

The Effect of Activity Ratio on Profitability in Automotive Companies and Components Registered on the IDX

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***Abstract**--This article consists a literature review to identify the elements of innovation leadership skills for middle-vocational leaders in the Technical and Vocational Education and Training (TVET) system in Malaysia. The elements of innovation leadership skills are based on transformational theory, innovation leadership theory, the Four Pillars of Innovation theory, innovation models in leadership and organization, competency profiles for innovation leaders and innovation leadership modality models. Innovation leadership is a synthesis of different leadership styles in an organization to influence employees to come up with creative ideas, products, services and solutions. In this systematic literature review, among the identified aspects of innovation leadership skills are relationships building, generating ideas, taking risks, decisions making, problems solving, implementation, technology, entrepreneurship, capacity builder and innovation. Without the innovation leadership, there will be high possibilities for an organization to work harder in order to succeed. Therefore, the development of innovative leadership skills is essential to be encouraged at all levels of educational leadership, especially for middle-vocational leaders in TVET organization.*

***Keywords**---Innovation Leadership, Middle-Vocational Leader, TVET, Skills*

I. INTRODUCTION

Indonesia is a country that has a potential market for entrepreneurs both domestically and abroad to market or sell their products. Lots of various kinds of products sold in Indonesia. One of them is automotive products and components both 2 wheels and 4 wheels thrive in Indonesia. With a population of more than 200 million people, Indonesia is indeed a large market share because consumption levels in Indonesia are also high. The high level of consumption means that demand for automotive products and components is also high. In meeting market demand, the company will need working capital to finance its business activities (Saudi, 2018). In Irham Fahmi (2012), said that working capital is a fund used to finance the company's operational activities, especially those that have a short term. If the company cannot maintain funds for its business activities, the company may go bankrupt because the funds are not fulfilled to carry out its activities.

According to Kasmir (2012: 252), working capital has a very important meaning for company operations. In addition, working capital management also has certain objectives to be achieved. With the fulfillment of working capital, the company can also maximize its earnings. In general, the importance of working capital for companies, especially for the financial health of companies, is that there's a close relation over sales growth and working capital requirements. The increase in sales is related to additional inventory and also cash balances.

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Cash turnover is the ability of cash to generate income so that it can be seen how many times the cash revolves in a certain period. The higher cash turnover rate, the more efficient the level usage of cash and vice versa the lower the level of turnover the more inefficient because more and more money is stopped or not used.

Inventories are a major part of the balance sheet and are often estimates that are of considerable value involving large working capital. Without a stock of merchandise, the company will face a risk that at one time can not meet the desires of its customers. Of course this reality can be bad for the company, because the company indirectly loses the opportunity to obtain the benefits that should be obtained.

In increasing profitability, companies often carry out strategies by increasing inventory sales so that inventory turnover also increases. Inventory turnover is the number of times the inventory will rotate and return again. With inventory turnover it can be seen that cost efficiency is useful for obtaining large profits. The company is said to have a strong position if companies are able raising its profitability.

Working capital that smaller than requirement will result in a loss or loss of opportunity for profit because the company lacks working capital to expand sales and increase production. Conversely, working capital that is too large than needed will result in idle funds, making it inefficient in the use of funds. Working capital also illustrates the ability to make a profit through income generated from operating activities. In general, the company's goal is to generate profits and because of that the company's life will continue to grow so that it can always seek further development (Saudi, 2018). Because of that the activity of determining working capital needs must be linked to operating profits.

Quantitative concept, states that working capital is all current assets (CA). In this concept is how to meet the needs of funds to finance short-term company operations. This concept is often referred to as dirty working capital.

The functional concept in working capital emphasizes the function of funds owned by companies in obtaining profits. This imply that the number of funds belongs to and used the enterprise to increase company profits. The more funds used as working capital should be able to increase profitability. Vice versa, if the funds used are small, profits will decline. However, in reality, sometimes this is not always the case. In a study conducted by Hina Agha (2014) about the impact of working capital management on profitability in companies engaged at the pharmaceuticals shows that there's a positive relationship over inventory turnover on profitability (ROA). However, there's no significant correlation between liquidity and ROA. This is contrary to the functional concept of working capital which emphasizes the function of funds owned by the company in making a profit. This imply that the number of funds owned and used the company to increase enterprise profits. The more funds used as working capital should be able to increase profitability. Vice versa, if the funds used are small, profits will decline. However, in reality, sometimes this is not always the case.

