Analyzing Accounting Profit of Vietinbank under Effects of Internal Factors - A Case Study in Vietnam Listed Banks

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Abstract: We conduct this research in order to measure effects of inter factors such as cost of interest, operating cost, lending rate, interest revenue , etc. on a key internal factor, that is accounting net profit of the firm.
This study use both quantitative analysis method with OLS regression (Eview) and with statistic analysis, and qualitative analysis including synthesis and inductive methods.
The research findings tell us that in order to increase accounting net profit, the bank will better manage costs and have cost planning effectively and better manage interest cost (going down)which will drive its profitability.
Besides, this study also give out recommendations for enhancing business results and operation results of a typical Vietnam bank, CTG (Vietinbank) in future and give out directions or implications for socio-economic policies.

1. Introduction

Rudhani (2016) stated that based on the literature review, a crucial internal factor on the profitability of banks in Kosovo was deemed: the repayment of assets (ROA) as a measure of profitability influenced by other independent variables, such as: bank size, capital adequacy, loan and liquidity risk. The aim of this study is to investigate the empirical relation between internal factors determining bank profitability and profitability as a dependent variable. The empirical analysis is based on the data of commercial banks in Kosovo published in the period 2010-2014. The data were analysed with SPSS 21 version, and the hypotheses were tested by means of correlation and linear regression. The findings of the study proved that commercial banks in Kosovo could enlarge their profitability by increasing the level of bank loaning and other investments, except for managing risk and liquidity properly.

In addition, Cuong, D.P et al (2018) found out firms' financial performance are positively affected by the firms' size, capital structure, capitalization expenditure, and accounts receivable management. The research results also reflect positive relation between firms' financial performance and business risk. Upon the research results we recommend that the changes should be focus on improving policies about capitalization expenditure; reasonable capital structure and management of inventories.

Next, in Vietnam, we recognize the importance of banking operation in recent years bring very good business results not only for banks but also for various business sectors.

Vietinbank is a big listed bank in Vietnam which contributed very much to bank system and economic activities.From a unit that has to rent an office, with a small network, until now, VietinBank has a system of Head Office, 7 subsidiaries, 155 branches and nearly 1,000 transaction offices nationwide. In the international market, VietinBank integrates strongly with the presence of 2 branches in the Federal Republic of Germany, 1 subsidiary bank with 100% capital in Lao PDR and 1 representative office in Myanmar. From an asset scale of only VND 718 billion in the early days of its establishment, by the end of 2017, VietinBank's total assets had reached VND 1.1 million billion, an increase of 1,500 times and affirming its leading position in the banking system. Vietnam row.

VietinBank's credit balance by the end of 2017 reached VND 840 trillion, 1,400 times higher than the day it was established. Profit before tax grew continuously with an average annual growth rate of 22%, of which the total profit before tax in the period 2013 - 2017 reached more than VND 40 trillion, an increase of 1.5 times compared to the period 5. previous year (2008 - 2012). In 30 years of operation, with a total contribution of nearly VND 37,000 billion to the State Budget and more than VND 7,000 billion for charity and social security, VietinBank has been a bank for many consecutive years in the Top 10 Enterprises contributing to the Bank. the highest State

