Collectibility Improvement in PT. Kaltim Prima Coal Receivables Management: A Framework Roadmap Proposal

Zuhri Ruslan[1], Anggoro Budi Nugroho[2]
[1,2] *School of Business and Management. Bandung Institute of Technology*
zuhri.ruslan@sbm-itb.ac.id, anggoro@sbm-itb.ac.id

Abstract

The Importance of efficient working capital management is indisputable given that a firm's viability relies on the financial manager's ability to effectively manage receivables, inventory, and payables. One of widely used measurement to calculate the effectiveness of working capital management is Cash Conversion Cycle. Cash Conversion Cycle will calculate how much capital tied up in inventory and receivable by measure how many days it takes for coal from exposed until it sold to the buyer, add with how many days it takes to collect the payment from the buyer, and minus with how many days it took for the invoices to be paid. A good working capital will allow Company to pay all its liabilities when due using payment received from the customers. Traditional Cash Conversion Cycle is calculated using items from Financial Statement. However, it is proofed to be overstated compare to actual calculation. Based on comparison with Cash Conversion Cycle of another company listed in Indonesian Stock Exchange, Cash Conversion Cycle of PT Kaltim Prima Coal seems to be superior with lower days it needs to convert inventory into cash and longer time to pay its payables. The research found that based on the regression method, days of late payment and sales amounts of late payment have significant relationship with Profit. Days of late payment and sales amounts of late payment has significant relationship with ROA. And, Days of late payment and sales amounts of late payment also has significant relationship with NPM. The research also found that Average Age of Inventory has negative relationship with Profit, ROA, ROE, and has positive relationship with NPM. Average Collection Period has negative relationship with Profit and ROEand has positive relationship with NPM and ROA. Average Payment Period has positive relationship with Profit, and has negative relationship with NPM, ROA and ROE. Day delay has negative relationship with Profit, ROE and NPM, and has positive relationship with COGS and ROA. Amount delay has positive relationship with Profit, COGS, ROA, ROE and NPM.

I. Introduction

The relation between Working Capital Management and Profitability at least can be explained in three ways:

1. If company does not pay its liabilities, it will increase profitability. If company pay lot of its liabilities, the profit will be reduced. Or,

2. If company does not manage its Working Capital well, it may not able to meet their short term financial obligations. It happens, the suppliers of the company will stop supplying goods and service that company needs to create inventory and sell to the market. No sales will reduce profitability. On the contrary, if company can manage its

14662

Working Capital, company can continue producing or even increasing its production and sells more. Thus, it is able to increase its profitability.

3. If company does not manage its Working Capital well and not able to meet their short term financial obligations, their creditors will seek legal assistance to collect their dues. This will affect reputation of the company and lead to decrease in sales (Ganesamoorthy & Rajavathana, 2013).

Understanding relation between Working Capital Management and its impact on company profitability will give useful information in managing account receivable, inventory and account payable of the company thus company can survive and provide value added for the shareholder in the long run. Hence, this research has three purposes. First, is to examine the relation of Working Capital Management with Profitability in PT Kaltim Prima Coal (KPC) for the year 2008-2013. Second, is to examine the structure of risks exposing KPC regarding Working Capital Management. And third, is to investigate any possible action to improve Working Capital. Specifically, is to enhance the speed of collection receivable from customers.

Global Coal Market nowadays faces challenging situation with the price suffering from downtrend since 2008. Many has suffered and liquidated their company, closed the operational even went bankrupt. The price fall was mainly caused by two factors. First, the innovation of using natural gas as substitute of Coal powered electric generator in United States. Natural gas is considered cheaper in the long run and clearer or eco-friendly. Second, China limited its amount of coal import which then made global coal market suffered from oversupply. As the consequences, the price went fall significantly and reduce the margin of the company. Company will sell at lower price, while cost stays same. The decreasing margin will eventually trouble the working capital management.

Hence, coal companies have to carefully manage their working capital. If they make a mistake, worst case scenario is company will not have any funds left to fulfill its liability. The creditor and supplier will use legal approach to claim their receivable. If they can manage working capital better, not just the company will survive through difficult times, perhaps still can show some profit to its shareholder. This extremely important position of working capital management makes it as one of the financial manager's most important and time consuming activities, and more than one half of the financial manager's time is spent managing account receivables and account payables (Gitman, 2012).