Based on the above, the writer is interested in re-examining the effect of working capital on profitability with the title "The Effect of Cash Turnover and Inventory Turnover on Profitability in Automotive Companies and Components Registered on the Indonesia Stock Exchange".

I.I. Identification of Problems

Based on the description of the background above, the identification of problems in this study are:

1. Does the cash turnover rate affect profitability in automotive & component sector enterprise?
2. Does the inventory turnover affect profitability of automotive & component sector enterprise?
3. Does the level of cash turnover and inventory turnover affect profitability of the automotive & component sector enterprise?

I.II. Theory of Discipline

I.II.I. Working Capital

Working capital according to Brigham and Houston (2006: 131) says that "Working capital is a company's investment in short-term cash assets, securities, inventories and receivables". According to Siegel and Shim (1999: 502) said that "Working capital is a measure of company liquidity". While working capital according to Kasmir (2012: 249) "Interpreted all CA or after being reduced by current debt". And according to Subramanyam and Halsey (2010: 259) working capital is "Difference between current assets and current liabilities".

Whereas Irham Fahmi (2015: 100) said that in the current era if a company underestimates or acts seriously in managing working capital management, the company is predicted to be problematic in competing in the market, including allowing the company not to be able to utilize working capital owned the maximum and right on target. Understanding the right target means that the company places working capital on the profitable side. Profitable means

the placement of decisions by looking at the prospect of profit that will continue to increase systematically and sustainably.

I.III. Calculation of Working Capital

Regarding the working capital calculation, according to Husnan (1998: 544) mentions some methods used in calculating working capital by using each different point of view from some definitions of working capital. The following are the methods :

1. Method of Working Capital Turnover

To estimate method of working capital (in terms of CA) the working capital turnover's used. The components rotation of AC is counted as follows.

$$\text{turnover of cash} = \frac{\text{sales}}{\text{cash average}}$$

$$\text{turnover of inventory} = \frac{\text{Sales}}{\text{inventory average}}$$

By knowing the rotation of each component, it can be known how many times the component can rotate in a period. The period of association between funds is as follows.

$$\text{Cash} = \frac{360}{\text{Cash turnover}}$$

$$\text{Inventory} = \frac{360}{\text{inventory turnover}}$$

With this method it will be known how many days each component can rotate back to its original form. The boundary funds period in working capital's the days sum in the linkages of these funds. This means that turnover of working capital is

$$\text{turnover of working capital} = \frac{360}{\text{number of days of fund binding}}$$

Which results in how frequently a year, working capital could spin and get back to cash. So, it can be known the each component rotation in working capital. This term is commonly called the cash cycle. Thus the term indicates how many time the needs of cash at working capital form before get back to cash form again.

2. Linking funds to working capital method

This way recognizes two notable things, namely:

- a. To funds working capital by other group in the shape of spontaneous funding.
- b. To finance receivables which should exclude from the element of profit.

In these methods there are very prominent difference, namely not the inclusion of profits in accounts receivable. This means that every profit earned in accounts receivable does not need to be included in working capital calculation.

3. Method of Cash flow

This method is basically the same as the preparation of the cash budget. The difference is that the cash flow considered is cash flow that involves the expenditure or receipt of daily operations. It does not include, for example, the purchase of fixed assets, repayment of long-term debt, and so on. The amount of working capital needed in a period is shown from the cash deficit compared to cash out.

This method is more specialized calculation of working capital on the cash element. The reason for this method is the comparison between inflows and outflows and other elements or components that are not taken into account.

All of these methods will be good when used in accordance with the needs of the company which is indeed different from one company to another. So that it is reasonable if there is a difference in the use of methods used by each company in its working capital management. But all of them will still refer to funding used to fulfill daily operations, and the difference is the components used by each company that are not the same.

