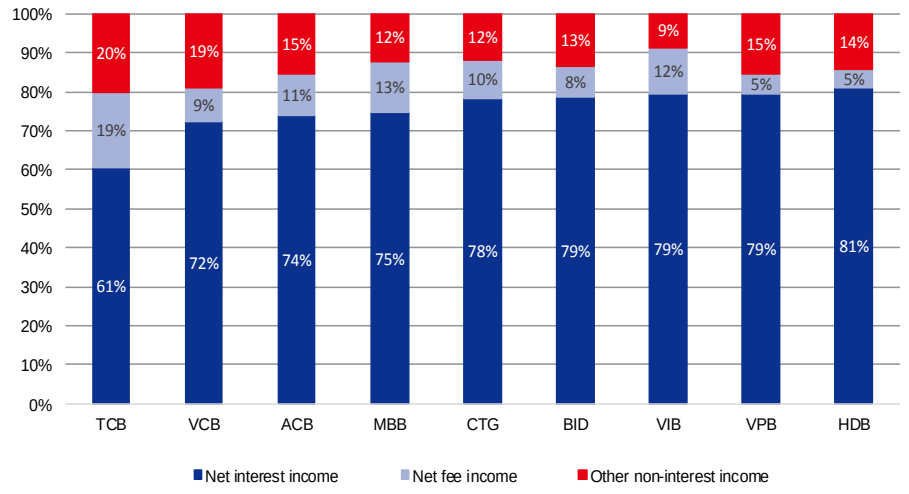


SOURCES: VND RESEARCH, COMPANY REPORTS

Strong and diversified non-interest income franchise »

TCB's unique ecosystem banking model allows the bank to access the large customer pool of anchor corporates. This enables TCB to promote non-credit products such as payment services, insurance, and corporate bonds to individual customers. TCB's non-II posted a robust CAGR of 50.2% in FY15-18 and its contribution to total operating income (TOI) increased from 22.8% in FY15 to 39.4% in FY18. Although TCB recorded extraordinary income of VND894bn from the divestment of Techcom Finance (Unlisted) in FY18, excluding one-off income and income from bad debt recovery, non-II still accounted for 30.6% of TOI. In FY18, TCB has the highest contribution of non-II to TOI of the system at 30.6%. The strong non-interest income franchise is driven by payment services, bancassurance and corporate bond advisory and brokerage service, making TCB's non-II franchise the most diversified among Vietnamese banks.

Figure 7: Income breakdown by bank (2018) – TCB is the leading bank in terms of non-interest income



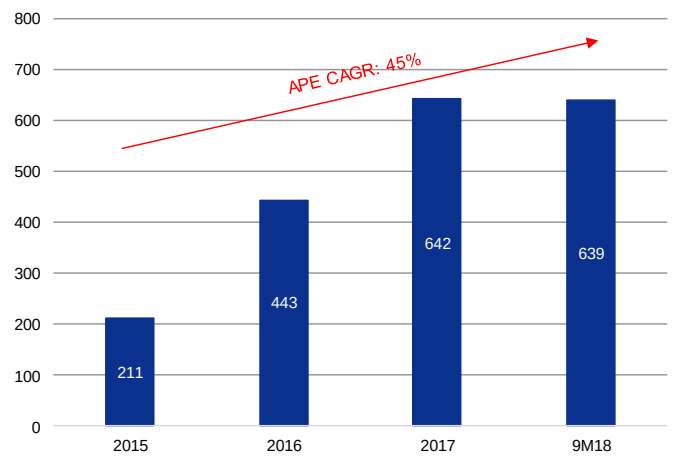
Note: One-off income and bad debt recovery are excluded
SOURCES: VND RESEARCH, COMPANY REPORTS

Bancassurance thrives, thanks to high-income customer base

Thanks to its connection with VIC and other big corporates, TCB has built a strong base of high-income customers, especially in the affluent segment. TCB disclosed that it has 35% market share in the affluent segment and 7% market share in the mass affluent segment in terms of number of customers in FY18. Its large base of high-income customers is an advantage for TCB in promoting insurance products as these customers have greater ability and propensity to buy advanced financial products. In FY15-9M18, the Annualised Premium Equivalent (APE) distributed by TCB increased by a CAGR of 45%. Bancassurance has become an important income stream for TCB, with contribution of insurance commission to net fee income (NFI) increasing from 3.0% in FY15 to 20.4% in FY18 (one-off income excluded from NFI). According to the Ministry of Finance, TCB has the leading market share (20%) in bancassurance as of Sep 2018.

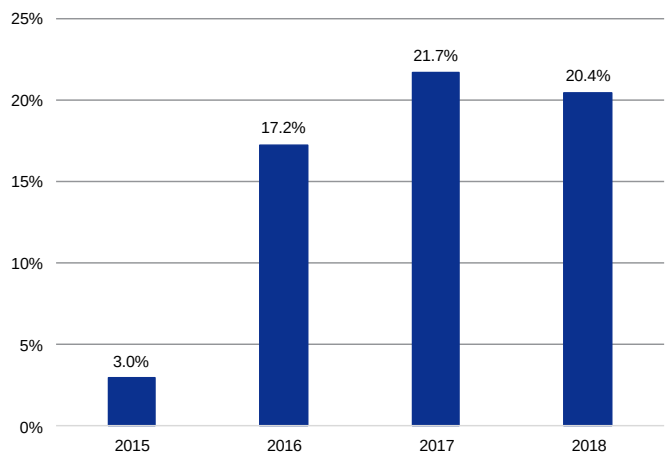
We would like to emphasise that TCB achieved strong growth in bancassurance even before its exclusive deal with Manulife Financial Corp (MFC CN, Not Rated; Manulife). The 15-year exclusive deal with Manulife signed in Sep 2017 is expected to further strengthen bancassurance at TCB as Manulife will bring in more diversified products and its expertise in insurance and sales. In return, Manulife would be able to approach the customer base of TCB, which reached 1.5m customers by end-FY17, while TCB's insurance penetration rate was still low at 3.3% as of end-FY17. TCB expects high growth from commission income in FY18-19F as the exclusive partnership was launched in 4Q17 and for growth to stabilise from FY20F onwards. In addition, growth of bancassurance would be supported by the current low penetration of the Vietnam insurance industry. Besides commission income, TCB received VND1,446bn of one-off agency fee from Manulife in FY17 as the exclusive agreement requires that TCB can only distribute Manulife's products. After the first five years of the deal, TCB expects to achieve APE of above VND10tr, up from VND639bn as of end-9M18, which is an ambitious target, in our view.

Figure 8: TCB's Annualised Premium Equivalent (APE) grew strongly in FY15-9M18 (VND bn)



SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 9: TCB's bancassurance NFI/Total NFI increased significantly in the last four years



SOURCES: VND RESEARCH, COMPANY REPORTS

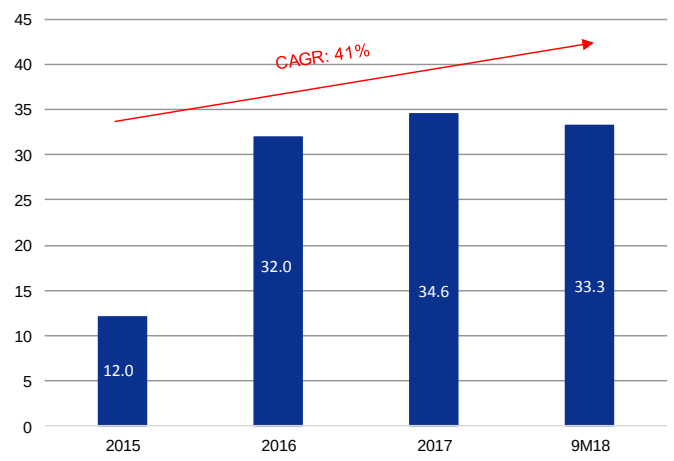
Top player in corporate bond advisory and brokerage

The ecosystem enabled TCB to start a new business of corporate bond advisory and it has been the first and only local bank so far to succeed in this business. As large corporates have high demand for long-term funds, TCB provides advisory services to these corporates for the issuance of long-term bonds and helps to distribute these bonds to TCB's customers. For corporate customers, TCB is shifting toward short-term lending for working capital financing, while demand for long-term funds will be financed by corporate bonds. The reorientation toward short-term lending reduces pressure on the bank's liquidity as the majority of customer deposits are short-term funds. While other banks are competing for

long-term funds as the State Bank of Vietnam reduced the ratio of short-term funds allowed to be used for medium/long-term loans, TCB is under less pressure as the bank is shifting towards short-term lending and if corporate customers need long-term funds, TCB will help them issue long-term bonds and distribute these bonds to TCB's customers.

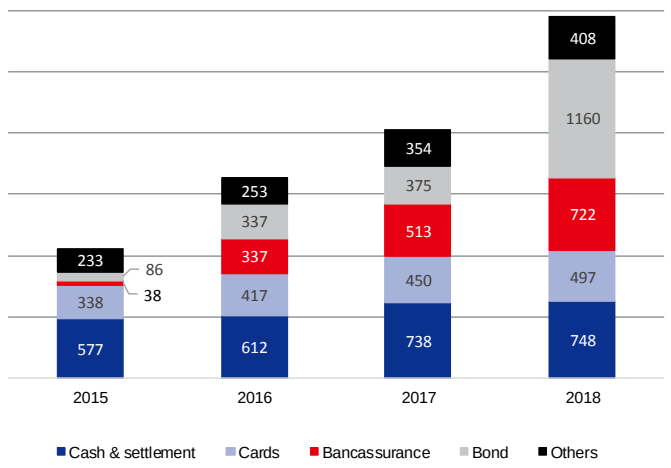
Corporate bond advisory not only reduces liquidity risk for TCB but also creates a new source of income for the bank. TCB earns up to 1.5% advisory fees on primary bond issuance by corporate customers. In addition, it also gains 1.0% to 1.5% interest spread when distributing these bonds to individual customers, which is booked as income from trading securities. In FY15-9M18, the volume of bonds advised posted a CAGR of 41%, boosting contribution of income from bond advisory to NFI from 6.8% in FY15 to 32.8% in FY18 (one-off income excluded from NFI). The bank targets 30% growth in volume of bonds issued going forward. Corporate bond advisory has been a success for TCB, thanks to its high-income customer base that have high propensity to invest but limited access to the corporate bond market. TCB is the leading player in both corporate bond advisory and corporate bond brokerage: it had dominant market share of 42% in corporate bond advisory in FY17 and 82% in corporate bond brokerage in FY18.