The impact of price decrease on collection the receivable is collection is lower, and now the longer time is needed to collect the receivable and the amount. These increase risk in KPC because the collection is not able to meet the liabilities needs to be paid every week.

To our best knowledge, the research of how much Working Capital Management affect Profitability of KPC has never been conducted before, and considering KPC should maintain its profitability in the mid downtrend of coal price imposes the importance of this research.

II. Review of Literature

Collectibility based on Merriam-Webster Dictionary is good for a collection; considered valuable by collectors; suitable for being collected; due for present payment.

Poor collectibility based on company's experience means a debt that is not collectible or need more days to be collected and it was longer than the days stipulated in the contract. This, therefore is a kind of risk to the creditor. In this research, poor collectibility means a lot of customers paying after the due date of the invoice and the company is exposed with the risk of unable to meet its short term or long-term obligations. Good collectibility based on company's experience means the invoices being paid by the customers on time.

Study of Working Capital Impact on Profitability has been conducted in 28 countries mixed with countries from developed and third countries and came up with various results as following:

All aforesaid literature has shown nearly agreed result from all around the world that the working capital management undoubtedly has impact on profitability, and recommends management to manage their working capital efficiently.

Calculation of Cash Conversion Cycle is explained by Gitman (2012) as follow:

Variable	Definition	Description	Predicted Sign
CCC	Cash Conversion Cycle	Measure the length of time required for a to convert cash invested in its operations to cash received as a result of its operations	-
AAI	Average Age of Inventory	Measure the length of time required to convert inventory into sales	-
ACP	Average Collection Period	Measure the length of time required to convert sales into cash	-
APP	Average Payment Period	Measure the length of time required to pay its liabilities	+

Figure 1. *Definition, description and predicted sign of Cash Conversion Cycle.*

2.1 Measurement

CCC = AAI + ACP – APP

CCC   : Cash Conversion Cycle
AAI   : Average Age of Inventory   : (Inventory/Cost of Goods Sold) x 365
ACP   : Average Collection Period   : (Accounts Receivables/Sales) x 365
APP   : Average Payment Period   : (Accounts Payables/Cost of Goods Sold) x 365

2.2 Profitability Ratio

According to Gitman (2012) there are many profitability ratios that can enable analyze profits in respect sales, total asset, or investment level. Some of them are presented below:

Common Size Income Statement = Every item in the statements, especially gross profit margin, operating profit margin and net profit margin is presented as percentage and compare to previous year's performance.

Gross Profit Margin	= Measures the percentage of sales left after company paid the goods
	= $\dfrac{\text{(Sales – Cost of Goods Sold)}}{\text{Sales}}$
Operating Profit Margin	= Measures the percentage of sales left after company paid the cost and expenses other than interest, taxes, preferred stock dividends.
	= $\dfrac{\text{Operating Profit}}{\text{Sales}}$
Net Profit Margin	= Measures the percentage of sales left after company paid the cost and expenses including interest, taxes, preferred stock dividends.
	= $\dfrac{\text{Earnings Available for Common Stockhelders}}{\text{Sales}}$
Return on Total Assets	= Measures Earning that can be generated with available assets
	= $\dfrac{\text{Earnings Available for Common Stockhelders}}{\text{Total Assets}}$
Return on Total Equity	= Measures Earning that can be generated with investment in common stock
	= $\dfrac{\text{Earnings Available for Common Stockhelders}}{\text{Total Equity}}$

