COLLABORATING ACTIVITY BASED COSTING AND ECONOMIC VALUE ADDED TO DETERMINE SHAREHOLDERS' VALUE AT PT. GUDANG GARAM, Tbk

Clara Margilina Reinamah

State Polytechnic of Kupang Email: <u>reinamahclara@gmail.com</u>

ABSTRACT

The increasing number of private companies establishment nowadays, indirectly make the burden of the management become heavier, because they should not only focus on achieving production cost efficiency, but also be able to maintain the trusty of the shareholders by showing an attractive profit figures every year. Implicitly, this profit figure is the management accountability proof on the capital invested by the shareholders. Thus, the management needs a tool that can be used to control the use of production and capital costs. The collaboration of Activity Based Costing and Economic Value Added is the appropriate solution in controlling both cost and capital. This journal will show the implementation of this tool to achieve efficiency in the production cost and also the cost of capital to maintain the shareholders' value in the Hand Rolled Department of PT. Gudang Garam, Tbk. The research methodology uses qualitative and quantitative approaches to the case study method. The data used for problem solving resulted by interviews, observation and documentation study in the company. The analysis technique of this research is to analyze financial data and make a comparison according to the theory of the problems identification. Therefore, it can be concluded that ABC-EVA collaborated system can make the invisible cost.

Key words: Collaborating Activity Based Costing and Economic Value Added, Shareholders' Value

1. INTRODUCTION

Nowadays, Indonesia's economic growth has been showing a sufficient development. The development can be seen in the number of private companies establishment which increases from 20,324 in 2003 to 23,345 in 2010 (Badan Pusat Statistik, 2012: 3). The main objectives of these private companies are how they can make money in the present time and also along the existence of the company. This phenomenon indirectly shows how big the burden and responsibility held by the management is, especially the manager. They should be able to manage the cost in order to generate enough economic profit besides keeping the investors' satisfaction by creating the attractive possibility of return. So, the management needs the real solution as a shareholders' value creation tool to manipulate the financial data of the company for short-term performance.

Activity Based Costing (ABC), a costing system that has recently gained popularity, is based on a simple idea; in an enterprise, overhead (or operating) expenses that are generated by a number of activities needed to successfully manufacturing performance and business processes. It does not provide only relatively accurate cost data, but it also gives information about the origin of the cost (Cooper and Kaplan, 1988: 27). In the other words, Activity Based Costing makes overhead costs traceable (Tippet and Hoekstra, 1993: 45). In addition, companies using ABC cost information alone tend to focus their attention on cost reduction for its own need. Frequently to achieve cost reduction targets, they put costs before employees' interests, customers' expectations, and continuous improvement and the managers tend to use accurate cost information only in order to identify and drop products requiring a lot of overhead

and generating only marginal revenues (Munck, 2001: 22). Because of this inefficiency, even proper long-term implementation of an ABC system in an organization is not enough to fully account for capital usage. Since the capital factor is not considered in the calculation and product costs are underestimated, the pure ABC system may allow a company's value to be reduced. In order to improve cost information obtained by ABC, the writer proposes that ABC should be combined with Economic Value Added so that the cost of capital can be considered.

Conversely, Economic Value Added is more focused on the capital cost and shareholder value. Economic Value Added, a registered trademark of Stern Stewart Company has been implemented in numerous large companies to motivate managers to create shareholder value (Dodd and Chen, 1996: 26). If the EVA is positive, the company creates shareholder wealth. Negative EVA indicates that shareholder wealth is destroyed (Stewart, 1999: 3).