Figure 10: Volume of corporate bonds advised saw strong growth in FY15-9M18 (VND tr)



SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 11: Income from corporate bonds has become an important income stream for TCB



SOURCES: VND RESEARCH, COMPANY REPORTS

Advanced technology enables customer centricity »

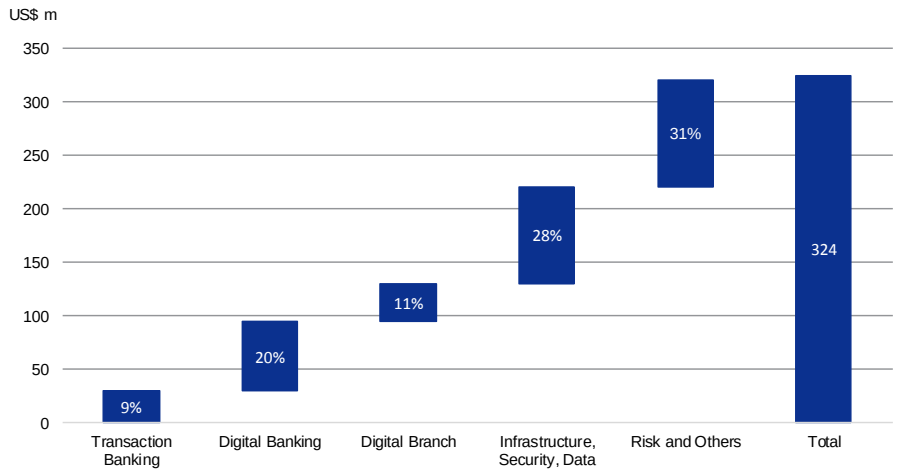
As its name suggests, the founders of TCB had a vision of building a tech-savvy bank, using advanced technology in banking operations. In 2001, TCB invested nearly VND20bn (20% of the bank's charter capital at that time) in a new core banking system from the renowned software provider – Temenos (TEMN SW, Not Rated). This was a big investment as TCB was the only joint stock commercial bank to invest in a core banking system at that time. State-owned commercial banks (SOCBs) also had new core banking systems but they were sponsored by the World Bank. In addition, the SOCBs' core systems were strong in data processing while TCB's system offered more flexibility and customisation.

TCB's core banking system allowed the bank to develop new products in a short amount of time, as it only needed to change and combine different parameters in the system to create new products. With a wide range of products tailored to the needs of its customers, TCB was able to acquire new customers and aggressively expand its deposit base. After its core banking system went live in 2003, TCB recorded a 71.3% CAGR in customer deposits and 93.1% CAGR in fee income over FY04-08. TCB was also a pioneer in various banking products, such as Internet banking, payment via SMS and ATM cards with direct connection to current accounts. Besides shortening the product development process, the core

banking system gives TCB a comprehensive customer view, allowing the bank's staff to view all the products and transactions that the customer participates in. As a result, it is easier for the bank's staff to serve customers and cross-sell products that the customers have yet to use. This helps to enhance the customer experience and thus, customer stickiness.

Over the next four years, TCB plans to invest heavily in IT projects to foster transaction banking and digital banking platforms. TCB expects its total investment in 2019-22F to amount to US$324m, equivalent to 41% of FY17 TOI. TCB aims to enhance its digital banking platform with features such as cash management and analytics to provide better advisory services and financial solutions to customers and the ecosystem, and as a result, enhance customer experience.

Figure 12: Significant IT investments of US$324m planned for 2019-22F



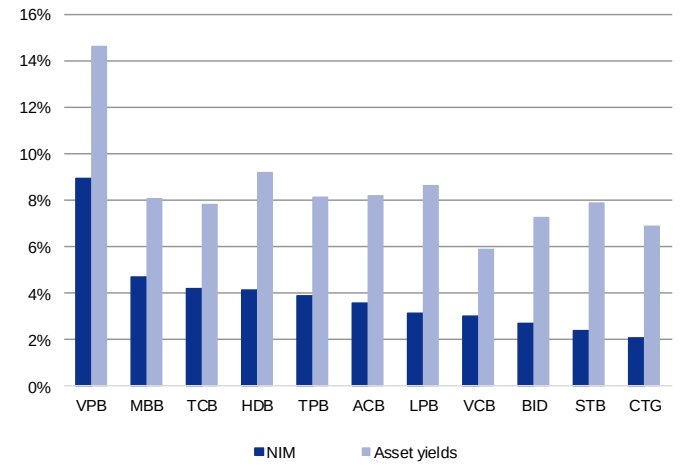
SOURCES: VND RESEARCH, COMPANY REPORTS

FINANCIALS

NIM to rise due to individual loan book expansion and improving CASA ratio

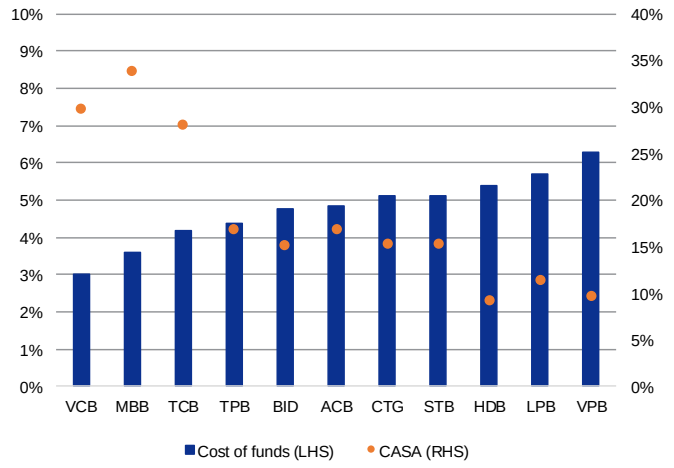
In 1Q19, TCB's NIM was 4.2%, higher than the 3.4% average NIM of Vietnam's listed banks, and ranked third-highest among the listed banks. TCB's NIM is lower than that of Vietnam Prosperity Bank (VPB VN, Add, TP: VND21,200; VPB) and Military Bank (MBB VN, Add, TP: VND34,000; MBB) as VPB has the high-yielding consumer finance business and MBB has the advantage of low cost of funds. Apart from these two banks, TCB has higher NIM than the rest of the sector, thanks to a high CASA ratio. As of end-1Q19, TCB had the sector's third-highest CASA ratio of 28.2%, and was among the top three banks with the lowest cost of funds. We believe that its low cost of funds underpinned TCB's above-average NIM as TCB has lower asset yields than its retail banking peers.

Figure 13: NIM by bank (1Q19) – TCB has above-average NIM in the Vietnam banking sector



SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 14: Cost of funds by bank (1Q19) – TCB has low cost of funds thanks to a high CASA ratio



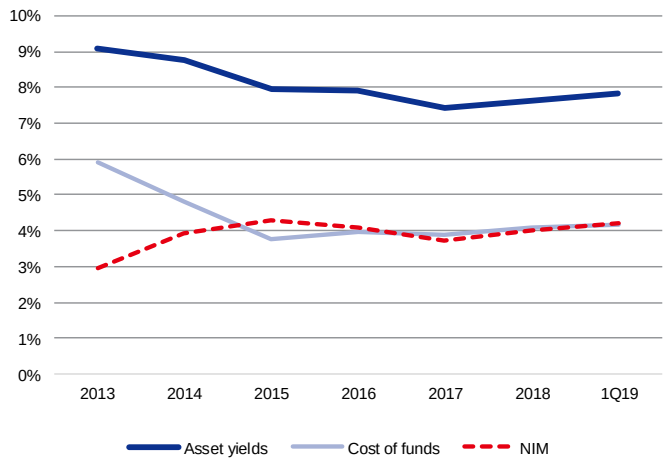
SOURCES: VND RESEARCH, COMPANY REPORTS

TCB's NIM significantly increased in FY14-15 but declined in 2016 before improving in FY18. We observe a correlation between the growth of TCB's individual loan book and the movement in its NIM trend. Its individual loan book posted robust growth of 35% in FY14 and 60% in FY15 but the growth rate tapered to 24% in FY16 and 5% in FY17. As a result, the proportion of individual loans in the overall loan book peaked in FY15, when there was an inflection point in TCB's NIM trend. We believe the growth of its individual loan book in FY14-15 was driven by mortgage loans, the majority of which came from real estate projects developed by VIC. In FY14-15, TCB's mortgage loan growth was supported by the launch of Vinhomes Royal City, Vinhomes Times City, Vinhomes Riverside and Vinhomes Central Park. The slowdown in individual loan growth in FY16 and especially in FY17 was due to the lack of big project launches. Having said that, we expect TCB's individual loans to regain strong growth momentum in FY19-21F, thanks to VIC's new property projects. VIC currently has 27 projects in the pipeline, of which two mega projects, Vinhomes Ocean Park and Vinhomes Smart City, in Hanoi started selling in 2H18.

