www.revistageintec.net
ISSN: 2237-0722
revista GEINTEC Gestão, Inovação e Tecnologias

Improving Accounting Management VIA Measuring Effects of Cost and Revenue Factors on Accounting Net Profit - A Case Study in Hoi An Tourism Company In Vietnam

Hoang Thanh Hanh[1]; Dinh Tran Ngoc Huy[2]
[1]PhD, Academy of Policy and Development (APD), Hanoi Vietnam.
[1]hoangthanhhanh@apd.edu.vn
[2]MBA, Banking University HCMC Ho Chi Minh City Vietnam.
International University of Japan, Japan.
[2]dtnhuy2010@gmail.com

Abstract
We perform this study in order to enhance management of accounting functions in firms, esp. In the case of Hoi An Tourism company in Vietnam.
Before covid 19 Vienam tourism has developed fast and achieved high growth, but during covid 19 Vietnam tourism sector has been affected so much, with declining GDP contribution and tourism unemployment.
This study mainly use combination of quantitative methods (statistics, calculation formulas) and qualitative methods including synthesis, inductive and explanatory methods.
Our study findings tell us that all cost factors such as COGS and sale cost and administrative expense have negative relationship with accounting net profit.
Besides, this study also give out recommendations for suitable financial accounting processes and policies as well as directions or implications for tourism management in post-covid in future.

Key-words: Accounting Functions, Hoi An Tourism Firm, Accounting Management, Vietnam, Cost and Revenue, Accounting Profit.

JEL: M21, G30, G32, G38.

1. Introduction

First, we recognize the importance of Vietnam tourism sector before covid 19 which contributed so much for economic growth in recent years.

However during covid 19, negative effects has made Vietnam tourism go down with declining jobs and GDP contribution.

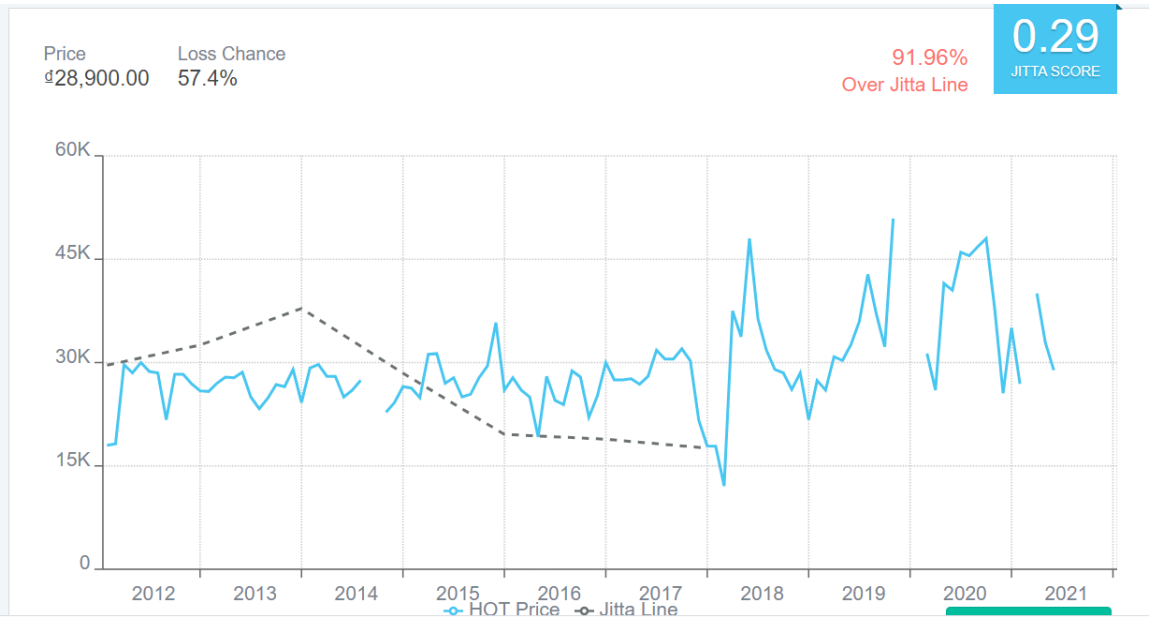
Hoi An Tourism - Service Joint Stock Company (HOT) provide many services including Hpi An hotel which has also been invested tens of billions of dong to comprehensively upgrade to 4 stars+ international standards, is the favorite choice of tourists because of its charm architectural style and intimate differences of service staff.

Currently, Hoi An hotel continues to focus on research and development of new products, strengthens service quality supervision, focuses on human factor investment, and has a flexible pricing policy. Along with the strategic orientation of innovation, professional development and investment in promoting products to ensure high rankings in the 4-star hotel segment, Hoi An hotel is applying many strategies to maintain the market. traditional markets, promote exploitation of key markets, penetrate into new markets, increase the proportion of customers exploiting via the global network, exploit the corporate, mice market, etc. to develop market share.