2. METHODOLOGY

This research is implemented based on the previous research done by Roztocki and Needy (1999) who implemented the integration system of Activity Based Costing and Economic Value Added in American manufacturing. There are some steps in the implementation of Activity Based Costing and Economic Value Added integration system. Firstly, review the company's financial information which is mostly obtained by the company's income statement and balance sheet to collect the financial data needed. Second, identify the main activities which mean that to describe the manufacturing and business process of the company that consume operating resources or are responsible for capital investments in order to easier the cost determination at the further steps. The third step of the implementation is determine the operating cost for each activity which is similar with the commonly Activity Based Costing system. The result of this step is an identified cost which mirrors the overhead resource consumption of each activity. Then, the fourth step is determines the capital charge for each activity. This step does not exist before in the commonly Activity Based Costing calculation which appeared because the ABC calculation result tends to underestimate the object cost. This information needed is obtained by converting data on the company's balance sheet into capital costs or charges. These capital charges are then added to the cost for each activity which has been calculated by the ABC system in the previous step. The formula of capital charge as follow:

Capital Charge = Invested Capital * Weighted Average Cost of Capital

(Roztocki and Needy, 1999: 80)

In the last step of the implementation of collaborating the Activity Based Costing and Economic Value Added is calculate the product cost. This step consists of tracing the resulted operating costs and capital costs to the products. The product costs which are calculated in this step will be more complete because it consists of direct cost, operating cost and the capital charge. By these product cost calculation, the management can more understand how much the real cost consumption of each product. So, it wishes that they can decide a better decision to the correct product.

3. ANALYSIS OF RESULT

The calculation process of Collaborating the Activity Based Costing and Economic Value Added system actually will look similar with the Activity Based Costing system

commonly which starts from the activity identification and ended by the product cost calculation. The difference between the commonly Activity Based Costing and the Activity Based Costing Collaborated Economic Value Added is about the cost elements to calculate the product cost. In the traditional Activity Based Costing, the product cost will be calculated from the actual operating cost. Meanwhile in the Activity Based Costing Collaborated Economic Value Added, there will be an actual capital charge element in the product cost calculation. So, there will be capital charge calculation in the middle of the Activity Based Costing Collaborated Economic Value Added calculation process.

1. To identify main activities

The activities which are going to be identified here are the activities which have a clear physical interpretation and surely support the production processes. These activities will be classified into four activity levels. Those are the activity of the unit level, batch level activity, the activity of the product level and the facility level activity. The activities on identification process consist of direct observation and then arrange the production activity list to be processed in the next step of the calculation system.

List of Froudction Activities					
Number	Activity	Activity level			
	Raw Material Handling				
1	Raw Material Receipt	Batch			
2	Raw Material Inspection	Batch			
3	Raw Material Storage	Batch			
4	Raw Material Transfer	Batch			
	Raw Material Processing				
1	Tobacco Sieving	Batch			
2	Tobacco Paddling	Batch			
3	Clove Sieving	Batch			
4	Clove Paddling	Batch			
5	Raw Material Mixing	Batch			
	Processed Material Handling				
1	Processed Material Storage	Batch			
2	Processed Material Inspection	Batch			
3	Processed Material Transfer	Unit			
	Production				
1	Cigarette Rolled	Unit			
2	Cigarette Sorting	Unit			
3	Defective Cigarette Reworking Cigarette	Unit			
4	Packing	Unit			
5	Packing the packed cigarette into Bale	Batch			
	Finished Good Handling				
1	Finished Good Transfer	Batch			
2	Finished Good Storage	Batch			
	Technical				
1	Machinery Reparation	Facility			
2	Machinery Maintenance	Facility			
3	Factory Maintenance	Facility			

Table 1.		
List of Production	A ctivities	

Source: Processed Data

2. To determine operating cost of each activity

The aim of charging the activity cost on each product is to calculate the total activity cost consumed to produce one unit of product. The total activity cost consumed of each

product is resulted by multiplying the cost driver rate with its cost driver consumption. This calculation is commonly referred as overhead charged formula. Overhead charged on each product is calculated by multiplying the number of cost driver consumption of each product with the cost driver rates. Here is the following table of total activity cost charged to each product.