We expect TCB's NIM to improve going forward, on the back of: 1) strong individual loan growth, which is likely to be driven by VIC's new real estate projects and 2) improving CASA ratio. One of its key strategies is to increase CASA ratio from 28.7% in FY18 to 45.0% by FY20F. In order to increase CASA ratio, TCB will continue to utilise the customer base from its ecosystem and upgrade its transaction banking platform to better serve corporate customers. In addition, the bank recently launched a "zero fee" campaign for individual customers, whereby all transactions executed via the digital banking platform would be free of charge. The "zero fee" campaign targets new customers in the mass segment by providing low-cost services. After the success of the "zero fee" campaign for individual

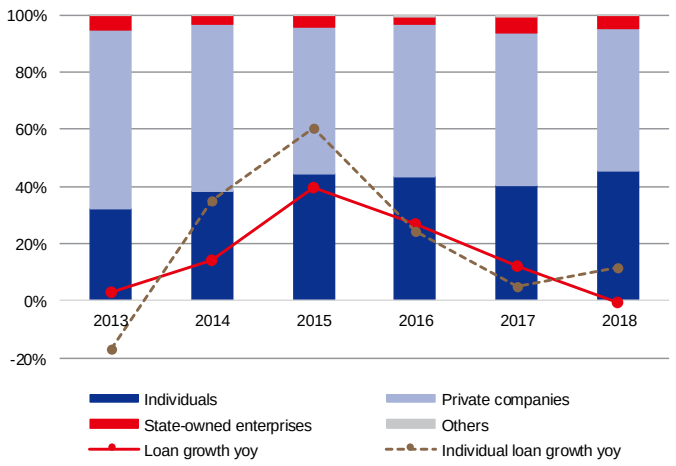
customers, TCB expanded this campaign to SMEs. As the customer base expands, we expect TCB's CASA ratio to improve accordingly. However, we view the bank's CASA ratio target of 45.0% by FY20F as quite ambitious, and we conservatively project CASA ratio of 35.0% by FY20F.

Figure 15: TCB's NIM movement was driven by individual loan book



SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 16: TCB's individual loan growth slowed down in FY16-17 but recovered in FY18

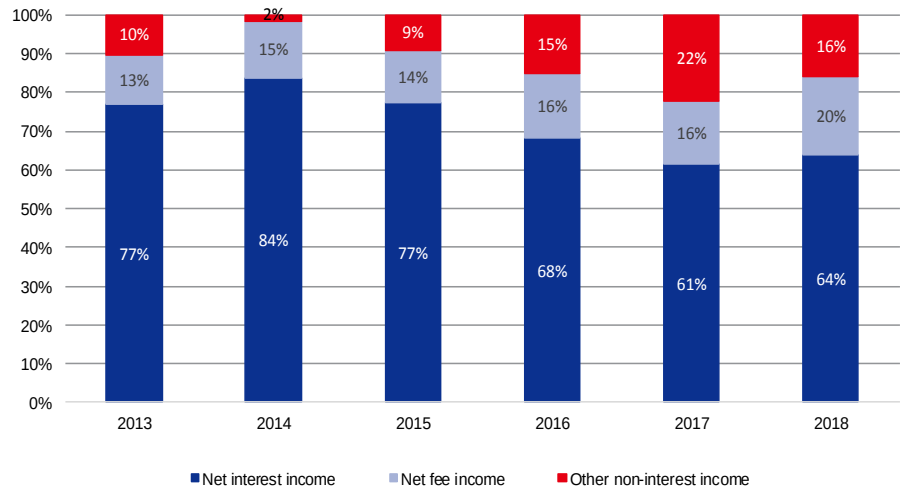


SOURCES: VND RESEARCH, COMPANY REPORTS

Non-II has increased its contribution to TOI

The contribution of TCB's non-II franchise to TOI has increased from 22.8% in FY15 to 36.3% in FY18. We note that TCB's income structure in Figure 17 does not include one-off income of VND1,446bn upfront fees from Manulife and VND355bn from the divestment of Vietnam Airlines (HVN VN, Not Rated; HVN) in FY17 and VND894bn from the selling of Techcom Finance (Unlisted) in FY18. Growth of the non-II franchise was underpinned by a 10.8% CAGR in payment and cash services, 167.6% CAGR in insurance commission, 137.8% CAGR in bond advisory fees, 82.8% CAGR in income from securities and 39.6% CAGR in bad debt recoveries in FY15-18.

Figure 17: TCB's income breakdown – Non-II has become more important over the last three years

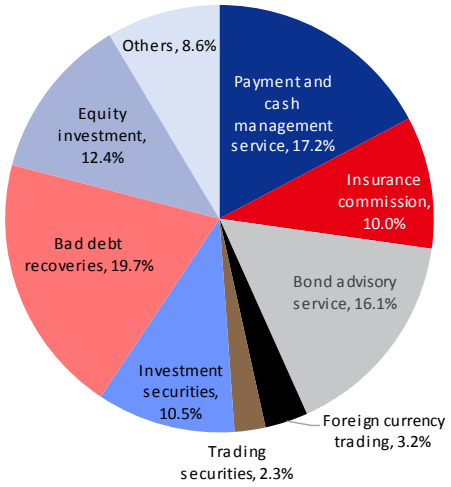


Note: One-off income is excluded

SOURCES: VND RESEARCH, COMPANY REPORTS

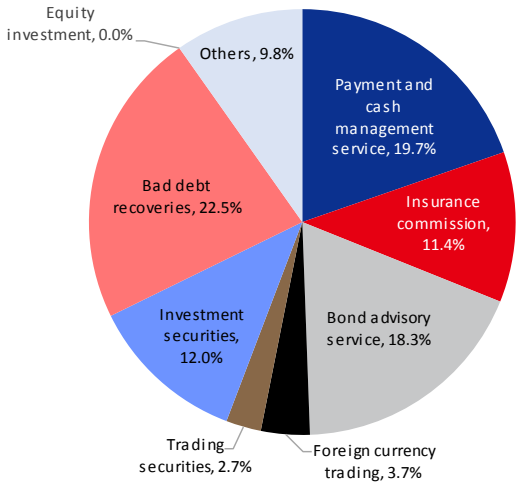
Excluding one-off income, the three largest contributors to TCB's non-II are fees from payment & cash management services, bad debt recoveries and bond advisory services. Although bancassurance achieved impressive growth in FY15-18, its contribution to TOI is still small as it expanded quickly from a low base. However, income from bancassurance surged from 0.4% of TOI in FY15 to 4.1% in FY18 and income from bond advisory increased from 0.9% of TOI in FY15 to 6.6% in FY18. The fast growth of the bancassurance and bond advisory business has made TCB the leading bank in terms of non-II franchise, while its non-II is the strongest and most diversified among Vietnamese banks. A large non-II franchise benefits TCB by providing it with a sustainable income source without the credit risk associated with interest income.

Figure 18: Breakdown of TCB's non-II in FY18, including one-off income



SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 19: Breakdown of TCB's non-II in FY18, excluding one-off income



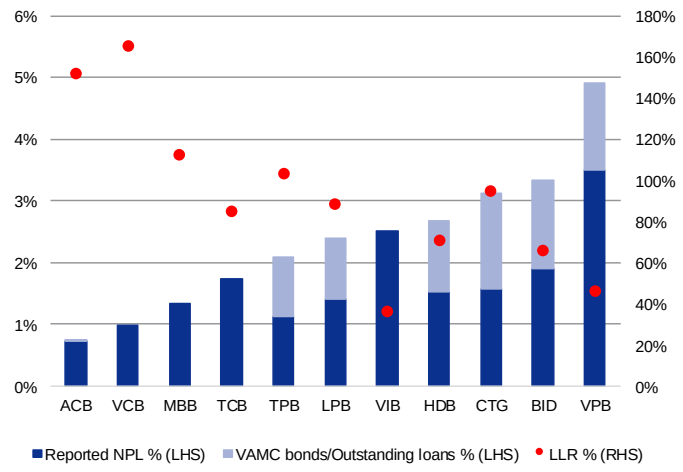
SOURCES: VND RESEARCH, COMPANY REPORTS

Active bad debt clearing greatly reduced distressed assets

During the last banking crisis in 2011-12, TCB was embedded with a high level of non-performing assets as it had significant exposure to real estate, while the Vietnam property market was frozen in 2011-13. As of end-FY13, TCB's non-performing loans and VAMC bonds jumped to 6.2% of total loans. However, over the past four years, TCB has significantly reduced distressed assets by aggressively writing off bad debts. In addition, strong loan growth also reduced its non-performing loan ratio (NPL).

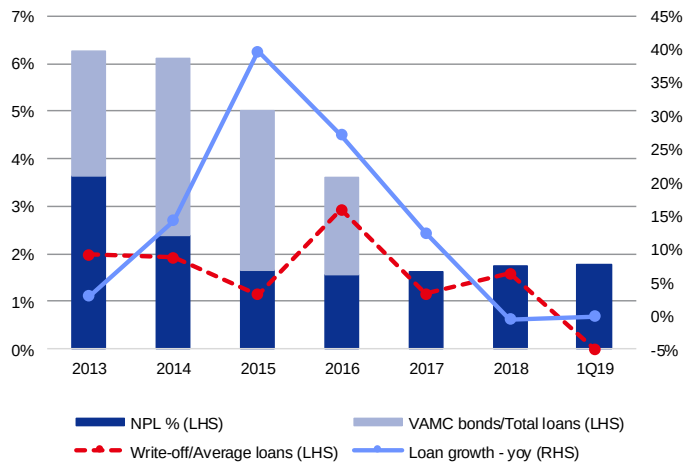
Since 2014, Vietnam's property market started to recover, which helped to improve loan recoveries and prompted real estate developers to start new projects. Thanks to its close relationship with VIC, TCB achieved high loan growth in FY14-16, with a CAGR of 33.3%. Improved loan growth, coupled with strong growth in non-II, resulted in a net profit CAGR of 67.2% in FY14-18. The high net profit facilitated aggressive provisioning and loan write-offs, with TCB's average write-off rate of 1.7% and average credit cost of 2.6% in FY14-18, higher than the listed banks' average of 0.8% and 1.2%, respectively. Due to heavy provisioning, TCB become one of the first three banks to fully provision for VAMC bonds in FY17, three years ahead of the deadline. As of end-FY18, TCB had the fourth-lowest level of distressed assets among the listed banks.