I.IV. Profitability

Understanding of profitability according to Martono & D. Agus Harjito (2005: 18), namely "The ability of companies to obtain profits from capital used to generate profits". According to Bambang Riyanto (2008: 35) argues about profitability "Is the ability of a company to generate profits during a certain period of time at the level of sales, assets and certain share capital". Whereas Sartono (2001: 119) defines profitability as "The ability of a company to earn profits in relation to sales, total assets and own capital". Besides that Brigham and Houston (2001: 89) states that profitability is "net results from a series of policies and decisions".

Wild (2005: 110) defines profit as income and profit minus expenses and losses during the reporting period. Indirectly means profit is a positive net income received by the company in a certain period. When net income produces something negative then the company can be said to lose. The definition of profit here seems to be more in the way of calculating the profit itself (Hussain et al., 2019).

I.V. Profitability Ratio

Profitability ratio according to Agus Sartono (2001: 64) says that "This ratio measures the overall effectiveness of management as indicated by the size of the level of profits obtained in relation to sales and investment. The better the profitability ratio, the better the ability to describe the company's high profitability ". While according to Van Horne, Wachowics (2005: 222) explains that profitability ratios are financial ratios that connect profits with sales of investment in the company.

I.VI. Return on Asset (ROA)

ROA according to Brigham and Houston (2001: 90) is "The ratio of net income to total assets measures returns on total assets (ROA) after interest and tax". Whereas according to Horne and Wachowicz (2005: 235), "ROA measures the overall effectiveness in generating profits through available assets, the power to generate profits from invested capital". According to Bambang Riyanto (2001: 336) mentions the term ROA with (Rate of Return on Investment / ROI), namely the capital invested capability in the overall assets to gain net profits. The net profit in question is the net profit after tax.

The formula used to determine the amount of Return on Assets (ROA) in this study is based on the formula proposed by Irham Fahmi (2013: 135), namely as follows:

$$\frac{\text{earning after tax (EAT)}}{\text{Total assets}}$$

I.VII. Hypothesis

Research conducted by Mohamad Tejo Suminar (2014) also gained the results about inventory, turnover of inventory has a positive impact on ROA and ROE. While turnover of cash has a negative impact on ROA and ROE. However, simultaneous turnover of inventory and turnover of cash have a positive impact on ROA and ROE.

The objects in this study are sector of automotive enterprises and components that have been listed at the IDX. The reason researchers chose the automotive sector and component companies is because the automotive sector and components are products that are the needs of the Indonesian population in terms of transportation that is needed by the wider community.

From the explanation above, the researcher is interested in researching with the hypothesis:

- H₁ Turnover of Cash has a positive impact to profitability (ROA) in sector of automotive enterprises and components listed in the IDX.
- H₂ Turnover of Inventory has a positive impact to profitability (ROA) in sector of automotive enterprises and components listed in the IDX.
- H₃ Turnover of Cash and Turnover of Inventory have a positive impact on profitability (ROA) sector of automotive enterprises and components listed in the IDX.

II. RESEARCH RESULTS AND DISCUSSION

II.I. Research Result

The average results for cash turnover and inventory turnover, and profitability (ROA sector of automotive enterprises and components listed in the IDX for the period of 2011 - 2014 are as follows:

Table 4.1: Results of Data Processing

No	Description	Average Results	Days
1	Cash Turnover Rate	28,77x	13 days
2	Inventory Turnover Rate	5,09x	71 days
3	Profitability (ROA)	6,96%	-

II.II. Multiple Regression Analysis

Multiple Regression Analysis is used to estimate the rise or fall the variable of dependent (criterion). Multiple Regression Analysis results in this study are as follows.

Tabel 4.6: Multiple Regression Analysis Results

Coefficients ^a						
Model.		Unstandardized Coeff.		Standardized	t	Sig .
		B	Std Error	Coeff.		
1	(Constant)	4.417	2.074	Beta.	2.129	0.038
	Cash turnover	0.03	0.024	0.155	1.27	0.209
	Inventory turnover	0.844	0.272	0.384	3.099	0.003

a. Dependent Variable: Profitabilitas (ROA)

From the table 4.6, Equation of the multiple regression in this study is:

$$Y = 4,417 + 0,030X_1 + 0,844X_2$$

II.III. Effect of Cash Turnover on Profitability (ROA)

Cash turnover has a significance value of 0.209 which means it is larger than level of the significance of 0.05. Therefore Ho1 is accepted and Ha1 is rejected. This means that cash turnover does not affect profitability (ROA) in automotive sector companies listed on the IDX. Cash turnover is a cash ability to generate income so that it can be seen how many times the cash money rotates in a given period. The higher the cash turnover rate means the more efficient the level of cash use and vice versa the lower the turnover rate the more inefficient, because the more money stops or is not used. In addition, excessive cash turnover can mean that the amount of cash available is too small for the sales volume. The larger turnover of the cash, the more efficient the enterprise uses its cash.