Activity	Overhead Charged (Rupiah)			
	Klobot	Sriwedari	Djaja	
Raw Material Handling				
Raw Material Receipt	10,470,666.03	16,296,333.33	12,074,666.42	
Raw Material Inspection	495,595.97	771,335.56	571,516.27	
Raw Material Storage	4,055,905.29	6,312,529.15	4,677,229.06	
Raw Material Transfer to				
Factory	11,519,041.74	17,928,004.13	13,283,642.72	
Raw Material Processing				
Tobacco Sieving	19,603,156.07	30,509,956.56	22,606,161.80	
Tobacco Paddling	12,821,906.34	19,955,756.30	14,786,093.03	
Clove Sieving	10,703,910.17	16,659,349.81	12,343,641.22	
Clove Paddling	12,821,906.34	19,955,756.30	14,786,093.03	
Material Mixing	20,122,133.69	31,317,682.85	23,204,641.56	
Processed Material Handling				
Processed Material Storage	13,634,214.17	21,220,015.82	15,722,838.23	
Processed Material Quality				
Control Processed Material Transfor	600,640.76	934,825.16	692,652.87	
Processed Material Transfer	11,975,124.59	18,637,842.28	13,809,592.86	
Production				
Cigarette Rolled	542,941,390.62	845,023,024.87	626,114,533.92	
Cigarette Sorting	9,071,973.44	14,119,436.40	10,461,708.24	
Defective Cigarette Reworking	264,951,832.53	412,365,685.94	305,539,780.17	
Cigarette Packing	650,187,215.19	1,011,938,262.21	749,789,336.80	
Packing the packed cigarette into bale	416.662.117.16	648.484.511.72	480.490.549.79	
Finished Good Handling				
Finished Good Transfer	13.825.389.79	21.517.557.70	15.943.300.02	
Finished Good Storage	4.665.888.33	7.261.894.44	5.380.655.34	
Technical	.,,	.,,	-,	
Machinery Reparation	104,404,495.65	162,493,050.35	120,398,211.04	
Machinery Maintenance	145,364,596.05	226,242,524.12	167,632,985.58	
Factory Maintenance	115,296,210.20	179,444,695.10	132,958,426.37	
Total	2,396,195,310.09	3,729,390,030.09	2,763,268,256.33	

	Table 2	
Operating (ove	erhead) Charged to Ea	ch Product

Source: Processed data

Table 2 shows the total operating cost consume to produce each type of Hand Rolled Department product. It shows that *Sigaret Kretek Klobot* as the first product of the company has practically consumed 2,396,195,310.09 operating cost. Then, *Sigaret Kretek Sriwedari* has practically consumed 3,729,390,030.09 operating cost. While *Sigaret Kretek Djaja* has consumed 2,763,268,256.33 operating cost.

3. To determine capital charge of each activity

This step does not exist in the commonly Activity Based Costing calculation. The collaborated Activity Based Costing and Economic Value Added system calculates the capital charge for activities demanding capital investments or tithing capital. This information is obtained by converting data on the company's balance sheet into capital costs or charges. The capital charge then be added to the cost for each activity which have been calculated by the Activity Based Costing system in the previous step.

Table 3	
Capital Charge Calculation of PT. Gudang Garam, Tbk in 2	2011

Capital Charge = Invested Capital * WACC		
Invested Capital	9,425,294,100,000	
Weighted Average Cost of Capital	0.0074324	
Capital Charge	70,052,559,760	

Source: Processed Data

Table 3 shows that Hand Rolled Department of PT. Gudang Garam, Tbk consume 70,052,559,760 capital charge which consists of the capital invested and the cost of capital. The amount that has been consumed with or without any calculation has never been realized by the manager. This cost used to be an invisible cost and become visible by using this calculation system. Because the manager of Hand Rolled Department tends to focus only on controlling the cost, unfortunately they forgot that beside the production cost, the product also consume the capital charge which comes from the shareholder's investment.

The next step after calculating capital charge is tracing the capital charge for each activity. In this research, the writer uses Activity Capital Dependences (ACD) Analysis to determine the capital cost driver because it does not need any complex calculation and the calculation of this method is not so different from the traditional Activity Based Costing. So, it looks more familiar to the company. The traditional Activity Based Costing only has one cost driver per operating cost. Meanwhile, Activity Capital Dependences (ACD) have more than one capital cost driver for each activity. Activity Capital Dependences (ACD) use Accounting Category, the Working Capital Requirement elements (Balance Sheet Account) as the capital cost driver with an assumption that the source of the capital cost has come from the working capital requirement in the balance sheet.