policy, establishing a deep imprint in the community, contributing to the Party and State to implement hunger eradication and poverty reduction quickly and sustainably nationwide (source: tinnhanhchungkhoan.vn, access date 29/5/2021).
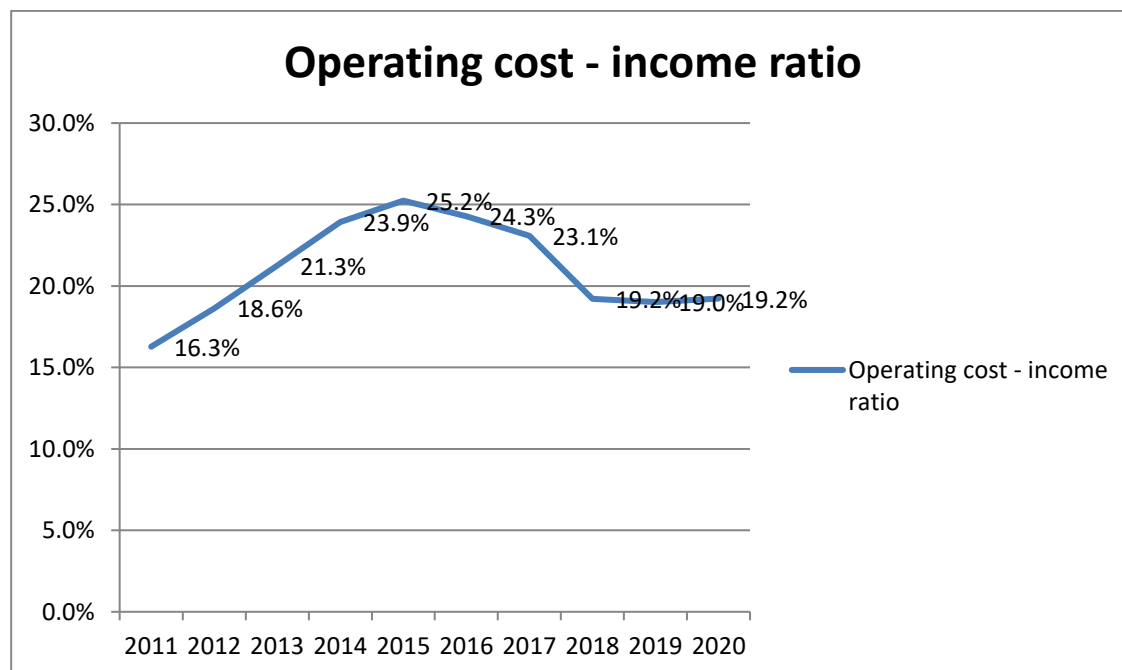
Operating cost - income ratio

Chart 1. Variation of operating cost/ interest income ratio of Vietinbank 2011-2020
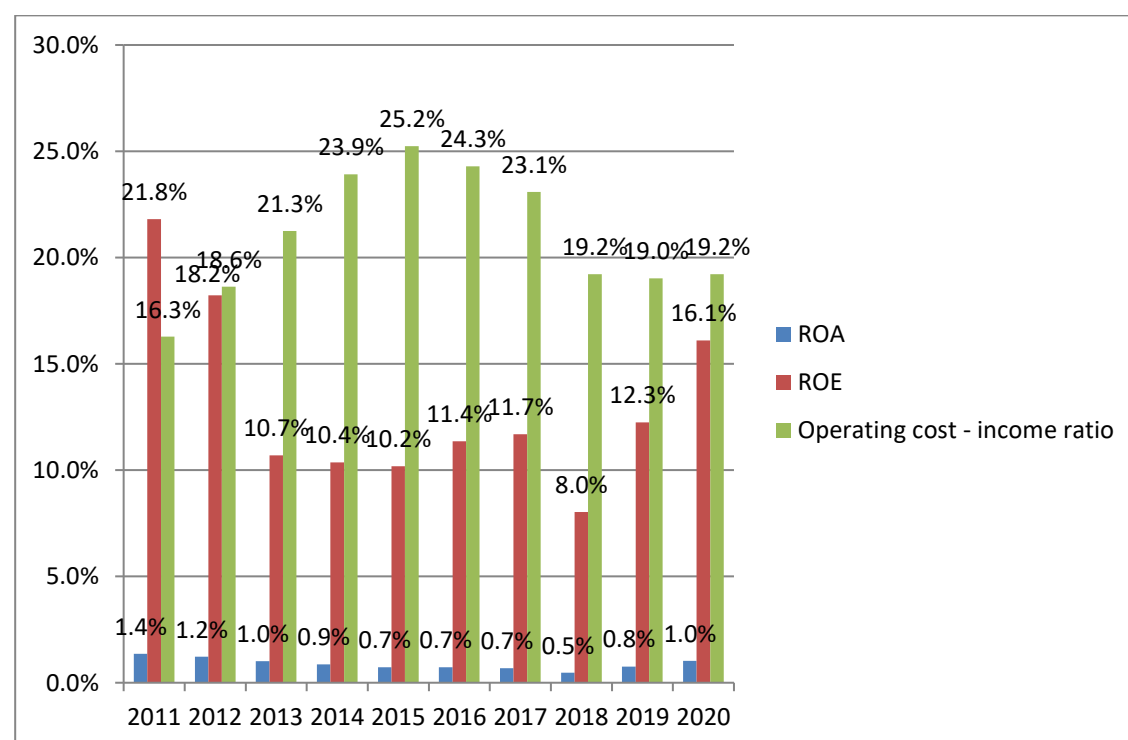

Chart 2. Variation of ROA and ROE of Vietinbank 2011-2020

All internet data such as cost of interest, income, net profit, lending rate we take from reliable internet data sources, esp. from website of banks, stock exchange reports.