For many consecutive years, the leading and fastest growing online booking company in Asia - Agoda has presented Hoi An hotel with the prestigious annual award Agoda Gold Circle Awards - Annual Gold Award.

Below chart show stock price of HOT has climbed up in 2018 and increased little bit in 2021.

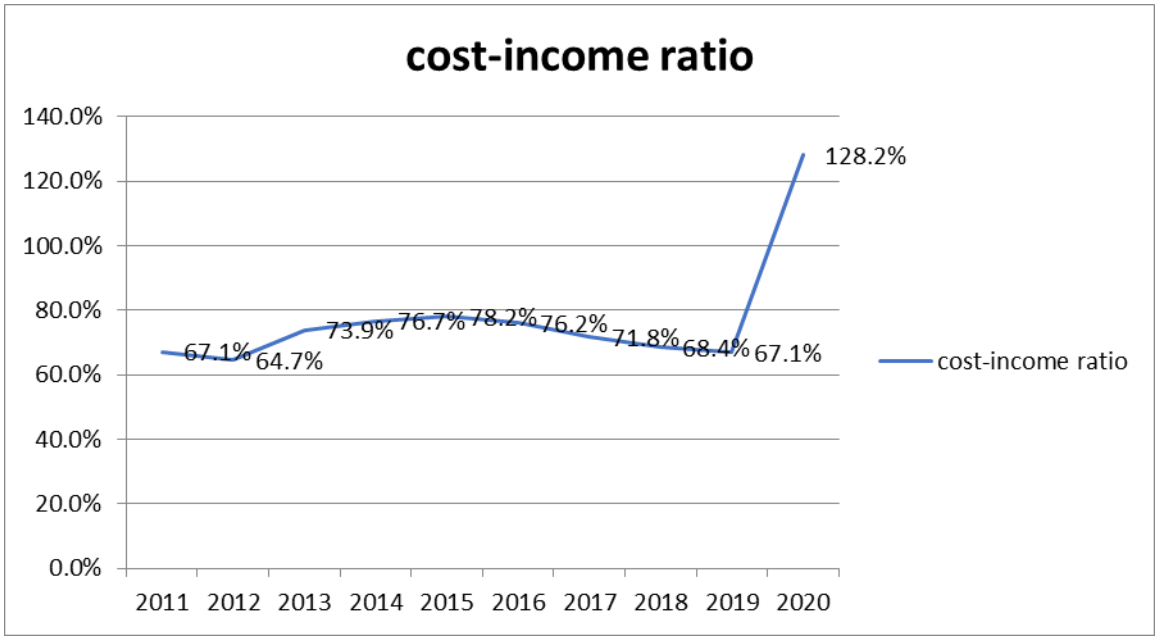
Chart 1 - Hoi An Toursim Company Stock Price



(Source: https://www.jitta.com/stock/vnm:hot, access date 2/6/2021)