The results in this study indicate turnover of the cash hasn't impact to profitability. These results are in line with study conducted by Eka Ayu Rahayu (2014) that cash is often referred to as non-profit assets.

II.IV. Effect of Inventory Turnover on Profitability (ROA)

Inventory turnover has a value of significance of 0.003 smaller over the level of significance at 0.05. Therefore Ha3 is accepted and Ho3 is rejected. This means that turnover of inventory has a significant impact to profitability (ROA) in sector of automotive enterprises listed on the IDX. The higher the inventory turnover, the lower the number of invested working capital in the shape of inventory. To enable achieve a high rate of turnover, supervision and planning of efficient inventory must be carried out. The larger rate of the inventory turnover will diminish the risk of losses caused by price decreases or changes in consumer tastes, besides that it will save the cost of storing and maintaining the inventory.

The outcome in this research state that turnover of inventory has a significant impact to profitability (ROA) in automotive sector enterprises listed at the IDX. The outcomes of these researches are in line with the study conducted by I Made Dian Satriya (2012) and Hina Agha (2014) which also shows the results that turnover of inventory has a significant impact on profitability and a positive value. This is because the inventory invested by the company must be appropriate to the needs of the company so that interest costs are reduced, reducing the storage and maintenance cost in the warehouse, so that all this will increase the sales volume and the profits the company will get. The outcomes in this researches are also similar with the theory put forward by Kasmir (2012: 254) regarding the factors that influence working capital, one of which is inventory turnover.

II.V. Cash Turnover Impact and Turnover of Inventory to Profitability

Turnover of Cash and turnover of inventory affect the dependent variable, namely profitability (ROA). This can be proven with an F measure of 3.993 with a level of significance 0.012. Because the significance measure is lower than the significance level of 0.05, it can be said Ho is rejected and Ha is accepted, meaning that simultaneously there's a significant influence over turnover of cash and turnover of inventory to profitability (ROA).

Simultaneous test results in these researches are similar with the outcomes of study conducted by Irman Deni (2014) and Eka Ayu Rahayu (2014), which also results that simultaneous cash turnover and inventory turnover significantly influence profitability. This is consistent with the theory put forward by Husnan (1998: 550) stating that the greater the ability of working capital to produce operating profits, the more efficient management of working

capital. This means that when a company can manage its working capital more efficiently, the greater the ability of working capital to produce profits for the company. In addition Kasmir (2012: 252) also revealed that working capital has a very important meaning for company operations

III. CONCLUSION

The conclusions obtained from the outcomes of study on the Impact of Working Capital to Profitability (ROA) on Companies Registered on the Stock Exchange are as follows:

1. Turnover rate of the cash does not affect profitability (ROA) in automotive sector & component enterprises listed at the IDX for the period 2010-2014
2. Turnover of Inventory has an impact to profitability (ROA) in automotive sector & component enterprises listed at the IDX 2010-2014
3. Turnover of cash level, turnover of accounts receivable level, and the turnover rate of inventory affect the profitability (ROA) of automotive sector enterprises and components listed at the IDX 2010-2014