We recognize from above charts with all data from reliable internet sources (mentioned above) that:

- ROA of Vietinbank increased in beginning years 2011 and 2012 (1.2-1.4%) and reduce till 2018 (lowest ratio 0.5%) then increased till 2020 (1%).

- ROE of Vietinbank also goes down in 2018 (8%) and increased again in 2020 (16.1%).
- Operating cost/ Interest income ratio moved in different path: increased to highest points in 2014-2016 period (23%-24%), then go down in 2020 (19.2%).

Our study organized with introduction, literature review, method and data, main results, discussion, conclusion and policy implications.

2. Literature Review

First, Trivelas and Satouridis (2013) stated that in Greece a) the externally focused Management Information System (MIS) effectiveness archetypes (OS, RM) reflecting innovation, creativity, goal setting and planning enhance task productivity b) the Internal process (IP) model of MIS effectiveness influences negatively task productivity.

And Karim (2011) specified that Management Information Systems (MIS) is the key factor to facilitate and attain efficient decision making in an organization.

Arasu et al (2014) found the Internet has revolutionized services across institutions. The Banking sector has registered significant change in the quality of service owing to the bandwidth of information flow ensuring greater customer-satisfaction. This has also brought into perspective the security environment within which information flow takes place.

Almazari (2014) found that there is a significant positive correlation between ROA of Saudi banks with TEA (Total equity to asset), TIA and LQR (Liquidity risk) variables, as well as a negative correlation with NCA, CDR (deposit ratio), CIR and SZE variables. Meanwhile, there is a significant positive correlation between ROA of Jordanian banks with LQR, NCA, TEA and CDR variables, also there is a negative correlation of return on assets with CIR (cost income ratio), TIA and SZE.

Then Haliti et al (2016) stated data with SPSS 21 version, and the hypotheses were tested by means of correlation and linear regression. The findings of the study proved that commercial banks in Kosovo could enlarge their profitability by increasing the level of bank loaning and other investments, except for managing risk and liquidity properly.

Last but not least, Huy, D.T.N et al (2020) measure effects of external factors on bank stock price in case of a big listed bank in Vietnam - Vietcombank which left the direction for further researches on internal factors effects measuring.

Moreover, Gupta (2019) specified that Information system (IS) is important in almost all the functional areas of any bank i.e. HR, Marketing, Finance, etc. It also helps in risk management and cash management along with maintaining long run customer relationship.

3. Methodology

Method and Data

This study mainly use combination of quantitative methods and qualitative methods including synthesis, inductive and explanatory methods. And it emphasizes again important roles of internal factors on accounting net profit of big listed banks.

For quantitative analysis, the study is supported with OLS regression.

Data is collected from reliable internet sources and websites as below: stock exchange, bank websites, bank system, etc.

Looking at descriptive statistics below, we see that:

- Standard deviation of interest cost and interest income are highest values, while that of ROA is lowest. (Fig 1)
- Correlation between net profit and operating cost (0.6) is higher than that of ROE and ROA (0.25 and 0.08 respectively).