Below chart 2 shows that cost-income ratio climbed up in the year 2020

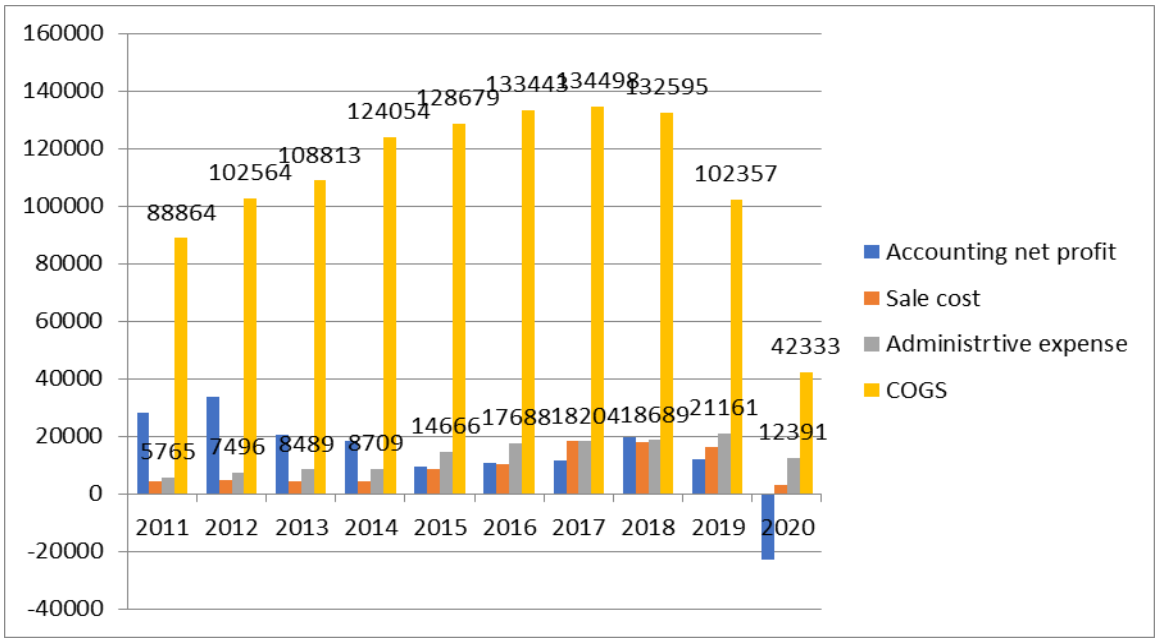
Chart 2 - Ratio of Cost/Income of HOT



(Source: stock exchange, financial reports and author calculation)

Then below chart 3 shows that admin expense increased in 2019 and go down in 2020 as well as COGS.

Chart 3 - Fluctuation of Accounting Profit, COGS and Sale Cost



(Source: stock exchange, financial reports and author calculation)

All internet data such as lending rate, cost and revenue factors we take from reliable internet data sources, esp. from website of company, annual reports from stock exchange, Bureau of Statistics, banks, etc.

We organize our study with introduction, literature review, method, main results, discussion and conclusion.

2. Literature Review

First, 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.

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.

And last but not least, Sibanda et al (2020) mentioned digital technology has transformed banking from classical model to innovative Fintech collaborative model.

Then, We summarize previous studies as follows:

Table 1 – Summary of Previous Studies

Authors	Year	Contents, results
Karim, A.J	2011	Management Information Systems (MIS) is the key factor to facilitate and attain efficient decision making in an organization.
Avegrou, C.	2008	Information system (IS) in emerging markets research has expanded the IS research agenda and developed new understanding of IS innovation phenomena, mainly through its attention to social context and strategic concerns associated with socio-economic development. As it encounters questions on policy and practice of development, it is confronted with critical issues associated with the role of Information and Communication Technology (ICT) in the transformation of social relations and macro-level institutions.
Endri E. et al	2020	the variables of Non-Performing Loans (NPL), Loan to Deposit Ratio (LDR), Return on Assets (ROA), Interest Rate (SBI), and Exchange Rate (FOREX) affect NIM. The exchange rate variable has a predominant effect, while the NPL factor has a less strong influence on NIM. The empirical evidence from this research is important for commercial banks in Indonesia to improve operational efficiency through NIM performance. Internal and external factors of a bank should be subject of attention of bank managers.
Giebe et al	2019	a progressive tool for providing customer-oriented services and products, in the banking sector, is currently defined as “Big Data & Analytics”.
Feitosa et al	2019	Disruptive technologies are triggers that transform the nature of work, leading to profound changes in organizational structure, labor relations, employee skills, customer relationship and communications.

3. Methodology

Method and Data

This study mainly use combination of quantitative methods and qualitative methods including synthesis, inductive and explanatory methods.

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

Data is collected from reliable internet sources and websites.

Then, looking at descriptive statistics below, we see that:

- Standard deviation of COGS is the highest value while that of lending rate is lowest (figure 1).
- Standard deviation of total revenue is the highest value while taht of ROA is lowest (figure 3).

Figure 1 - Descriptive Statistics of Net Profit and Cost Factors

	NETPROFIT	ADMIN_EX...	COGS	R	SALE_COST
Mean	14158.40	13325.80	109820.0	0.115260	9252.000
Median	15317.50	13528.50	116433.5	0.100000	6776.500
Maximum	33824.00	21161.00	134498.0	0.190000	18619.00
Minimum	-22954.00	5765.000	42333.00	0.080000	3103.000
Std. Dev.	15259.65	5492.537	28571.60	0.039225	6179.916
Skewness	-1.333027	-0.004212	-1.344525	1.138882	0.568044
Kurtosis	4.754844	1.485806	4.086983	2.705184	1.650314
Jarque-Bera	4.244717	0.955356	3.505220	2.197970	1.296812
Probability	0.119749	0.620222	0.173321	0.333209	0.522878
Sum	141584.0	133258.0	1098200.	1.152600	92520.00
Sum Sq. Dev.	2.10E+09	2.72E+08	7.35E+09	0.013847	3.44E+08