Figure 20: Stressed assets by bank (end-2018) – TCB has one of the lowest levels of stressed assets



SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 21: TCB's stressed assets were greatly reduced over 2015-18 thanks to loans written off and high loan growth



SOURCES: VND RESEARCH, COMPANY REPORTS

High exposure to real estate but reorienting towards mortgage customers

Although TCB has substantially reduced its bad debts in the past four years, we attribute the current low level of stressed assets to strong loan growth and active write-offs. However, TCB has a relatively high risk lending portfolio stemming from: 1) high exposure to real estate and 2) concentration risk as TCB mainly serves the ecosystem of a few large corporates.

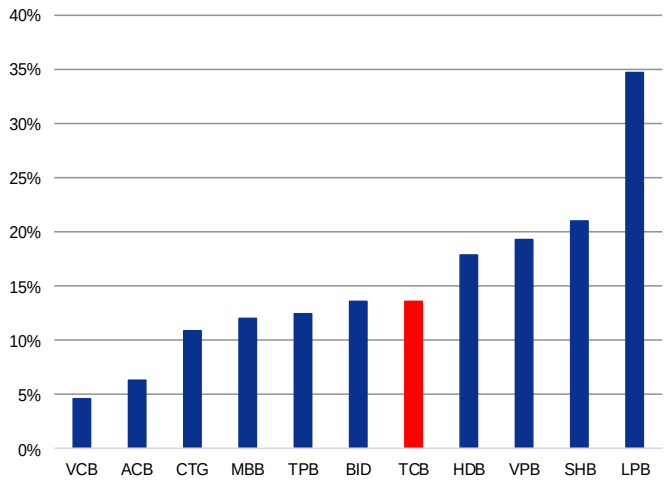
TCB had the fifth-highest exposure to real estate trading and construction among the Vietnamese banks at 13.5% of loan book as of end-FY18. We note that 13.5% was TCB's exposure to construction companies and real estate developers and this does not include mortgages to individual customers. As of end-FY18, TCB's exposure to construction companies and real estate developers was 13.5%, and in addition to this, TCB had VND48.6tr of mortgages at end-9M18 (29.1% of the total loan book); therefore we estimate its total exposure to real estate could amount to more than 42.6% of the total loan book. It is hard to pinpoint the total real estate exposure across Vietnamese banks as they do not disclose mortgage volume, but through our discussions with several banks, we gather that mortgages comprise around 40% to 50% of banks' individual loan books, while at TCB, mortgages accounted for 69% of the individual loan book. Along with high exposure to construction and real estate trading, we believe TCB has relatively high exposure to real estate.

Another risk that the bank faces is concentration risk as TCB focuses on serving the ecosystem of a few big corporates. TCB provides credit and financial solutions for the anchor corporates, customers and other companies in the supply chain of the anchor corporates. To illustrate this point, we use the data from the ecosystem of a real estate developer: as at end-FY17, 64% of TCB's total active mortgage customers and 87% of overall mortgages are from the ecosystem. Although the ecosystem provides economic synergies and more opportunities for cross-selling, should one company in the ecosystem default, it would have a domino effect on other players in the ecosystem, and the magnitude of the impact would depend on the size and significance of the company that defaults in the supply chain.

TCB is shifting away from lending to developers and moving towards mortgages to reduce credit risk. For corporate customers, TCB is promoting short-term financing for working capital, while demand for long-term funds will be channeled to corporate bonds, which are advised and distributed by TCB to the bank's customer base. The reorientation to focus on mortgages lowers concentration risk as the loan book will be diversified among more individual customers rather than concentrated among a few developers. In addition, 60% of TCB's mortgage

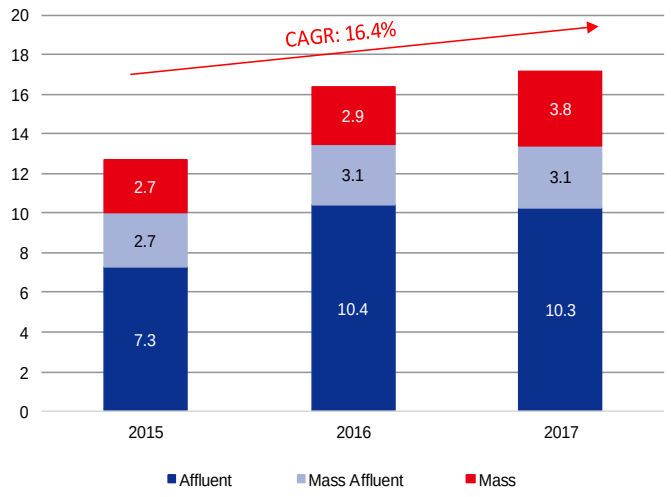
customers as at end-FY17 are in the affluent segment, which have higher financial capacity, and thus lower probability of default than other segments.

Figure 22: Construction and real estate trading as % of loan book – TCB has high exposure to construction and real estate trading, data as of end-FY18



SOURCES: VND RESEARCH, COMPANY REPORTS

Figure 23: TCB – Number of mortgage customers ('000)

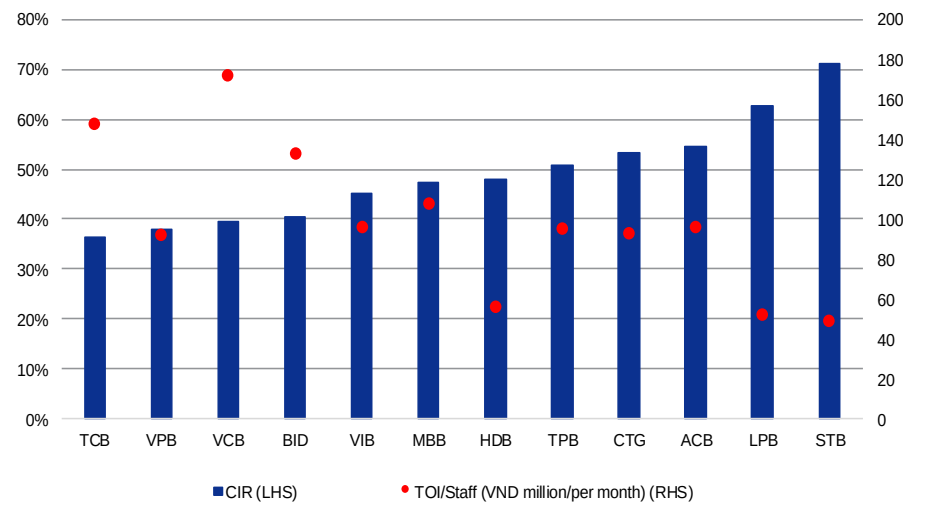


SOURCES: VND RESEARCH, COMPANY REPORTS

High efficiency with the lowest cost-to-income ratio (CIR) in the sector

TCB's high efficiency is evinced by the elevated revenue that each staff generates (measured by TOI/staff) and low operating cost (measured by CIR). In FY18, TCB had the lowest CIR in the banking sector at 36.4% (one-off income and bad debt recovery are excluded from TOI) and the second-highest TOI/staff. TCB's high efficiency is attributed to advanced technology and the bank's advantage in using an ecosystem business model. TCB's focus on developing technology since 2001 has allowed the bank to build a system with a high degree of flexibility and customisation. Its robust, customer-oriented system gives the bank a better understanding of its customers and enables it to offer a product portfolio that is tailored to the specific needs of different customer segments. These advantages are accompanied by favourable access to the customer base and business partners of its anchor corporates in the ecosystem. As a result, TCB has been able to build a strong non-II franchise. Non-credit services create a stable source of income but incur lower operating costs as these transactions involve a higher level of automation.

Figure 24: CIR and TOI/staff by bank (2018) – TCB has the lowest CIR and the second-highest TOI/staff among the listed banks

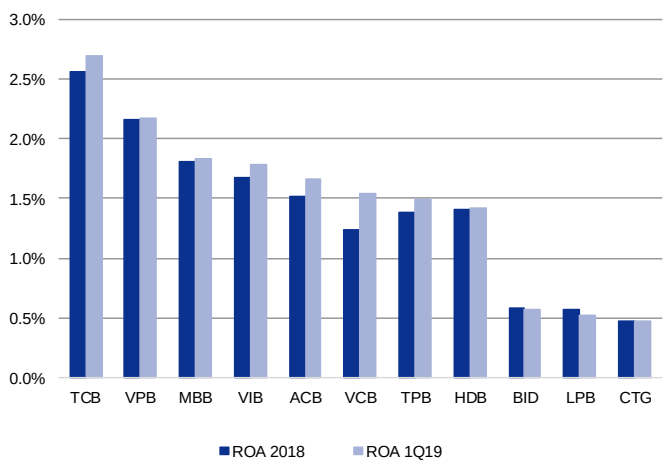


Note: One-off income and bad debt recovery are excluded from TOI.
SOURCES: VND RESEARCH, COMPANY REPORTS

High profitability while maintaining the lowest leverage among Vietnamese banks

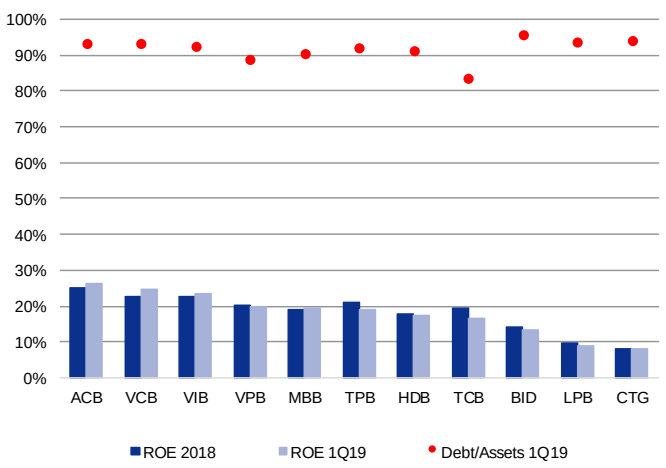
TCB's sector-leading ROA and the eighth-highest (out of 17 listed banks) ROE in 1Q19 are positive, especially given that TCB has the highest capital among the listed banks. As at end-1Q19, TCB had the highest ratio of equity/assets at 16.5%, much higher than the second-highest bank – VPB – at 11.2%. In our view, TCB's high returns are sustainable in the coming years, thanks to strong loan growth from mortgages, improving NIM and solid growth of non-II, driven by continued expansion in bancassurance, bond advisory, brokerage and payment services. In addition, its strong non-II franchise reduces the impact of credit growth and change in interest rates on the bank's bottomline.