Here are the steps of ACD Analysis:

1) Determining the relationship between the accounting categories for each production activity by giving a checkmark (v) when the activity has consumed the accounting category as the capital cost driver variable. The relationship resulted is obtained through direct observation in the Hand Rolled Department and the Finance Department of PT. Gudang Garam, Tbk.

- 2) After determining the relationship, the next step is determining the percentage of the allocation calculate from the marks given. The percentage is resulted by dividing the marks resulted of each accounting category with the total marks and then multiplied by the capital charge which has been calculated before.
- 3) The last step is tracing the capital charge for each activity in order to result the capital cost for each activity.

4. Calculate product cost

The product cost calculated here consists of the direct material, direct labor, operating (overhead) cost and the capital charge.

Production					
Cost	Unit	Sigaret Kretek Klobot	Sigaret Kretek Sriwedari	Sigaret Kretek Djaja	Total
a. Direct					
Material	Rupiah	8,280,451,452.00	9,554,367,060.00	14,013,171,688.00	31,847,990,200.00
b. Direct					
Labor	Rupiah	4,579,650,158.35	5,988,821,157.11	7,045,628,684.54	17,614,100,000.00
c. Operating					
Cost	Rupiah	2,396,195,310.09	3,729,390,030.09	2,763,268,256.33	8,888,853,596.51
d. Capital					
Charge	Rupiah	18,886,170,111.40	29,394,054,075.45	21,772,335,573.52	70,052,559,760.37
e. Total					
Production					
Cost					
(a+b+c+d)	Rupiah	34,142,467,031.84	48,666,632,322.65	45,594,404,202.39	128,403,503,556.88
f. Total					
production	Bale	63,410	98,693	73,119.00	235,222
Cost per Bale	Rupiah/				
(e/f)	bale	538,439.79	493,111.29	623,564.38	

Table 4Total Product Cost CalculationHand Rolled Department of PT. Gudang Garam, Tbk

Source: Processed Data

5. DISCUSSION OF THE RESULT

Although, the traditional Activity Based Costing method provides accurate operating product costs, it does not identify which product has economic value added creator and have a big contribution to the shareholders' wealth. Below is the final valuation table that shows the actual economic profit resulted by each product of Hand Rolled Department at PT. Gudang Garam, Tbk by using the simplest way of EVA that is to subtract capital charges (invested capital multiplied by the WACC) from net operating profit after taxes (NOPAT) which can be used as the management tool to protect company leaders from making short-term decisions based on profit alone that may destroy economic value in the long-term.

PROGRAM STUDI AKUNTANSI FAKULTAS EKONOMI UNIVERSITAS MUHAMMADIYAH KUPANG

Actual Economic Profit of Hand Rolled Department Products					
	SIGARET KRETEK KLOBOT	SIGARET KRETEK SRIWEDARI	SIGARET KRETEK DJAJA	Total	
Revenue	37,962,000,000.00	2,024,857,600,000.00	3,037,286,400,000.00	5,100,106,000,000.00	
Direct Cost	12,860,101,610.35	15,543,188,217.11	21,058,800,372.54	49,462,090,200.00	
Operating Cost	2,396,195,310.09	3,729,390,030.09	2,763,268,256.33	8,888,853,596.51	
Operating					
Income	22,705,703,079.56	2,005,585,021,752.80	3,013,464,331,371.13	5,041,755,056,203.49	
Tax	5,676,425,769.89	501,396,255,438.20	753,366,082,842.78	1,260,438,764,050.87	
Net Operating					
Profit After Tax	17,029,277,309.67	1,504,188,766,314.60	2,260,098,248,528.35	3,781,316,292,152.62	
Capital Charge	18,886,170,111.40	29,394,054,075.45	21,772,335,573.52	70,052,559,760.37	
Economic Profit	-1,856,892,801.73	1,474,794,712,239.15	2,238,325,912,954.82	3,711,263,732,392.24	

Table 5

Source: Processed Data

On the first look, including capital charge in product cost information will increase their cost significantly. But on the other hand, the managers will obtain a powerful tool because it can give a clearer picture to the management in which product need to get more invested and which one should be divested or restructured to maximize the value. This is crucial for any business because poor performance of a part of one company's business has the capability to destroy market value.