Figure 2 – Cost Factors Correlation Matrix

Correlation Matrix					
	NETPROFIT	ADMIN_EX...	COGS	R	SALE_COST
NETPROFIT	1.000000	-0.341754	0.517198	0.638298	0.036663
ADMIN_EX...	-0.341754	1.000000	0.364894	-0.789023	0.867011
COGS	0.517198	0.364894	1.000000	-0.195625	0.549525
R	0.638298	-0.789023	-0.195625	1.000000	-0.554098
SALE_COST	0.036663	0.867011	0.549525	-0.554098	1.000000

Looking at descriptive statistics below, we see that:

Figure 3 - Descriptive Statistics of Net Profit and Revenue Factors

	NETPROFIT	COST_INC...	NETREVE...	ROA	ROE	TOTALREV...
Mean	14158.40	0.772300	150442.0	0.086700	0.114800	150642.9
Median	15317.50	0.728500	159759.5	0.103500	0.135000	160217.0
Maximum	33824.00	1.282000	193718.0	0.232000	0.284000	193718.0
Minimum	-22954.00	0.647000	33030.00	-0.258000	-0.292000	33030.00
Std. Dev.	15259.65	0.185023	45170.74	0.132696	0.156992	45177.45
Skewness	-1.333027	2.357335	-1.874201	-1.825870	-1.813281	-1.885423
Kurtosis	4.754844	7.165691	5.809923	5.852607	5.789471	5.842360
Jarque-Bera	4.244717	16.49212	9.144244	8.946903	8.722122	9.290955
Probability	0.119749	0.000262	0.010336	0.011408	0.012765	0.009605
Sum	141584.0	7.723000	1504420.	0.867000	1.148000	1506429.
Sum Sq. Dev.	2.10E+09	0.308100	1.84E+10	0.158474	0.221818	1.84E+10

Figure 4 – Revenue Factors Correlation Matrix

Correlation Matrix						
	NETPROFIT	COST_INC...	NETREVE...	ROA	ROE	TOTALREV...
NETPROFIT	1.000000	-0.912310	0.686453	0.991702	0.991978	0.689690
COST_INC...	-0.912310	1.000000	-0.864286	-0.950989	-0.944218	-0.865995
NETREVE...	0.686453	-0.864286	1.000000	0.756113	0.750566	0.999986
ROA	0.991702	-0.950989	0.756113	1.000000	0.999343	0.758976
ROE	0.991978	-0.944218	0.750566	0.999343	1.000000	0.753539
TOTALREV...	0.689690	-0.865995	0.999986	0.758976	0.753539	1.000000

(Source: stock exchange, financial reports and author calculation)

We also find out that:

- Correlation between net profit and ROA and ROE (0.99) is higher than that of between net profit and net revenue (0.68) (figure 4)
- Correlation between net profit and lending rate (0.63) is higher than that between net profit and sale cost (0.03) (figure 2).

4. Main Results

5. 4.1 Overall Results

As shown in below figure:

- Between net profit and administrative expenses, cost-income ratio there is negative correlation.
- Between net profit and ROA, ROE and lending rate there is positive correlation