III. Result and Discussion
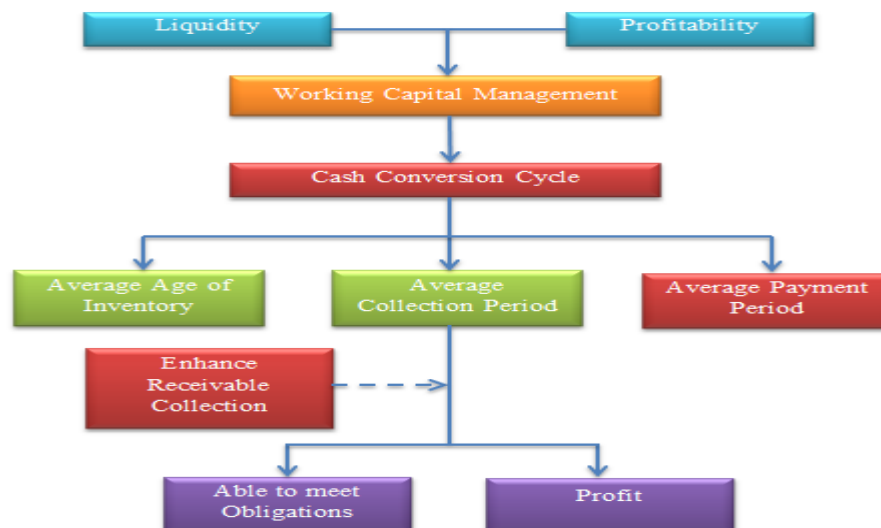
3.1 Conceptual Framework

Figure 2. Conceptual Framework

How to increase Profitability and liquidity is always the focus of good working capital management. One of the most used working capital management measures is Cash Conversion Cycle. Cash Conversion Cycle Measures Average Age of Inventory, Average Collection Period, and Average Payment Period. When the date of Age of Inventory is not available, and Payment period already delay as long as possible, improvement focus

should be on faster Collection Period. The project to enhance and speed up collection will be resulting in ability of the company to fulfill its short term and long-term obligations, and hypothetically will increase profit.

3.2 Root Cause Analysis

Considering KPC has received payment exceeded the day stipulated in the contract, root-cause analysis is performed to search the root of the problems. The structure of the problem is appearing from discussion with Superintendent Accounting and Administration in Marketing Department who is handling the Invoicing process. The next page shows the fishbone root-cause analysis, and findings of several root causes are as of following:
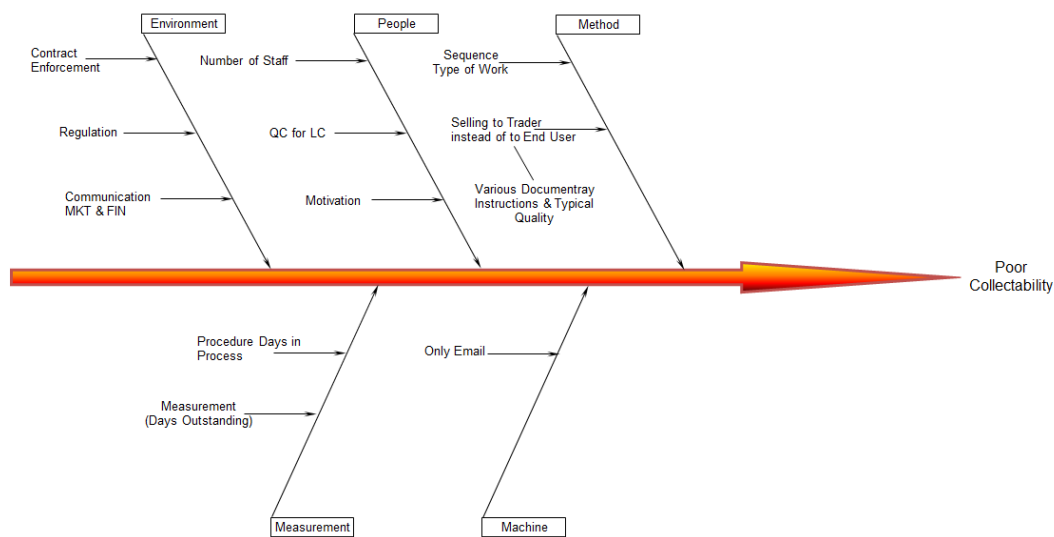

Figure 3. Root Cause Analysis

There are several reasons why poor collectibility happens. They are:

1. Sequence Type of Work.
   Invoicing process is at the end of work cycle. The prior process is establishing contract, arranging Ship Scheduling, Blending and Coal Quality process, and Coal loading. Sales Accounting and Administration Section is the section that handling invoice and documentation. They are at the end of the process and any delay in the earlier process will also cause the delay in preparing document for collection process.
2. Selling to Trader instead of to End User.
   KPC not only sell the coal to end user but also expand its customer range to trader, which later will sell the coal to end user or to another trader.
3. Reconsider the Number of Staff.
   The number of staff is quite tight and as the workload increase mistakes may happens. Even little mistake such send one original sets of certificate of analysis instead of three as contract asked will cause incomplete document, and customer will not start to pay if the document is incomplete.
4. Letter of Credit Discrepancy (LC)
   LC is a document issue by a bank in relation to provide security for buyer and seller in exchange of goods and payment. In LC scheme, buyer's bank and seller's bank will provide assurance of credibility of the buyer and the seller. Simply said, the benefits of using LC are the buyer will buy the correct goods, and the seller will receive right amount of cash payment.