In the table 5, the writer found some facts. The first fact is that *Sigaret Kretek Klobot* as the first product of the company is actually becomes the worst value contributor of the Hand Rolled Department. Its revenue can not cover the operating cost and the capital charge consumption. It was possibly caused by the reducing of its consumers and the increasing of the National health impact awareness. It has a consumers reducing, because the most consumers of this product are the old which always be decrease per year. The youth are prefer non-*klobot* cigarette because beside it is out of date product, the *klobot* cigarette is a strong cigarette. It needs a special skill to the beginner, because they have to take a deep breathe before smoke and then blow it slowly or it will directly cause a two-day cough after the first smoke of *klobot* cigarette (*LIPI*, 2012: 3). So, the manager should take a difficult decision whether to keep its production as the special characteristic of the company with minor value contribution or just discontinue this product.

To help the decision making process, the writer has calculate whether to continue or discontinue by using the differential cost analysis. Differential cost analysis is the tool to compare the difference between the cost of two alternative decisions. It calculates the unavoidable cost of each alternative decision. An unavoidable cost is a cost that can not be eliminated by not engaging in or no longer performing an activity.

Sigaret Kretek Klobot Production					
	Alternati	Differential Cost			
	Continue Discontinue		and Revenue		
Revenue	5,100,106,000,000.00	5,062,144,000,000.00	37,962,000,000.00		
Unavoidable Cost					
Direct Material	31,847,890,200.00	23,567,438,748.00	8,280,451,452.00		
Direct Labor	17,614,100,000.00	17,614,100,000.00	-		
Supplementary Material	7,942,267,571.13	-	7,942,267,571.13		
Indirect Labor	416,330,637.89	416,330,637.89	-		
Machinery Maintenance	65,389,445.73	65,389,445.73	-		
Machinery Depreciation	175,686,593.60	175,686,593.60	-		
Building Depreciation	63,706,172.18	63,706,172.18	-		
Material Handling	87,511,272.92	64,758,341.96	22,752,930.96		
Electricity	78,251,271.96	78,251,271.96	-		
Material Inspection	4,066,159.97	3,008,958.38	1,057,201.59		
Quality Control	54,755,673.61	40,519,198.47	14,236,475.14		
Total of Unavoidable Cost	58,349,954,998.99	42,089,189,368.17	16,260,765,630.82		
Operating Income	5,042,756,045,001.01	5,020,054,810,631.83	21,701,234,369.18		
Tax	1,260,439,011,250.25	1,255,013,702,657.96	5,425,308,592.29		
NOPAT	3,781,317,033,750.76	3,765,041,107,973.87	16,275,925,776.88		
Capital Charge	70,052,559,760.37	70,052,559,760.37			
Differential Income/Loss	3,711,264,473,990.39	3,694,988,548,213.50	16,175,925,776.88		

Table 6 Differential Cost Analysis Whether to Continue or Discontinue Sigaret Kretek Klobot Production

Source: Processed Data

It recommended continue the production of Sigaret Kretek Klobot because the department's differential revenue will reduce 16,275,925,776.88 if it has discontinued as shown by table 6 as follow. So, the manager has to find out another way as the solution to solve the minor value of Sigaret Kretek Klobot. Some strategies which can be taken by the management are strengthen the marketing and promotional strategy of this product by expand the marketing area, extend the marketing target and try to develop personal selling activities. Conversely, although Sigaret Kretek Sriwedari consumes a high portion of the company's operating cost resources with a high capital investments demand but it gives high revenue too. So, it still becomes a positive value creator of the Hand Rolled Department of PT. Gudang garam, Tbk. It possibly caused by the more filter contained to equalize the strong tobacco and clove contained. Strategy which can be taken for the Sigaret Kretek Sriwedari are revise the production process of this product in order to reduce the cost of capital and the operating cost consumed to make its production process become more efficient. While Sigaret Kretek Djaja show as the best value creator product. It consumes not only a low operating cost, but also the lowest capital investment consumers. It is the lower resources consumer but it gained the highest revenue. It means that this product should be kept and the manager has no need to be too focused on it.