Figure 1 - Admin Expense and Net Profit

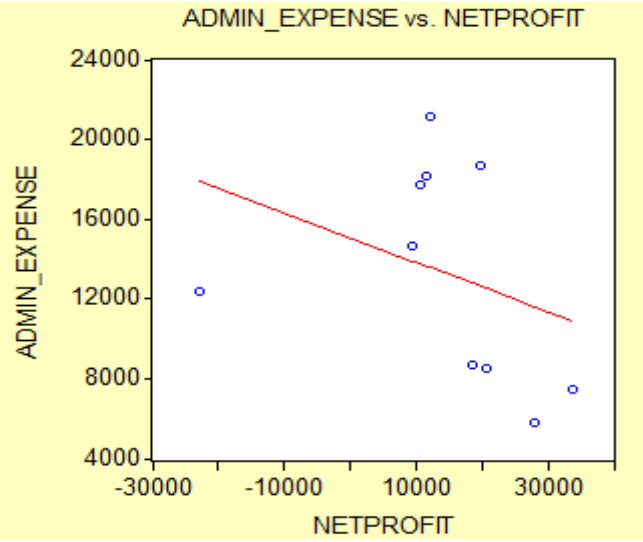


Figure 2 - Cost/Income Ratio and Net Profit

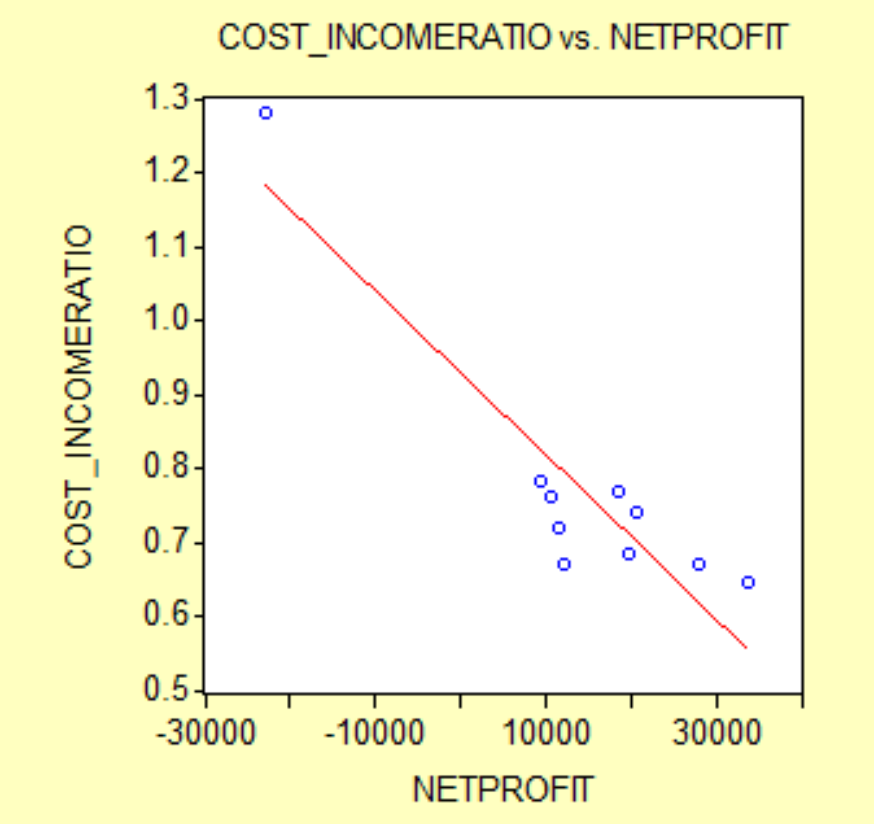


Figure 3 - ROA and Net Profit