Figure 25: ROA by bank (1Q19) - TCB has sector-leading ROA



SOURCES: VND RESEARCH, COMPANY REPORTS

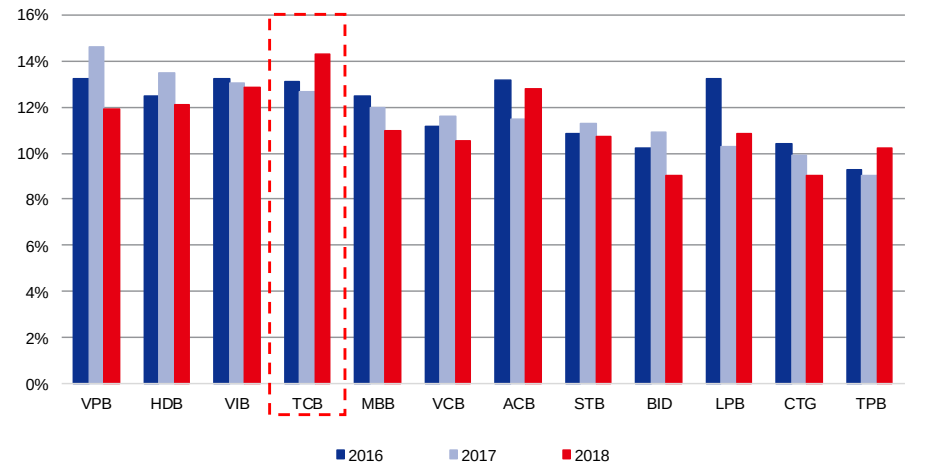
Figure 26: ROE and debt/assets by bank (1Q19) - TCB operates with low leverage



SOURCES: VND RESEARCH, COMPANY REPORTS

High capital base is sufficient to comply with Basel II

Figure 27: CAR by bank – TCB's CAR significantly increased after its IPO in early 2018



SOURCES: VND RESEARCH, COMPANY REPORTS

TCB's CAR increased from 12.7% at end-FY17 to 14.3% at end-FY18 after its successful IPO in early 2018, which raised fresh capital of US$724m. At this CAR level, TCB has one of the highest capital buffers in the sector. As at end-FY18, TCB's Tier 1 ratio reached 12.2%.

We believe TCB's current capital would be sufficient to meet Basel II requirements (CAR of 8.0%), as we estimate that its CAR will fall to 11.6% and Tier 1 to 10.1% at end-FY19F, based on the following assumptions:

- TCB's net profit rises by a 16.7% CAGR in FY19-21F.
- Zero cash dividends in FY19-21F. In the past, TCB did not pay any cash dividends and the bank has not expressed any intention to pay cash dividends in the future.
- Its risk-weighted assets (RWA) increases by a 14.2% CAGR in FY19-21F.
- Its RWA are revised up by 35% under Basel II standards.

OUTLOOK

We project a net profit CAGR of 16.7% in FY19-21F

Key assumptions on which our earnings forecasts are based are as follows:

- **NII CAGR of 20.7% in FY19-21F, underpinned by 16.1% loan CAGR and 60bp NIM expansion over the same period.**
  Our high loan growth projections for FY19-21F would be driven by mortgage loans from new projects launched by VIC. Currently, VIC has 27 projects in pipeline, and is starting to develop Vinhomes (apartments for mid-income buyers, with a total of 200,000–300,000 apartments to be launched in the next five years). We estimate that TCB could gain VND86,000bn-VND129,000bn in mortgage loans over the next five years from new Vinhomes projects. We forecast TCB's individual loan book to expand by a 22.0% CAGR in FY19-21F, largely driven by mortgage loans from VIC's homebuyers. However, we expect TCB's corporate loan growth to slow down due to: 1) TCB's reorientation to short-term lending and lower long-term lending to corporate customers, and 2) likely credit quota limit of 15%, or 18% at best, tempering corporate loan growth to spare headroom for mortgage growth.

  We forecast NIM to increase by 60bp in FY19-21F on the back of improving CASA ratio and strong individual loan growth. As VIC is entering a new market segment of low- to mid-income customers, TCB would have access to a new customer pool. The continued leveraging of its ecosystem and the "zero fee" campaign could help TCB to expand its customer base and increase CASA ratio. We project TCB's CASA ratio to increase from 28.7% in FY18 to 38.0% in FY21F.

Figure 28: Balance sheet key KPIs, based on our projections

(In VND bn, otherwise noted)	2017A	2018A	2019F	2020F	2021F	CAGR 2015-18	CAGR 2019-21F
Interest-earning assets (excl. provisions) "IEAs"	**253,813**	**300,488**	**332,954**	**377,886**	**429,371**	**19.1%**	**13.6%**
% growth	*14.4%*	*18.4%*	*10.8%*	*13.5%*	*13.6%*		
Gross loans to customers	160,849	159,939	199,990	232,441	269,511	12.6%	16.1%
% growth	*12.8%*	*-0.6%*	*25.0%*	*16.2%*	*15.9%*		
Interbank deposit and loans	30,156	35,559	39,115	44,591	51,280	34.0%	14.5%
% growth	*39.6%*	*17.9%*	*10.0%*	*14.0%*	*15.0%*		
Securities	58,492	94,434	81,604	86,651	92,104	25.3%	6.2%
% growth	*6.0%*	*61.4%*	*-13.6%*	*6.2%*	*6.3%*		
Interest-bearing liabilities "IBLs"	**235,935**	**257,353**	**286,301**	**321,308**	**361,999**	**14.5%**	**12.4%**
% growth	*11.9%*	*9.1%*	*11.2%*	*12.2%*	*12.7%*		
Customer deposit	170,971	201,415	235,655	275,716	322,588	12.3%	17.0%
% growth	*-1.4%*	*17.8%*	*17.0%*	*17.0%*	*17.0%*		
CDs and valuable papers	17,640	13,178	15,155	15,912	16,708	17.4%	5.0%
% growth	*69.4%*	*-25.3%*	*15.0%*	*5.0%*	*5.0%*		
Deposit and loan from other banks	46,324	36,426	29,140	23,312	16,319	20.6%	-25.2%
% growth	*81.9%*	*-21.4%*	*-20.0%*	*-20.0%*	*-30.0%*		
Loan from SBV	1,000	6,025	6,025	6,025	6,025	N/M	0.0%
Other funds from gov. and other org.	-	310	326	342	359	-9.8%	5.0%

SOURCES: VND RESEARCH ESTIMATES, COMPANY REPORTS

- **Non-II CAGR of 10.3% over FY19-21F, driven by 16.5% CAGR in net fee income, 15.0% CAGR in foreign currency trading and 4.5% CAGR in other non-II income, whereas income from investment contracts by a 2.2% CAGR.**

Figure 29: Profit & loss statement KPIs, based on our projections

(In VND bn, otherwise noted)	2017A	2018A	2019F	2020F	2021F	CAGR 2015-18	CAGR 2019-21F
Net interest income	8,930	11,127	13,065	15,717	19,032	15.5%	20.7%
Net fee income	3,812	3,536	3,890	4,473	5,278	40.6%	16.5%
FX & gold trading income	279	234	269	309	356	N/M	15.0%
Income from trading and investment securities	1,608	1,820	1,037	954	992	123.9%	-2.2%
Other income	1,715	1,634	2,521	2,590	2,754	22.5%	4.5%
Operating income	16,344	18,350	20,781	24,044	28,413	25.2%	16.9%
% growth	*38.1%*	*12.3%*	*13.3%*	*15.7%*	*18.2%*		
Operating expense	4,698	5,843	6,442	7,454	8,524	12.3%	15.0%
% growth	*12.5%*	*24.4%*	*10.3%*	*15.7%*	*14.4%*		
Pre-provision profit	11,646	12,507	14,339	16,590	19,889	30.2%	17.8%
% growth	*52.1%*	*7.4%*	*14.6%*	*15.7%*	*19.9%*		
Provision expense	3,609	1,846	2,563	3,040	3,845	-20.2%	22.5%
% growth	*-1.4%*	*-48.8%*	*38.8%*	*18.6%*	*26.5%*		
Profit before tax	**8,036**	**10,661**	**11,776**	**13,550**	**16,044**	**73.6%**	**16.7%**
% growth	*101.1%*	*32.7%*	*10.5%*	*15.1%*	*18.4%*		
Profit after tax and minority interest	**6,446**	**8,463**	**9,348**	**10,756**	**12,736**	**76.9%**	**16.7%**
% growth	*104.7%*	*31.3%*	*10.5%*	*15.1%*	*18.4%*		

SOURCES: VND RESEARCH ESTIMATES, COMPANY REPORTS

Lower net fee income CAGR of 16.5% in FY19-21F vs. the 40.6% CAGR seen in FY15-18, as income from bancassurance and bond advisory grew substantially over FY15-18 from a low base (TCB started offering bancassurance and bond advisory services in FY16). We expect growth in bancassurance and bond advisory income to moderate in FY19-21F, after the surge in FY15-18.

We project TCB's income from trading and investment securities to contract by -2.2% CAGR in FY19-21F, vs. the 123.9% CAGR in FY15-18, in the absence of VND894bn one-off income from the divestment from Techcom Finance recognised in FY18. The fall in bond yields in 1H18 also resulted in high trading and investment income in FY18. Sans one-offs, we estimate TCB's income from trading and investment securities would grow by a 78.7% CAGR in FY15-18. We forecast income from trading and investment securities to decline slightly over FY19-21F, as in 4Q18, TCB guided that it plans to issue a sizeable amount of corporate bonds (~c.VND23tr); we expect these bonds to be distributed in FY19F, leading to high investment income in FY19F. We forecast volume of bond issuance in FY19-21F to decline from the FY18 level. Therefore, we expect income from trading and investment securities to decline slightly over FY19-21F.