6. CONCLUSION

More accurate product cost information alone, however, does not automatically lead to a better improvement in business performance. Once product cost information is obtained from the collaborated Activity Based Costing and Economic Value Added system, management is more challenged to take a right action to the right product. A Collaborated Activity Based Costing and Economic Value Added system has the potential to help managers improve the business performance of their company by giving them a better understanding of their true costs. In other words, the Collaborated Activity Based Costing and Economic Value Added System allow the manager to run their companies more effectively.

On the first look, capital charge in product cost information will increase their cost. But on the other hand, the managers obtain a powerful tool because actually with or without this calculation, the product will still consume the capital cost which is invisible. And by Collaborating Activity Based Costing and Economic Value Added, the invisible capital consumption becomes visible and more manageable.

Therefore, it can be concluded that the Collaborated Activity Based Costing and Economic Value Added System is a very promising managerial tool for several reasons. First, this system is able to show the invisible capital cost which has been consumed by the product besides the production cost. Second, this system can provide reliable and complete cost information to the decision makers. Third, after implementing this system, managers become more sensitive to value creation beside the production cost efficiency. Fourth, decision makers will recognize that the capital invested is a precious and limited resource which must be carefully accounted for. So, they will indirectly tend to use the capital invested more efficiently.

7. SUGGESTION

From the implementation of collaborating Activity Based Costing and Economic Value Added that has been done in Hand Rolled Department of PT. Gudang Garam, Tbk, the writer can give the following suggestions.

- 1) The management of Hand Rolled Department is recommended to keep the production of *Sigaret Kretek Klobot* whether result minor value because by using a differential cost analysis, there will be a profit reducing when its production has stop. So, the management should find another way to solve the minor value contribution. The management should strengthen the marketing and promotional system by expand the marketing area, extend its marketing target and develop the promotional system trough personal selling in order to come closer with the consumer. The management may also doing export it to the free cigarette publication countries and introduce this product as a herbal cigarette supported by a reliable research of *LIPI*.
- 2) The company should consider the use of Activity Based Costing and Economic Value Added collaboration system because it will provide more detailed information that can support more appropriate decisions which do not only look at the profit but also concern with the economic value of the company.
- 3) This study can be continued by using wider data which possibly the entire production department owned. So, all products can be assessed more accurately. However, those studies will need more time in collecting data because majority data required are not informed directly by the company. So, it needs a longer and deeper direct observation.