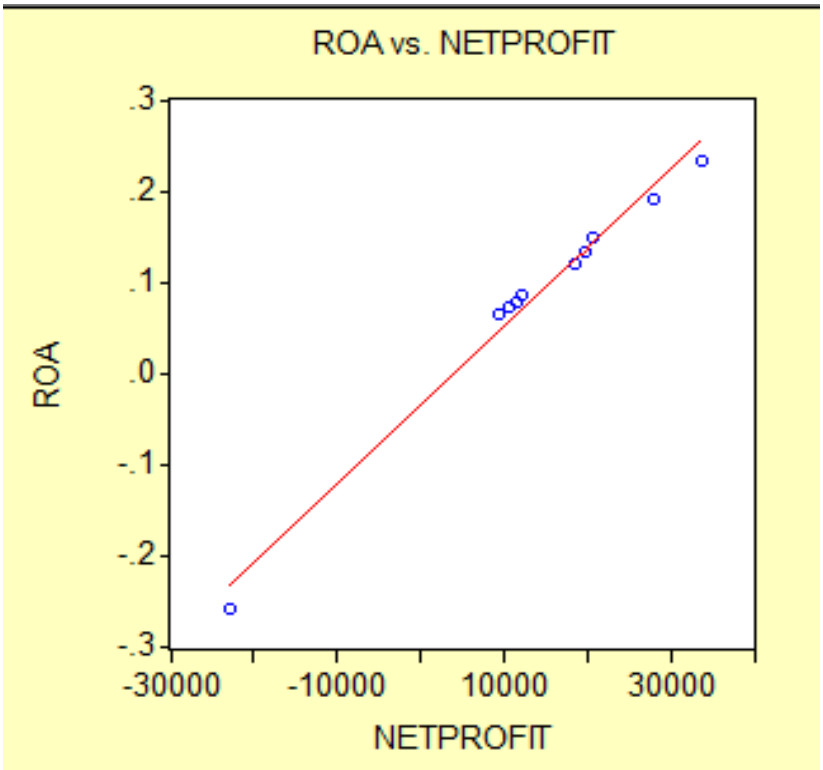


Figure 4 - ROE and Net Profit

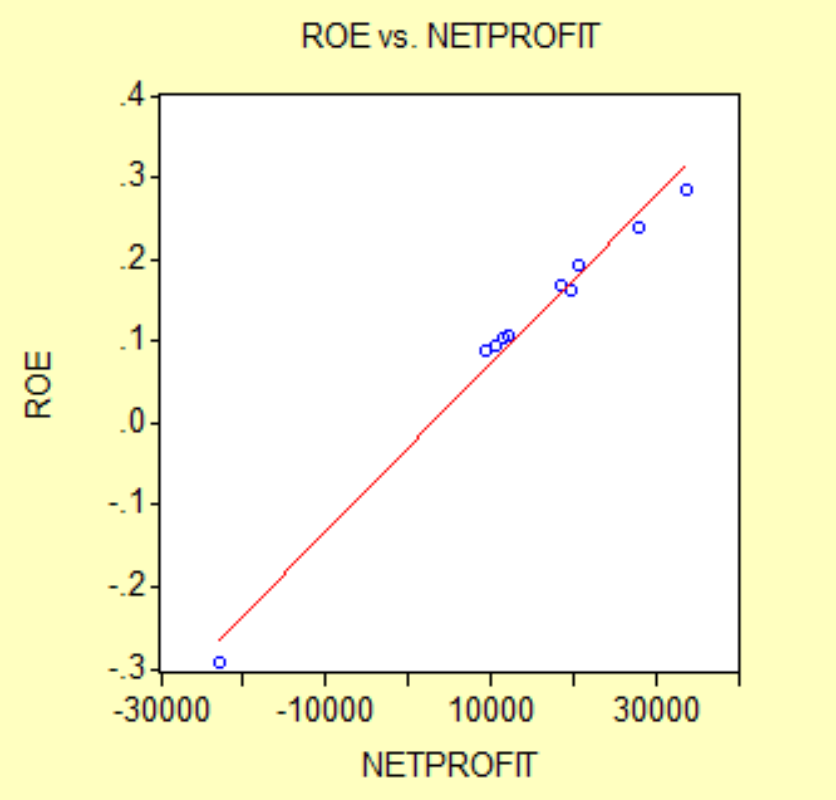
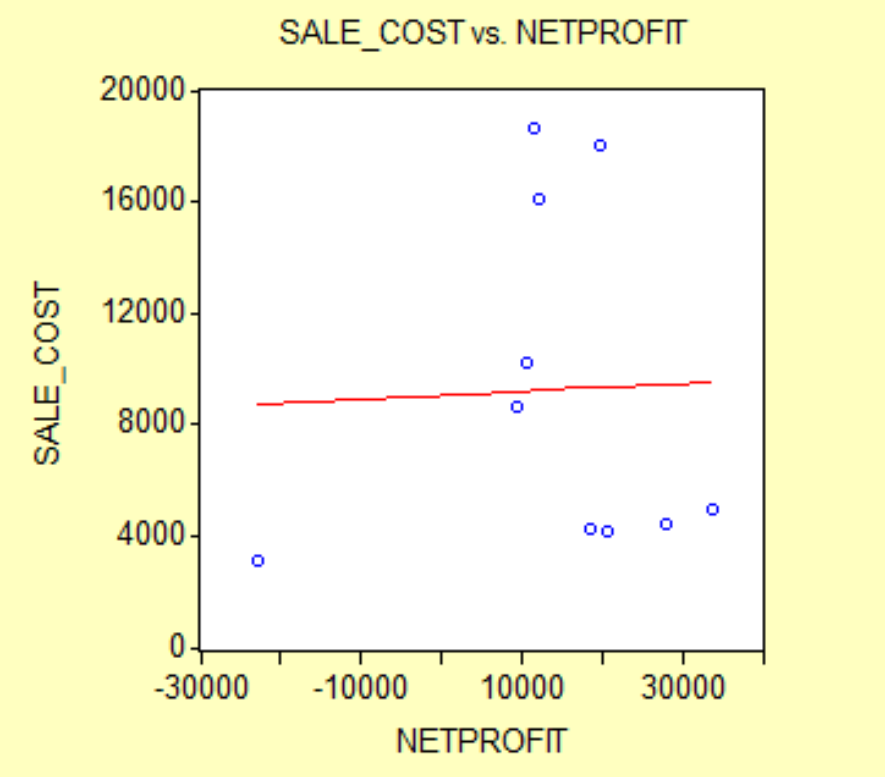
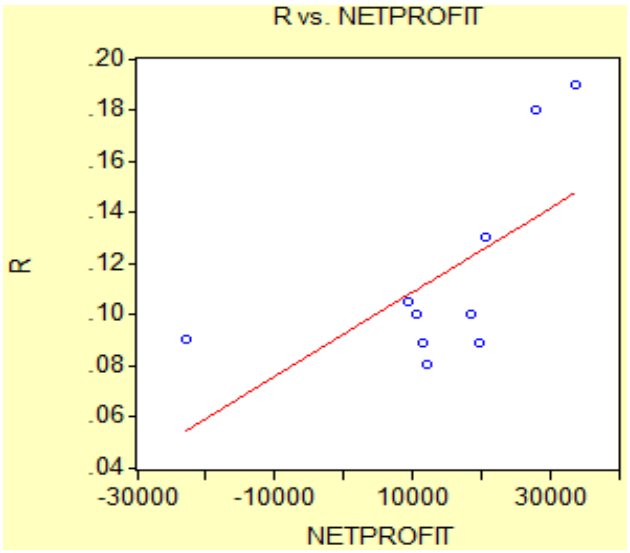