	NETPROFIT	COST_INC...	OPERATIN...	R	SERVICEC...	ROE	ROA	INTEREST...	INTERESTI...
Mean	7264.300	0.210100	12248.40	0.115260	1915.400	0.130800	0.008900	35900.30	59312.30
Median	6214.000	0.202500	11794.50	0.100000	1413.500	0.115500	0.008500	33983.50	54382.50
Maximum	13757.00	0.252000	16085.00	0.190000	4001.000	0.218000	0.014000	51658.00	83677.00
Minimum	5416.000	0.163000	9077.000	0.080000	576.0000	0.080000	0.005000	23495.00	41075.00
Std. Dev.	2576.936	0.029771	2856.982	0.039225	1349.059	0.042643	0.002685	10706.76	16222.90
Skewness	1.816395	0.017745	0.174979	1.138882	0.509368	0.950453	0.510960	0.319782	0.428966
Kurtosis	5.126208	1.693955	1.319936	2.705184	1.656849	2.756427	2.476008	1.647350	1.699180
Jarque-Bera	7.382466	0.711256	1.227119	2.197970	1.184116	1.530320	0.549537	0.932794	1.011742
Probability	0.024941	0.700733	0.541420	0.333209	0.553188	0.465259	0.759748	0.627258	0.602980
Sum	72643.00	2.101000	122484.0	1.152600	19154.00	1.308000	0.089000	359003.0	593123.0
Sum Sq. Dev.	59765378	0.007977	73461112	0.013847	16379650	0.016366	6.49E-05	1.03E+09	2.37E+09

Figure 1. Descriptive statistics

Correlation Matrix									
	NETPROFIT	COST_INC...	OPERATIN...	R	SERVICEC...	ROE	ROA	INTEREST...	INTERESTI...
NETPROFIT	1.000000	-0.257323	0.689684	-0.353427	0.730123	0.256441	0.087144	0.561760	0.731816
COST_INC...	-0.257323	1.000000	-0.028185	-0.484938	-0.204044	-0.674164	-0.586368	-0.598006	-0.498183
OPERATIN...	0.689684	-0.028185	1.000000	-0.755460	0.958070	-0.279825	-0.559576	0.786006	0.877403
R	-0.353427	-0.484938	-0.755460	1.000000	-0.703513	0.750380	0.824965	-0.342327	-0.443614
SERVICEC...	0.730123	-0.204044	0.958070	-0.703513	1.000000	-0.209626	-0.461584	0.874063	0.941167
ROE	0.256441	-0.674164	-0.279825	0.750380	-0.209626	1.000000	0.898315	0.058461	0.064566
ROA	0.087144	-0.586368	-0.559576	0.824965	-0.461584	0.898315	1.000000	-0.213720	-0.211177
INTEREST...	0.561760	-0.598006	0.786006	-0.342327	0.874063	0.058461	-0.213720	1.000000	0.966699
INTERESTI...	0.731816	-0.498183	0.877403	-0.443614	0.941167	0.064566	-0.211177	0.966699	1.000000

Figure 2. ACB beta and and other factors correlation matrix

4.   Main Results

4.1. Overall Results

Results shown in below charts: most of factors there are positive relationship with net profit including ROA, ROE, operating cost and interest cost, while only cost/income ratio has negative relationship.
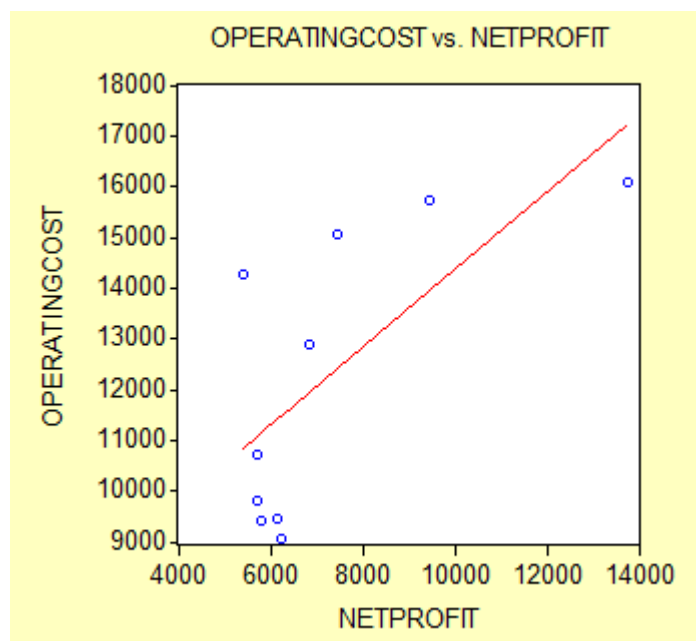