REFERENCES

- Badan Pusat Statistik. *Pertumbuhan Indeks Produksi Industri Besar dan Sedang Menurut 2 Digit Kode ISIC*, 2012. (Online),(<u>http://www.bps.go.id</u>), accessed on November 23rd, 2012.
- Ballow, R.M. 2004. Evidence on EVA, *Journal of Applied Corporate Finance* (p. 119-123). New Jersey: Wiley and Sons Inc.
- Bardia, Noohi. 2008. Issues Surrounding the Cyber Security of The Electricity Infrastructure and Associated Mitigation Strategies. *Journal of Illnois Institute of Technology*. XI (3): 67-70.
- Bhimani, A.L., and Gosselin, M. 2002. A Cross-National Investigation of Factors Influencing Activity-Based Management in Seven Countries. *London School of Economics*, December (2): 3-7.
- Blocher, Edward, J. 2005. *Cost Management: a Strategic Emphasizes*. Second Edition. North Carolina: Mc.Graw Hill.
- CIMA Official Terminologies. 2005. Activity-Based Costing an overview, (Online), (www.cimaglobal.com/technicalreports). Accessed on October 27th, 2012.
- Cokins, G. 1999. Activity-based Costing: Understanding Progress Definition and Industry Applications, Cranfield: Knowledge Management Solution Inc.
- Cooper, Robin and Kaplan, Robert, S. 1988. Measure Cost Right: Make the Right Decision, *Harvard Business Review*. September-October: 26-32.
- Copeland, T. Koller and Murrin, J. 2001. *Valuation: Measuring and Managing the Value of Companies*, 3rd edition. New York: John Wiley & Sons.
- De Vries, W.T and Pholbud. 2002. Enhancing Cost Implications of Mapping by Activity-Based Costing in Thailand, *Handbook of Cost Mapping* (p. 11-14). Khon kaen: Rajamangala University of Technology Press.
- Dierks, P. A and Patel, A. 1997. What is EVA, and How Can It Help Your Company?. *Management Accounting* (p. 52-58). Ireland: South-Western Thomson Learning.
- Dodd, James. L and Chen, Shimin. 1996. EVA: A New Panacea?. *B&E Review*. July-September (1): 26-30
- Ferguson, R., Rentzler, J. and Yu, S. 2005. Does Economic Value Added (EVA) improve stock performance profitability?. *Journal of Applied Finance*. 15 (2): 81-93.
- Fernandez, P. 2002. EVA, Economic Profit and Cash Value Added Do Not Measure Shareholders' Value Creation. *REPEC Ideas*, 5 (1). (Online), (<u>http://ww.iese.edu/research/pdfs</u>). Accessed on October 27th, 2012.
- Firer, A. Ross., Randolph, Westerfield and Bradford, D. Jordan. 2004. *Fundamentals of Corporate Finance*. North Carolina: McGraw-Hill.
- Garrison, Ray. H & Noreen, Eric. W. 2000. *Managerial Accounting*. Translated by Budisantoso, A. Totok on *Akuntansi Manajerial*. Jakarta: Salemba Empat.
- Hamilton, M. 2001. DTIC to implement Activity Based Costing. Oklahoma: Digest.
- Hansen, Don. R and Maryanne, M. Mowen. 2004. *Management Accounting 7th*. Translated on *Akuntansi Manajemen, Edisi* 7. Book 1. Jakarta: Salemba Empat.
- Hubbel, William. W. 1996. Combining Economic Value Added and Activities-Based Management. *Journal of Cost Management* (p.13-18). New York: Spring.
- Jalbert, T and Landry, S. P. 2003. Which Performance Measurement Is Best for Your Company?. *Management Accounting Quarterly* (p.32-41). Ottawa: Edmonton Inc.

- Kudla, R. J and Arendt, D. A. 2000. Making EVAtm Work. *Journal of Applied Corporate Finance*. 8th Edition. New Jersey: Wiley & Sons Inc. p.98-103.
- Mulyadi. 2003. Activity Based Cost System: Sistem Informasi Biaya untuk Pengurangan Biaya, Edisi 6. Yogyakarta: UPP AMP YKPN.
- Munck, M. 2001. The Cost of Order Handling if Using Activity-Based Costing at an Order Handling Department. *Handbook of Chemical Engineering II* (p.21-25). Lund University. Lund: Ole Romes Inc.
- M. Nafarin. 2007. Penganggaran Perusahaan. Jakarta: Salemba Empat
- Rosztocki, N and Needy, K. LaScola. 1999. Integrating Activity-Based Costing And Economic Value Added In Manufacturing. *Engineering Management Journal*. p.78-84
- Stern Stewart Co. 1999. (Online) (<u>http://www.sternstewart.com</u>). Accessed on November 29th, 2012.
- Stern, J.M and Stewart, G.B. 1991. The EVA Financial Management System, Journal of Applied Corporate Finance, 8th Edition. New Jersey: Wiley & Sons Inc. p.1-5.
- Tippet, Donald. D & Hoekstra, Peter. 1993. Activity-Based Costing: A Manufacturing Management Decision-Making Aid. *Engineering Management Journal*. North Carolina: Mc. Graw Hill. p. 45-47