Figure 5 - Sale Cost and Net Profit



Received: 18.04.2021 – Accepted: 10.05.2021

Figure 6 - Lending Rate and Net Profit



(Source: Stock exchange, financial reports and author calculation)

4.2. OLS Regression Results

Run OLS regression with Eviews gives below results:

- First, because coefficient is of 0.09, there is positive correlation between sale cost, net revenue and accounting net profit (figure 1 and 2)
- It means that the firm (HOT) need to increase cost of sale and revenue.
- Figure 3 tell a negative correlation between admin expense and net profit.

Figure 1- Regression Results for Sale Cost and Net Profit

Dependent Variable: NETPROFIT
Method: Least Squares
Date: 06/02/21 Time: 15:10
Sample: 1 10
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SALE_COST	0.090529	0.872419	0.103768	0.9199
C	13320.82	9555.744	1.394012	0.2008

R-squared	0.001344	Mean dependent var	14158.40
Adjusted R-squared	-0.123488	S.D. dependent var	15259.65
S.E. of regression	16174.42	Akaike info criterion	22.39711
Sum squared resid	2.09E+09	Schwarz criterion	22.45762
Log likelihood	-109.9855	F-statistic	0.010768
Durbin-Watson stat	0.749229	Prob(F-statistic)	0.919908

(Source: stock exchange, financial reports and author calculation)

Figure 2 - Regression Results for Net Revenue and Net Profit

Dependent Variable: NETPROFIT
Method: Least Squares
Date: 06/02/21 Time: 15:10
Sample: 1 10
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NETREVENUE	0.231899	0.086852	2.670034	0.0284
C	-20728.88	13585.97	-1.525757	0.1656

R-squared	0.471217	Mean dependent var	14158.40
Adjusted R-squared	0.405119	S.D. dependent var	15259.65
S.E. of regression	11769.54	Akaike info criterion	21.76127
Sum squared resid	1.11E+09	Schwarz criterion	21.82179
Log likelihood	-106.8064	F-statistic	7.129084
Durbin-Watson stat	0.310375	Prob(F-statistic)	0.028361

Figure 3 - Regression Results for Admin Expense and Net Profit

Dependent Variable: NETPROFIT
Method: Least Squares
Date: 06/02/21 Time: 15:11
Sample: 1 10
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ADMIN_EXPENSE	-0.949478	0.923118	-1.028555	0.3338
C	26810.95	13208.27	2.029860	0.0769

R-squared	0.116795	Mean dependent var	14158.40
Adjusted R-squared	0.006395	S.D. dependent var	15259.65
S.E. of regression	15210.78	Akaike info criterion	22.27425
Sum squared resid	1.85E+09	Schwarz criterion	22.33477
Log likelihood	-109.3713	F-statistic	1.057924
Durbin-Watson stat	1.199655	Prob(F-statistic)	0.333780

(Source: stock exchange, financial reports and author calculation)

Figure 4 - Regression Results for 4 Cost Factors

Dependent Variable: NETPROFIT
Method: Least Squares
Date: 06/02/21 Time: 15:11
Sample: 1 10
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
COGS	0.288088	0.105963	2.718751	0.0418
R	264548.7	111696.0	2.368471	0.0641
SALE_COST	1.181474	0.997814	1.184062	0.2896
ADMIN_EXPENSE	-1.158180	1.366141	-0.847774	0.4353
C	-43468.66	26613.26	-1.633346	0.1633

R-squared	0.873046	Mean dependent var	14158.40
Adjusted R-squared	0.771482	S.D. dependent var	15259.65
S.E. of regression	7294.657	Akaike info criterion	20.93452
Sum squared resid	2.66E+08	Schwarz criterion	21.08582
Log likelihood	-99.67262	F-statistic	8.596050
Durbin-Watson stat	2.081597	Prob(F-statistic)	0.018277

(Source: Stock exchange, financial reports and author calculation)

Look at figure 4 we see that:

- COGS, sale cost and lending rate have positive correlation with accounting net profit whereas admin expense has negative correlation with net profit.
- It means that HOT need to decrease admin expense while increase COGS to push net profit.

Next, we look at below table:

- Only net revenue has positive relationship with accounting net profit, all other cost factors have negative relationship. (table 1).