- We estimate operating expense CAGR of 15.0% in FY19-21F, higher than the 12.3% CAGR in FY15-18 as TCB plans to invest heavily in IT (US$324m total investment in FY19-22F). We forecast gradual reduction in CIR from 31.0% in FY19 to 30.0% in FY21F as operating income growth outpaces operating expense growth. Based on our estimates, the reduction in CIR over FY19-21F will be at a slower pace than in FY15-18 (CIR declined from 39.4% in FY15 to 31.8% in FY18).
- We forecast provision expense CAGR of 22.5% in FY19-21F, vs. -20.2% CAGR in FY15-18. TCB completed provisioning for VAMC bonds in FY17 and recognised a provision reversal in FY18, as such, its provision expense dropped 48.8% yoy in FY18. We forecast TCB to maintain an average credit cost of 1.5% over FY19-21F, higher than the 1.2% in FY18 to reach 83.3% LLR in FY21F.

- We estimate FY19-21F net profit CAGR of 16.7%, which is lower than the 76.9% CAGR over FY15-18 but stable yoy. Our lower net profit CAGR forecast for FY19-21F is due to the lack of sizeable extraordinary income that was booked in FY18, the completion of the previous provision cycle in FY17, and more stable growth in income from bancassurance, corporate bond advisory and brokerage. Solid net profit growth in FY19-21F will be supported by high loan growth, improving NIM and moderate growth of non-II income, in our opinion.

VALUATION AND RECOMMENDATION

Initiate with an Add rating and potential upside of 31.1% to our TP

We use a combination of residual income and a P/BV methodologies to value TCB, with weights of 70% and 30%, respectively. The residual income approach is based on our forecasts for TCB's earnings and growth, and factors in the bank's current capital buffer and its business strategies. On the other hand, a P/BV multiple allows us to value TCB relative to other banks and factors in market sentiment on the banking sector as a whole. However, each bank has distinctly different fundamentals and earnings prospects and, therefore, we only assign a 30% weight to this relative valuation approach.

Figure 30: Target price calculation, based on our estimates

Approach	Weight	Fair value (VND/share)	Contribution (VND/share)
Residual income	70%	27,958	19,571
P/BV multiple (at 1.5x FY19F BVPS)	30%	26,195	7,858
Target price (VND/share)			27,429
Target price (VND/share, rounded)			**27,400**

SOURCES: VND RESEARCH ESTIMATES

Figure 31: Key assumptions for residual income valuation, based on our estimates

Assumptions	2019F	2020F	2021F	2022F	2023F	Terminal year
Risk free rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Equity risk premium	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
Beta	0.8	0.8	0.8	0.8	0.8	0.8
Cost of equity	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
Long-term growth rate						4.0%
Opening shareholder's equity	51,713					
PV of RI (5 years)	11,522					
PV of Terminal value	34,522					
Implied EV	97,758					
No.of o/s shares (m shares)	3,496.6					
Implied value per share (VND/share)	**27,958**					

SOURCES: VND RESEARCH ESTIMATES

For peer comparison, we choose regional banks with similar earnings growth outlook, profitability and financial metrics as TCB. At the current share price, TCB is trading at 1.2x FY19F P/BV and 1.0x FY20F P/BV, at discounts of 25.2% and 29.0% to the regional peers' average FY19F and FY20F P/BV, respectively. We project TCB to achieve a net profit CAGR of 16.7% in FY19-21F on the back of 16.1% loan CAGR and 60bp hike in NIM, driven by mortgage loan growth and improving CASA ratio. In our view, TCB has a unique business model of ecosystem banking, which is unmatched by any other bank in Vietnam. The advantage of ecosystem banking is that it enables TCB to build up a strong non-

II franchise, which provides a stable income stream with lower risk. In addition, TCB enjoys high profitability but low leverage, thanks to sizeable capital raised in the recent IPO. We believe TCB is undervalued, therefore, we apply a target multiple of 1.5x to FY19F book value per share. Combining our residual income valuation and P/BV multiple valuation, with respective weights of 70% and 30%, respectively, we arrive at a TP of VND27,400, implying potential upside of 31.1%.

Figure 32: Regional banking sector comparison

Banks	Bloomberg Code	Recommendation	Closing price	Target Price	Market cap	P/BV (x)		P/E (x)		3-yr Forward CAGR EPS	ROE (%)		Div. yields (%)
			(local curr.)	(local curr.)	(US$m)	FY19F	FY20F	FY19F	FY20F	%	FY19F	FY20F	FY19F
Agricultural Bank of China	1288 HK	ADD	3.28	5.30	182,696	0.5	0.5	4.4	4.1	6.3%	12.7%	12.4%	6.8%
Bank of China	3988 HK	ADD	3.27	5.60	150,765	0.5	0.4	4.3	4.0	7.3%	11.6%	11.5%	7.6%
China Merchants Bank	3968 HK	ADD	41.70	45.40	138,292	1.5	1.3	9.3	7.9	16.7%	17.0%	17.6%	3.2%
Bank of Communications	3328 HK	HOLD	6.52	6.90	65,089	0.6	0.5	5.2	4.9	7.7%	11.2%	10.9%	6.0%
China banks average						***0.8***	***0.7***	***5.8***	***5.2***	***9.5%***	***13.1%***	***13.1%***	***5.9%***
ICICI Bank	ICICIBC IN	ADD	430.80	475.00	39,943	2.4	2.1	23.9	16.4	84.9%	10.4%	13.7%	1.2%
Axis Bank	AXSB IN	ADD	771.95	900.00	29,057	2.7	2.3	20.5	14.0	60.9%	13.8%	17.6%	0.3%
Indusind Bank	IIB IN	ADD	1,448.70	2,100.00	12,558	2.9	2.4	17.3	13.2	35.8%	17.9%	19.8%	0.5%
Yes Bank	YES IN	ADD	109.60	270.00	3,650	0.9	0.8	9.3	6.4	49.2%	9.9%	13.0%	2.0%
India banks average						***2.2***	***1.9***	***17.8***	***12.5***	***57.7%***	***13.0%***	***16.1%***	***1.0%***
Bank Central Asia	BBCA IJ	HOLD	29,375.00	28,500.00	51,165	3.9	3.4	23.5	20.8	12.0%	17.6%	17.4%	0.9%
Bank Rakyat Indonesia	BBRI IJ	ADD	4,310.00	4,500.00	37,557	2.4	2.1	13.5	11.9	13.9%	18.8%	18.8%	2.6%
Bank Mandiri	BMRI IJ	ADD	7,975.00	8,800.00	26,292	1.8	1.6	12.5	10.8	15.4%	14.9%	15.6%	2.8%
Bank Negara Indonesia	BBNI IJ	ADD	8,875.00	11,100.00	11,692	1.3	1.1	8.7	7.5	15.9%	15.6%	16.0%	3.4%
Indonesia banks average						***2.3***	***2.1***	***14.5***	***12.7***	***14.3%***	***16.7%***	***16.9%***	***2.4%***
Malayan Banking Bhd	MAY MK	HOLD	8.96	9.29	24,276	1.2	1.2	12.3	11.5	3.8%	10.4%	10.5%	5.8%
Public Bank Bhd	PBK MK	HOLD	23.02	23.60	21,539	2.0	1.9	15.5	14.8	4.5%	13.5%	13.3%	2.9%
Hong Leong Bank	HLBK MK	REDUCE	19.42	16.80	9,575	1.5	1.4	14.7	13.9	6.2%	11.0%	10.5%	2.7%
BIMB Holdings	BIMB MK	HOLD	4.59	4.63	1,952	1.4	1.3	10.2	9.7	7.8%	14.6%	14.1%	3.6%
Malaysia banks average						***1.6***	***1.4***	***13.2***	***12.5***	***5.6%***	***12.4%***	***12.1%***	***3.8%***
Kasikornbank	KBANK TB	ADD	192.00	244.00	14,926	1.2	1.1	11.4	10.2	9.9%	10.6%	10.9%	2.0%
Siam Commercial Bank	SCB TB	ADD	135.00	146.00	14,890	1.2	1.1	11.5	10.5	8.2%	10.5%	10.8%	3.9%
Bangkok Bank	BBL TB	ADD	200.00	238.00	12,401	0.9	0.8	10.2	9.4	7.5%	9.0%	9.3%	3.1%
Kiatnakin Bank	KKP TB	REDUCE	68.25	63.00	1,877	1.4	1.3	10.1	9.0	4.9%	13.8%	15.0%	7.0%
Thailand banks average						***1.2***	***1.1***	***10.8***	***9.8***	***7.6%***	***11.0%***	***11.5%***	***4.0%***
Vietcombank	VCB VN	HOLD	73,000.00	73,800.00	11,618	3.2	2.7	16.3	13.9	13.2%	18.4%	17.4%	1.1%
Techcombank	TCB VN	ADD	20,900.00	27,400.00	3,136	1.2	1.0	7.8	6.8	14.6%	16.5%	16.1%	0.0%
Vietnam Prosperity JSC Bank	VPB VN	ADD	19,300.00	21,200.00	2,035	1.1	0.9	6.3	5.1	12.1%	19.7%	19.9%	0.0%
Military Commercial Joint Stock Bank	MBB VN	ADD	21,300.00	34,000.00	1,932	1.2	1.0	6.0	5.2	19.2%	20.0%	19.7%	2.8%
Asia Commercial Joint Stock Bank	ACB VN	ADD	29,500.00	39,500.00	1,579	1.4	1.1	6.1	5.3	15.7%	24.3%	22.7%	3.4%
Vietnam banks average						**1.6**	**1.3**	**8.5**	**7.3**	**15.0%**	**19.8%**	**19.2%**	**1.5%**
Vietnam banks average - ex-VCB						**1.2**	**1.0**	**6.6**	**5.6**	**15.4%**	**20.1%**	**19.6%**	**1.6%**
Regional bank average						**1.6**	**1.4**	**12.4**	**10.5**	**18.9%**	**13.2%**	**13.9%**	**3.4%**

SOURCES: CGS-CIMB RESEARCH, VND RESEARCH, BLOOMBERG (AS AT 24 JUN 2019)

INVESTMENT RISK

Potential re-rating catalysts

Potential catalysts could arise from a higher CASA ratio than our forecast. TCB aims to improve its CASA ratio to 45.0% by FY20F, but we think this target is ambitious, as its end-FY18 CASA ratio was only 28.7%. We conservatively project CASA ratio of 35% in FY20F. If TCB achieves a higher CASA ratio, cost of funds will be lower than our forecast, therefore profit would be higher than our projections.