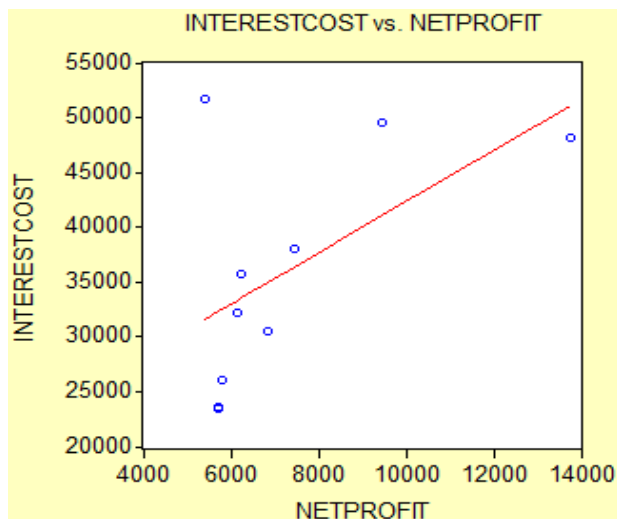**Chart 1.** Operating cost versus net profit
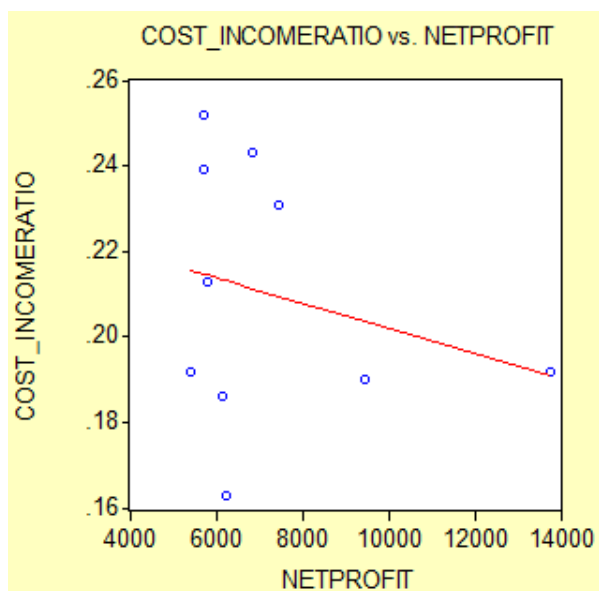
Chart 2. Interest cost versus net profit

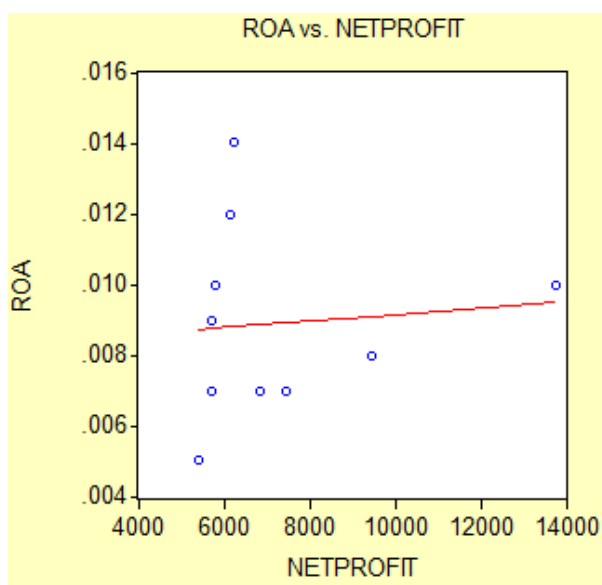
Chart 3. Operating Cost/income ratio versus net profit
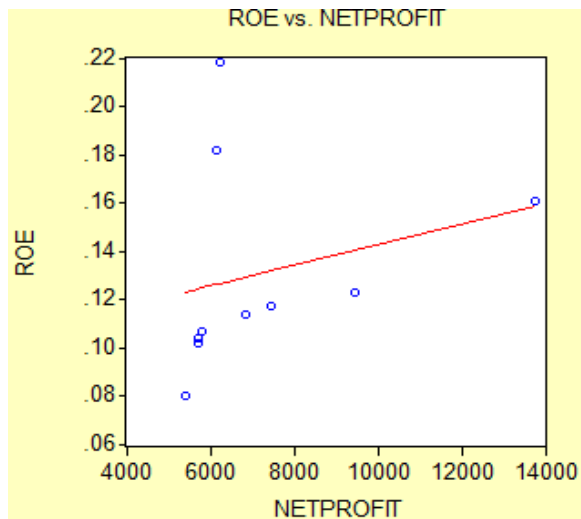