Table 1 - Regression for 5 and 6 factors

	Coefficient	
	5 factors	6 factors
COGS	-0.95	-0.71
R	-13243	-7655
Sale cost	-0.98	-0.72
Admin expense	-0.71	-0.77
Net revenue	0.92	0.15
Cost-income ratio		-21778
R-squared	0.99	0.99
Akaike info criterion	17.7	16.4

(Source: stock exchange, financial reports and author calculation)

Then, we look at below table:

- Our model show high R-squared 0.99, show reliable model.

Table 2 - Regression for 7 and 8 Factors

	Coefficient		
	7 factors	**8 factors**	**8 factors**
COGS	**-0.47**	**-0.43**	**-0.43**
R	**-3479**	**4981**	**3087**
Sale cost	**-0.36**	**-0.29**	**-0.3**
Admin expense	**-0.45**	**-0.32**	**-0.3**
Net revenue	**0.43**	**0.38**	
Cost-income ratio	**3662**	**8513**	**8699**
ROA	**66825**	**28762**	**45365**
ROE		**42665**	**28337**
Total revenue			**0.38**
R-squared	**0.99**	**0.99**	**0.99**
Akaike info criterion	**16.1**	**16.3**	**16.3**

(Source: Stock exchange, financial reports and author calculation)

6. Discussion

In cost factors: COGS has higher coefficient and negative correlation with net profit, compared to sale cost.

In revenue factors: total revenue and net revenue and ROA, ROE they all have positive correlation with net profit.

Suggestions for a better management information system:

Building better financial accounting system for MIS is a good thought as it provides benefits below:

+ Provide useful information for checking and controlling the implementation of the plan.

+ Provide useful information for running daily operations.

- Control.

+ Control compliance with business processes of the enterprise.

+ Protection of physical assets and information.

+ Control information processing activities to ensure that information is processed accurately and timely.

7. Conclusion

Financial Accounting Policy Implications

Because COGS, sale cost and admin expense have negative relationship with accounting net profit (HOT), firm management need to control better COGS while saving admin expense and sale expense rationally to push accounting net profit.

Mukhamadeev et al (2019) stated that the role of information systems for entrepreneurship education in developing countries on the example of the Azerbaijan education system and Internet banking. The information systems role in entrepreneurship education was determined with the help of online questionnaire. As a result of the study, it was found out that about 29% of higher entrepreneurship education institutions use IT technologies and e-learning principles in the learning process.

Limitation of Research

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

Acknowledgement: Thank you editors, friends and brothers to assist this publishing.

References

Asadullah, M., & Mahar, I.U. (2019). *Effect of Internal Factors on Profitability of Conventional and Islamic Banks of Pakistan.* https://www.researchgate.net/publication/341286347_Effect_of_Internal_Factors_on_Profitability_of_Conventional_and_Islamic_Banks_of_Pakistan.

Almazari, A.A., & Natarajan, T. (2014). Impact of Internal Factors on Bank Profitability: Comparative Study between Saudi Arabia and Jordan, *Journal of Applied Finance & Banking, 4*(1): 125-140

Arasu, B.S. (2014). Information Systems Success in the Context of Internet Banking: Scale Development, *Journal of Internet Banking and Commerce 19*(3):1-15

Dinh Tran Ngoc Huy (2015). The Critical Analysis of Limited South Asian Corporate Governance Standards After Financial Crisis, *International Journal for Quality Research, 15*(1).

Endri, E., MArlina, A., & Hurriyaturroman. (2020). Impact of internal and external factors on the net interest margin of banks in Indonesia, *Banks and Bank Systems 15*(4): 99-107. DOI:10.21511/bbs.15(4).2020.09

Huy, D.T.N., Loan, B.T., and Anh, P.T. (2020). Impact of selected factors on stock price: a case study of Vietcombank in Vietnam, *Entrepreneurship and Sustainability Issues, 7*(4): 2715-2730. https://doi.org/10.9770/jesi.2020.7.4(10)

Huy, D.T.N., Dat, P. M., and Anh, P.T. (2020). Building and econometric model of selected factors' impact on stock price: a case study, *Journal of Security and Sustainability Issues,* vol.9(M), 77-93. https://doi.org/10.9770/jssi.2020.9.M(7)

Huy, D.T.N., & Hien, D.T.N. (2010).The backbone of European corporate governance standards after financial crisis, corporate scandals and manipulation, Economic and Business Review, 12(4).

Rudhani, L.H., Ahmeti, S., & Rudhani, T. (2016). The Impact of Internal Factors on Bank Profitability in Kosovo. *Economica, 12*(1).

Trivellas, P.G., & Santouridis, I. (2013). The Impact of Management Information Systems' Effectiveness on Task Productivitythe Case of the Greek Banking Sector, *IJCTE, 5*(1): 170-173 ISSN: 1793-8201. DOI: 10.7763/IJCTE.2013.V5.671