Another potential upside catalyst could come from higher-than-expected credit growth. The SBV recently tightened credit growth on the back of tightening policy in various countries, concerns over the US-China trade war and a rising interest rate environment globally. In FY18, Vietnam's banking system credit growth was 14.0%, much lower than the 18.3% achieved in FY17. For FY19F, the SBV set a target of 14.0% credit growth. As a result, we forecast 14.0% credit growth in FY19-21F for TCB. However, credit growth in Vietnam is closely tied to GDP growth and inflation. As the majority of capital in Vietnam comprises banks' credit, credit growth is an important driver of GDP growth. In the coming years, we think TCB's credit growth could outperform our forecasts if GDP growth is slow and inflation remains stable. In our base-case scenario, we forecast a credit CAGR of 14% in FY19-21F for TCB. Our sensitivity analysis shows that every incremental 50bp increase in credit growth from our base-case assumption of 14% would increase our FY19F EPS estimate by VND12 (around 0.5% of our base-case EPS forecast).

Figure 33: Sensitivity of EPS to changes in credit growth

Credit growth FY19F	12.5%	13.0%	13.5%	14.0%	14.5%	15.0%
EPS FY19F	**2,630**	**2,642**	**2,654**	**2,664**	**2,676**	**2,688**
Credit growth FY20F	12.5%	13.0%	13.5%	14.0%	14.5%	15.0%
EPS FY20F	**2,951**	**2,989**	**3,028**	**3,065**	**3,105**	**3,144**
Credit growth FY21F	12.5%	13.0%	13.5%	14.0%	14.5%	15.0%
EPS FY21F	**3,408**	**3,482**	**3,556**	**3,629**	**3,706**	**3,782**

SOURCES: VND RESEARCH ESTIMATES

Downside risk – Asset quality risk

We are concerned about the risk of increasing bad debts in a global environment of rising interest rates. Recently, the US Federal Reserve has continuously raised interest rates, which led to a number of countries following suit and increasing their policy rates. As the interest rate increases globally, there is rising pressure on Vietnamese interest rate. Interest rates in Vietnam started rising in 4Q18, especially for long tenors. A higher interest rate would create greater asset quality risk for TCB as it has high exposure to real estate - a sector that is sensitive to interest rate movements. A rise in interest rate would slow down credit growth and cause the payment capability of borrowers to deteriorate. As a result, the bank would incur higher expenses for provisioning and bad debt clearing, and thus lower net profit compared to our forecasts.

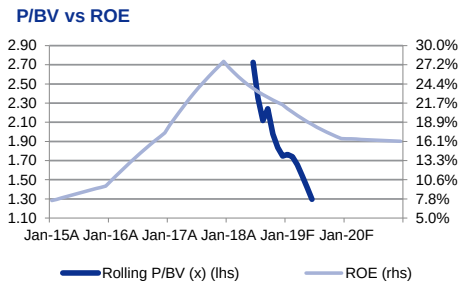
SWOT ANALYSIS

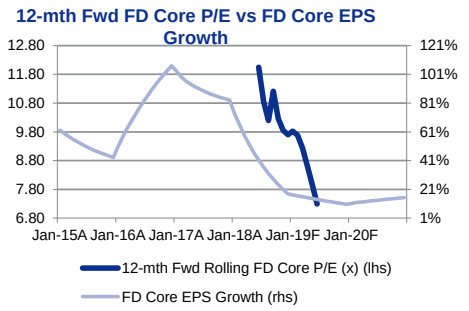
Figure 34: SWOT analysis for TCB

Strengths • Ecosystem approach reduces risk and enhances cross-selling. • Advanced technology and strong appetite for IT investment. • Strong non-interest income franchise. • High capital buffer. • Well-known brand name in retail space.	**Opportunities** • Opportunities for high growth in bancassurance, thanks to the exclusive deal with Manulife. • Opportunities to expand into mass customer segment as VIC starts to develop mid- and low-priced projects.
Weaknesses • Limited presence in regions outside Ho Chi Minh City and Hanoi.	**Threats** • High risk concentration due to large real estate exposure.

SOURCES: VND RESEARCH, COMPANY REPORTS

BY THE NUMBERS





Profit & Loss

(VNDb)	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Net Interest Income	8,930	11,127	13,065	15,717	19,032
Total Non-Interest Income	7,413	7,223	7,717	8,327	9,380
Operating Revenue	**16,344**	**18,350**	**20,781**	**24,044**	**28,413**
Total Non-Interest Expenses	(4,698)	(5,843)	(6,442)	(7,454)	(8,524)
Pre-provision Operating Profit	**11,646**	**12,507**	**14,339**	**16,590**	**19,889**
Total Provision Charges	(3,609)	(1,846)	(2,563)	(3,040)	(3,845)
Operating Profit After Provisions	**8,036**	**10,661**	**11,776**	**13,550**	**16,044**
Pretax Income/(Loss) from Assoc.	0	0	0	0	0
Operating EBIT (incl Associates)	**8,036**	**10,661**	**11,776**	**13,550**	**16,044**
Non-Operating Income/(Expense)	0	0	0	0	0
Profit Before Tax (pre-EI)	**8,036**	**10,661**	**11,776**	**13,550**	**16,044**
Exceptional Items					
Pre-tax Profit	**8,036**	**10,661**	**11,776**	**13,550**	**16,044**
Taxation	(1,591)	(2,187)	(2,416)	(2,780)	(3,291)
Consolidation Adjustments & Others					
Exceptional Income - post-tax					
Profit After Tax	**6,446**	**8,474**	**9,361**	**10,770**	**12,753**
Minority Interests	0	(11)	(12)	(14)	(17)
Pref. & Special Div	0	0	0	0	0
FX And Other Adj.	0	0	0	0	0
Net Profit	**6,446**	**8,463**	**9,348**	**10,756**	**12,736**
Recurring Net Profit	6,446	8,433	9,315	10,718	12,691

Balance Sheet Employment

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Gross Loans/Cust Deposits	94.1%	79.4%	84.9%	84.3%	83.5%
Avg Loans/Avg Deposits	88.1%	86.1%	82.4%	84.6%	83.9%
Avg Liquid Assets/Avg Assets	35.2%	40.4%	41.3%	37.6%	36.4%
Avg Liquid Assets/Avg IEAs	37.3%	43.0%	44.0%	40.0%	38.6%
Net Cust Loans/Assets	58.9%	49.0%	55.4%	57.0%	58.3%
Net Cust Loans/Broad Deposits	67.6%	62.6%	70.3%	72.7%	74.7%
Equity & Provns/Gross Cust Loans	17.9%	33.8%	31.9%	32.2%	32.6%
Asset Risk Weighting	93%	124%	120%	121%	122%
Provision Charge/Avg Cust Loans	2.38%	1.15%	1.42%	1.41%	1.53%
Provision Charge/Avg Assets	1.43%	0.63%	0.76%	0.80%	0.90%
Total Write Offs/Average Assets	1.78%	0.40%	0.65%	0.71%	0.80%

SOURCES: VND RESEARCH, COMPANY REPORTS

BY THE NUMBERS… cont'd

Balance Sheet

(VNDb)	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Total Gross Loans	191,005	195,499	239,105	277,032	320,791
Liquid Assets & Invst. (Current)	58,492	94,434	81,604	86,651	92,104
Other Int. Earning Assets	4,316	10,555	12,244	14,203	16,476
Total Gross Int. Earning Assets	**253,813**	**300,488**	**332,954**	**377,886**	**429,371**
Total Provisions/Loan Loss Reserve	(2,076)	(2,734)	(3,098)	(3,466)	(3,873)
Total Net Interest Earning Assets	**251,737**	**297,754**	**329,855**	**374,420**	**425,499**
Intangible Assets	942	931	1,014	1,106	1,205
Other Non-Interest Earning Assets	14,370	19,698	21,471	23,404	25,510
Total Non-Interest Earning Assets	**15,311**	**20,629**	**22,486**	**24,509**	**26,715**
Cash And Marketable Securities	**2,344**	**2,606**	**2,841**	**3,097**	**3,375**
Long-term Investments	0	0	0	0	0
Total Assets	**269,392**	**320,989**	**355,182**	**402,026**	**455,589**
Customer Interest-Bearing Liabilities	188,611	214,592	250,810	291,629	339,296
Bank Deposits	46,324	36,426	29,140	23,312	16,319
Interest Bearing Liabilities: Others	1,000	6,335	6,351	6,367	6,384
Total Interest-Bearing Liabilities	**235,935**	**257,353**	**286,301**	**321,308**	**361,999**
Bank's Liabilities Under Acceptances					
Total Non-Interest Bearing Liabilities	6,527	11,853	7,738	8,804	8,924
Total Liabilities	**242,462**	**269,206**	**294,039**	**330,112**	**370,923**
Shareholders' Equity	**26,931**	**51,713**	**61,062**	**71,818**	**84,554**
Minority Interests	0	69	82	96	113
Total Equity	**26,931**	**51,783**	**61,143**	**71,914**	**84,666**