Generally, the discrepancy rate is really high. Roughly 80% of the LC found to be discrepant. It the LC is discrepant, company cannot discount the LC and receive the cash faster. The company has to wait the customer pay to Issuing Bank, and then Issuing Bank will send the cash to Advising Bank, which later on will send the cash to the company. There is urgent need of project to reduce discrepancy rate of LC.

5. Motivation
   When employees are given target, they tend to overcome the target with extra effort.

6. Contract Enforcement
   The normal contract will have clause that if the payment are not paid in due date there shall be an interest charge applied for the payment until the payment is paid. However the enforcement of this clause is always a subject to Management approval and depends on the relationship between KPC and the customer.

7. Regulation
   Some government regulation required time to fulfill and will cause delay to the completion of the invoice and supporting documents which later will delay the day payment received in KPC's bank.

8. Communication between Marketing and Finance.
   The function of Account Receivable is also normally under Finance Division not under Marketing Division. This structural type creates may conflict between Marketing Division and Finance Division.

9. Procedure Days in Process
   The faster Sales Accounting and Administration complete the invoice and documentation process, the faster documents ready to be sent, and the faster the due date will be since the due date will be counted starting from the date KPC present correct invoice and supporting document.

10. Measurement Days Sales Outstanding.
    KPC not yet use Days Sales Outstanding as a Key Performance Indicator.

    The faster KPC receive the payment from the coal customer, the better for KPC. The funds can be used to pay off some of its debt in the next month i.e., leasing, special term contractor payment, etc. Thus, strengthen the Account Receivable collection function is the most important thing to do.

3.3 Cash Conversion Cycle Calculation of PT Kaltim Prima Coal

Cash Conversion Cycle consists of three components. First component is Average age of Inventory which calculates how many days KPC need to convert extracted coal into sales and Account Receivable. KPC at the moment did not calculate this. Second component is average Collection period which calculates how many days company need to claim its Account Receivable. In KPC, this is different for each customer. Some customers pay a week after receiving the invoice and its supporting document, while another supplier pay more than a week after the bill of lading date. The third component is Average payment period which calculates how long KPC paying its liabilities.
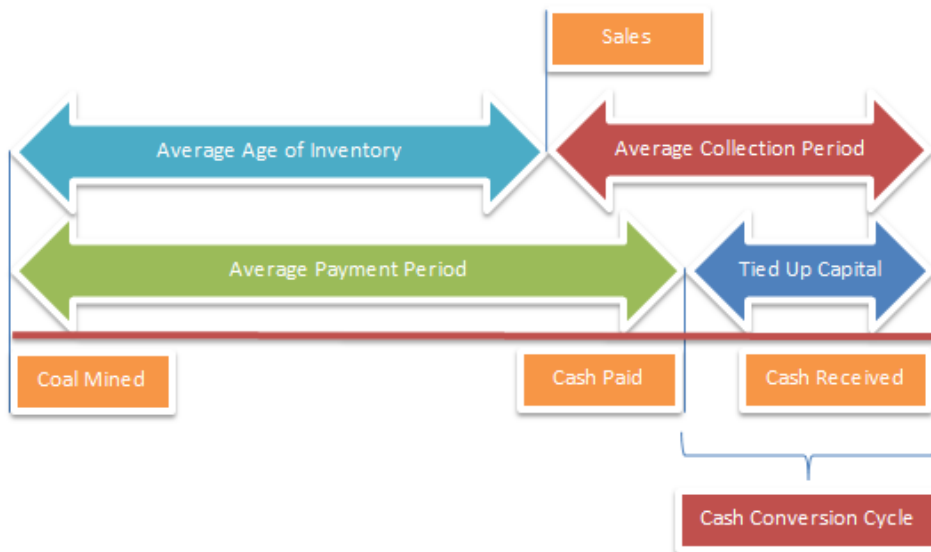
Figure 4. Cash Conversion Cycle diagram

The lower the number of Cash Conversion Cycle, the lower the amount of tied up capital. The best practice is to have zero tied up capital or even surplus tied up capital. And it means collection is received first before making any payment to supplier. However, this is rare and the target of this research is to reduce KPC's Cash Conversion Cycle ratio as lower as possible.