Chart 4. ROA versus net profit

Chart 5. ROE versus net profit

4.3. OLS Regresion Results

First, looking at below figure we found out:

- Coefficient is 0.6 positive, when net profit increases it implies that operating cost also increased.

Dependent Variable: NETPROFIT
Method: Least Squares
Date: 05/28/21   Time: 23:55
Sample: 1 10
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
OPERATINGCOST	0.622080	0.230917	2.693954	0.0273
C	-355.1840	2896.784	-0.122613	0.9054

R-squared	0.475664	Mean dependent var		7264.300
Adjusted R-squared	0.410122	S.D. dependent var		2576.936
S.E. of regression	1979.177	Akaike info criterion		18.19561
Sum squared resid	31337143	Schwarz criterion		18.25612
Log likelihood	-88.97803	F-statistic		7.257391
Durbin-Watson stat	0.957558	Prob(F-statistic)		0.027329

Figure 1. Regression results for net profit with 1 factor operating cost

Second, we look at below table and found out:

- Operating cost and interest cost has negative relationship with net profit while interest income has positive correlation.

Table 1. OLS regression for 3 ,5,7 factors

	Co-efficient	
	3 factors	5 factors
Operating cost	-0.47	-0.38
Interest income	0.6	0.38
Interest cost	-0.6	-0.6
R		39300
Service cost		2.95
R-squared	0.9	0.93
Akaike info criterion	16.8	16.8

Third, we look at below table and found out:

- Interest income and interest cost has negative correlation with accounting net profit while operating cost has positive correlation.

Table 2. OLS regression for 6, 7, 8 factors

	Coefficient		
	6 factors	7 factors	8 factors
Operating cost	4.9	4.11	1.08
Interest income	-1.2	-1.14	-0.28
Interest cost	-0.7	-0.4	-0.03
R	48766	39881	54450
Service cost	10.2	9.04	4.98
Cost /income ratio	-393294	-282557	20217
ROA		474580	1419926
ROE			-31929
R-squared	0.9	0.96	0.97
Akaike info criterion	16.5	16.5	16.6

5. Discussion

Analysis

We can infer from the above tables that service cost and operating cost are the most influential factors, with highest coefficients that show positive correlation with accounting net profit of Vietinbank.

It means that net profit will increase when cost go up.

Asadullah and Mahar (2019) investigated the effect of internal factors (capital structure) on the profitability of conventional and Islamic banks of Pakistan. Total seventeen conventional banks and five Islamic banks were selected as a sample with annual data over the period from Pakistan however the total debt/total capital ratio had a positive impact on ROA. Asset Growth has a negative impact on ROA in conventional banks of Pakistan. Other variables were found to be insignificant with profitability. The findings will be helpful to implement capital structure policies accordingly to generate revenue in future.

6. Conclusion

Because operating cost and net profit has positive correlation:

We found out: Vietinbank accounting net profit will increase when cost go up. The banks should consider efficiency and effectiveness of bank operating costs and service costs, expenditures rationally and can enable profitability to increase.

Also, interest income and interest cost have negative correlation with bank profits. So accounting net profit of Vietinbank will go up if interest income and expense go down.

Business Policy implications

The bank will better manage costs and have cost planning effectively which will drive its profitability and better manage interest cost (going down) to increase accounting net profit.

Chi, N.T.D et al (2018) also mentioned that capital size and loan have a positive and significant effect on bank profitability, and asset size, deposits, liquidity risk and bad debts have a negative and significant impact on bank profitability. These findings suggest that banks can improve their profitability through increasing capital size and loan, remaining asset size, deposits, liquidity risk and bad debts reasonably.

Limitation of Research

We can expand our research model for other industries and other markets.

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