REFERENCES

- [1] Agha, Hina. 2014. "Impact of Working Capital Management On Profitability". Pakistan. European Scientific Journal January 2014 edition vol.10, No 1 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431.
- [2] Brigham, Eugene F dan Houston Joel F. 2006. "Dasar-dasar Manajemen Keuangan Buku 2". Jakarta : Salemba Empat.
- [3] Deni, Irman. 2014. "Pengaruh Tingkat Perputaran Kas, Perputaran Piutang Dan Perputaran Persediaan Terhadap Profitabilitas Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia". Jurnal Ilmiah. Riau : Universitas Maritim Raja Ali Haji.
- [4] Fahmi, Irham. 2012. "Analisis Laporan Keuangan Cetak ke-2". Bandung : Alfabeta.
- [5] Husnan, Suad. 1998. "Manajemen Keuangan Teori dan Penerapan (Keputusan Jangka Pendek) Buku 2". Yogyakarta: BPFE.
- [6] Hussain, H.I., Herman, Ghani, E.K. & Razimi, M.S.A. (2019) Systematic Risk and Determinants of Cost of Capital: An Empirical Analysis of Selected Case Studies, *Journal of Security and Sustainability Issues*, 9 (1), 295 – 307.
- [7] Horne, James C. Van dan John M. Wachowicz, JR. 1997. "Prinsip-prinsip Manajemen Keuangan". Jakarta: Salemba Empat.
- [8] Kasmir. 2012. "Analisis Laporan Keuangan Cetak ke-5". Jakarta : Raja Grafindo Persada.
- [9] Martono, & Harjito, A. 2005. "Manajemen Keuangan". Yogyakarta : Ekonisia Fakultas Ekonomi UI.
- [10] Rahayu, Eka Ayu dan Susilowibowo Joni. 2014. "Pengaruh Perputaran Kas, Perputaran Piutang Dan Perputaran Persediaan Terhadap Profitabilitas Perusahaan Manufaktur". Jurnal Ilmu Manajemen Volume 2 Nomor 4 Oktober 2014.
- [11] Riyanto, Bambang. 2001. "Dasar-dasar Pembelian Perusahaan. Edisi Keempat Cetak Keenam". Yogyakarta: BPFE.
- [12] Sartono, A. 2001. "Manajemen Keuangan (Teori dan Aplikasi)". Yogyakarta : BPFE.
- [13] Satriya, I Made Dian & Putu Vivi Lestari. 2012. "Pengaruh Perputaran Modal Kerja Terhadap Profitabilitas Perusahaan". Jurnal Ilmiah. Bali : Universitas Udayana.
- [14] Saudi, M.H.M., Sinaga, O. & Rospinoedji, D., The role of tax education in supply chain management: A case of Indonesian supply chain companies, *Polish Journal of Management Studies* 18(2):304-319, December 2018.
- [15] Siegel, Joel G dan Shim Jae K. 1999. "Kamus Istilah Akuntansi". Jakarta : Elex Media Komputindo.
- [16] Subramanyam, Wild John J. 2010. "Analisis Laporan Keuangan Edisi Kesepuluh". Jakarta : Salemba Empat.
- [17] Suminar, Mohamad Tejo. 2014. "Pengaruh Perputaran Persediaan, Perputaran Piutang Dan Perputaran Kas Terhadap Profitabilitas Pada Perusahaan Sektor Industri Barang Konsumsi Yang Terdaftar Di BEI Periode 2008 – 2013". Skripsi. Semarang : Universitas Pandanaran.
- [18] Wild, John J., K. R. Subramanyan, dan Robert F.Hasley. 2005. "Financial Statment Analysis-analisis Laporan Keuangan Edisi 8 Buku Dua". Jakarta: Salemba Empat.
- [19] Aldabbagh, L., Almuhana, S., Zainy, A., Almudaffer, A., Hadi, N., Aldujaily, M.N., Kareem, G.A. The effect of hyponatremia on short term prognosis in patients with acute ST-elevation myocardial infarction(2018) *International Journal of Pharmaceutical Research*, 10 (4), pp. 270-276. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057236780&doi=10.31838%2fijpr%2f2018.10.04.022&partnerID=40&md5=c22c033f5089aa4c0498876c9f58035>

- [20] Satyavani kalamurthi, gurudeeban selvaraj (2016) insight on solid lipid nanoparticles: characterization and application in diabetes mellitus. *Journal of Critical Reviews*, 3 (4), 11-16.
- [21] Rajput G, Majmudar F, Patel J, Thakor R, Rajgor NB. "Stomach-Specific Mucoadhesive Microsphere as a Controlled Drug Delivery System." *Systematic Reviews in Pharmacy* 1.1 (2010), 70-78. Print. doi:10.4103/0975-8453.59515