Key Ratios

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Total Income Growth	38.1%	12.3%	13.3%	15.7%	18.2%
Operating Profit Growth	52.1%	7.4%	14.6%	15.7%	19.9%
Pretax Profit Growth	101%	33%	10%	15%	18%
Net Interest To Total Income	54.6%	60.6%	62.9%	65.4%	67.0%
Cost Of Funds	3.88%	4.06%	3.82%	3.78%	3.70%
Return On Interest Earning Assets	7.40%	7.63%	7.41%	7.65%	7.85%
Net Interest Spread	3.52%	3.57%	3.58%	3.87%	4.15%
Net Interest Margin (Avg Deposits)	5.19%	5.98%	5.98%	6.15%	6.36%
Net Interest Margin (Avg RWA)	4.08%	3.43%	3.17%	3.44%	3.65%
Provisions to Pre Prov. Operating Profit	31.0%	14.8%	17.9%	18.3%	19.3%
Interest Return On Average Assets	3.54%	3.77%	3.86%	4.15%	4.44%
Effective Tax Rate	19.8%	20.5%	20.5%	20.5%	20.5%
Net Dividend Payout Ratio	NA	NA	NA	NA	NA
Return On Average Assets	2.55%	2.87%	2.77%	2.84%	2.97%

Key Drivers

	Dec-17A	Dec-18A	Dec-19F	Dec-20F	Dec-21F
Loan Growth (%)	12.8%	-0.6%	25.0%	16.2%	15.9%
Net Interest Margin (%)	3.8%	4.0%	4.1%	4.4%	4.7%
Non Interest Income Growth (%)	100.9%	-2.6%	6.8%	7.9%	12.7%
Cost-income Ratio (%)	28.7%	31.8%	31.0%	31.0%	30.0%
Net NPL Ratio (%)	1.1%	1.0%	1.2%	1.1%	1.0%
Loan Loss Reserve (%)	72.8%	85.1%	72.9%	77.7%	83.3%
GP Ratio (%)	0.7%	0.8%	0.8%	0.8%	0.8%
Tier 1 Ratio (%)	8.8%	12.2%	13.6%	14.1%	14.7%
Total CAR (%)	12.7%	14.3%	15.6%	15.9%	16.3%
Deposit Growth (%)	-1.4%	17.8%	17.0%	17.0%	17.0%
Loan-deposit Ratio (%)	92.9%	78.1%	83.6%	83.0%	82.3%
Gross NPL Ratio (%)	1.6%	1.8%	1.8%	1.7%	1.5%
Fee Income Growth (%)	94.9%	-7.2%	10.0%	15.0%	18.0%

SOURCES: VND RESEARCH, COMPANY REPORTS

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Score Range:	90 - 100	80 – 89	70 - 79	Below 70 or	No Survey Result
Description:	Excellent	Very Good	Good	N/A	

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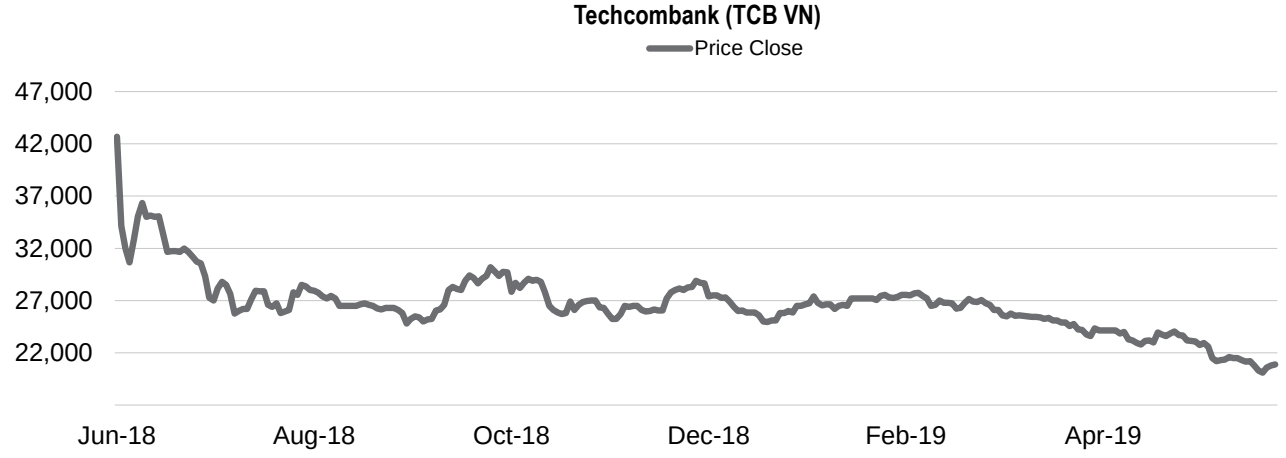
	Rating Distribution (%)	Investment Banking clients (%)
Add	57.8%	4.0%
Hold	27.0%	2.1%
Reduce	15.2%	0.4%

Spitzer Chart for stock being researched (2 year data)



Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2018, Anti-Corruption 2018

ADVANC – Excellent, Certified, **AEONTS** – Good, n/a, **AH** – Very Good, n/a, **AMATA** – Excellent, Declared, **ANAN** – Excellent, Declared, **AOT** – Excellent, Declared, **AP** – Excellent, Certified, **ASP** – Very Good, Certified, **BANPU** – Excellent, Certified, **BAY** – Excellent, Certified, **BBL** – Very Good, Certified, **BCH** – Good, Certified, **BCP** - Excellent, Certified, **BCPG** – Excellent, Certified, **BEM** – Very Good, n/a, **BDMS** – Very Good, n/a, **BEAUTY** – Good, n/a, **BEC** – Very Good, n/a, , **BGRIM** – Very Good, Declared, **BH** - Good, n/a, **BJC** – Very Good, Declared, **BJCHI** – Very Good, Certified, **BPP** – Very Good, Declared, **BR** - Good, Declared, **BTS** - Excellent, Certified, **CBG** – Very Good, n/a, **CCET** – Good, n/a, **CENTEL** – Very Good, Certified, **CHG** – Very Good, Declared, **CK** – Excellent, n/a, **COL** – Excellent, Declared, **CPALL** – Very Good, Certified, **CPF** – Excellent, Certified, **CPN** - Excellent, Certified, **DELTA** - Excellent, n/a, **DEMCO** – Excellent, Certified, **DDD** – Very Good, Declared, **DIF** – not available, n/a, **DTAC** – Excellent, Certified, **EA** – Excellent, n/a, **ECL** – Very Good, Certified, **EGCO** - Excellent, Certified, **EPG** – Very Good, n/a, **ERW** – Very Good, n/a, **GFPT** - Excellent, Certified, **GGC** – Excellent, Certified, **GLOBAL** – Very Good, n/a, **GLOW** – Very Good, Certified, **GPSC** – Excellent, Certified, **GULF** – Very Good, n/a, **GUNKUL** – Excellent, Certified, **HANA** - Excellent, Certified, **HMPRO** - Excellent, Certified, **HREIT** - Excellent, Certified **ICHI** – Excellent, Declared, **HUMAN** – not available, n/a, **III** – Good, n/a, **INTUCH** - Excellent, Certified, **IRPC** – Excellent, Certified, **ITD*** – Very Good, n/a, **IVL** - Excellent, Certified, **JASIF** – not available, n/a, **KBANK** - Excellent, Certified, **KCE** - Excellent, Certified, **KKP** – Excellent, Certified, **KSL** – Excellent, Certified, **KTB** - Excellent, Certified, **KTC** – Excellent, Certified, **LH** - Very Good, n/a, **LPN** – Excellent, Certified, **M** – Very Good, Certified, **MACO** – Very Good, n/a, **MAJOR** – Very Good, n/a, **MAKRO** – Excellent, Declared, **MALEE** – Very Good, Certified, **MC** – Very Good, Certified, **MCOT** – Excellent, Certified, **MEGA** – Very Good, n/a, **MINT** - Excellent, Certified, **MTC** – Excellent, Declared, **NETBAY** – Good, n/a, **PLANB** – Excellent, Declared, **PLAT** – Very Good, Certified, **PSH** – Excellent, Certified, **PSTC** – Good, Certified, **PTT** - Excellent, Certified, **PTTEP** - Excellent, Certified, **PTTGC** - Excellent, Certified, **QH** – Excellent, Certified, **RATCH** – Excellent, Certified, **ROBINS** – Excellent, Certified, **RS** – Very Good, n/a, **RSP** – not available, n/a, **SAMART** - Excellent, n/a, **SAPPE** – Very Good, Declared, **SAT** – Excellent, Certified, **SAWAD** – Very Good, n/a, **SC** – Excellent, Declared, **SCB** - Excellent, Certified, **SCC** – Excellent, Certified, **SCN** – Very Good, Certified, **SF** – Good, n/a, **SIRI** – Very Good, Certified, **SPA** - Good, n/a, **SPALI** - Excellent, n/a, **SPRC** – Excellent, Certified, **STA** – Very Good, Certified, **STEC** – Excellent, n/a, **SVI** – Excellent, Certified, **SYNEX** – Very Good, Declared, **TASCO** – Excellent, Certified, **TCAP** – Excellent, Certified, **TIPCO** – Very Good, Certified, **TISCO** - Excellent, Certified, **TKN** – Very Good, Declared, **TMB** - Excellent, Certified, **TNR** – Very Good, Declared, **TOP** - Excellent, Certified, **TPCH** – Good, n/a, **TPIPP** – Good, n/a, **TRUE** – Excellent, Certified, **TU** – Excellent, Certified, **TVO** – Very Good, Declared, **UNIQ** – Good, n/a, **VGI** – Excellent, Certified, **WHA** – Excellent, Certified, **WHART** – not available, n/a, **WORK** – Good, n/a.

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- Companies certified by CAC

* The company, its director or management had been reportedly accused for breaching proper corporate governance such as violation of the SEC's regulations or charged with corruption.

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Add	The stock's total return is expected to reach 15% or higher over the next 12 months.
Hold	The stock's total return is expected to be between negative 10% and positive 15% over the next 12 months.
Reduce	The stock's total return is expected to fall below negative 10% over the next 12 months.

The total expected return of a stock is defined as the sum of the:(i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.

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Neutral	A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
Underweight	An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

Country Ratings	Definition:
Overweight	An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
Neutral	A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
Underweight	An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.

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