Poor collectibility is shows as longer average collection period. The effect is more tied up capital locked as account receivables. Picture below explains poor collectibility.

Calculation of Cash Conversion Cycle calculation based on Financial Statement will be put in comparison to Cash Conversion Cycle calculation based on physical movement and cash received or pay by KPC.

Calculation of Actual physic Average Age of Inventory is not possible to do since no data available for goods like coal.

The differences between Average Collection Period and Average Payment Period using Financial Statement calculation and using actual calculation provided below:
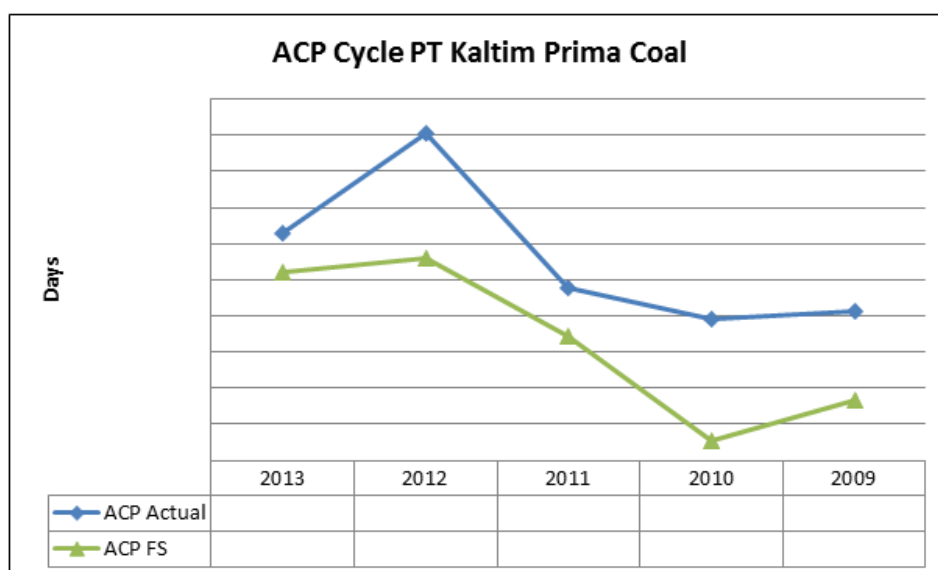

Figure 5. Comparison ACP Calculated from Financial Statement and Actual Days Cash Collected.
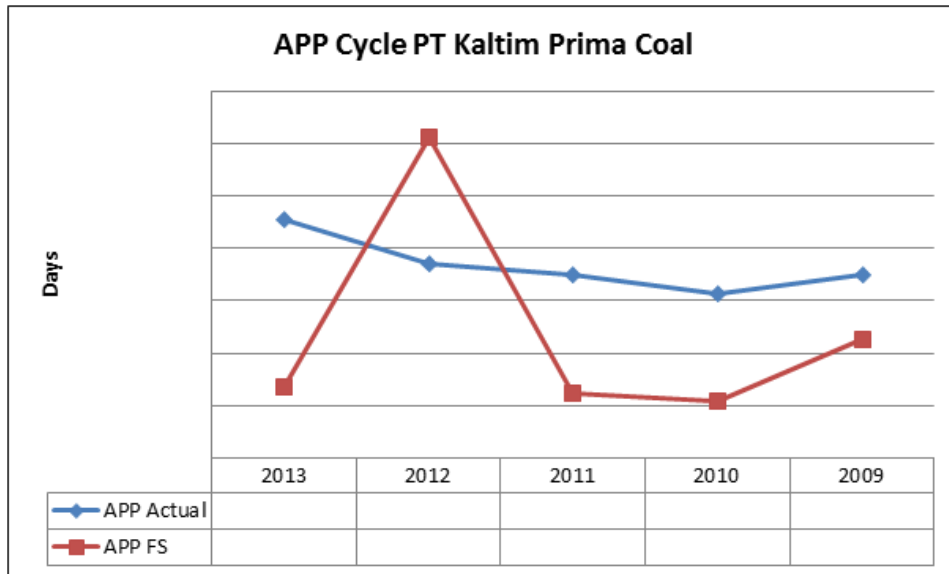
Figure 6 - *Comparison APP Calculated from Financial Statement and Actual Payment.*

The differences of Cash Conversion Cycle using Financial Statement calculation and using actual calculation provided below:
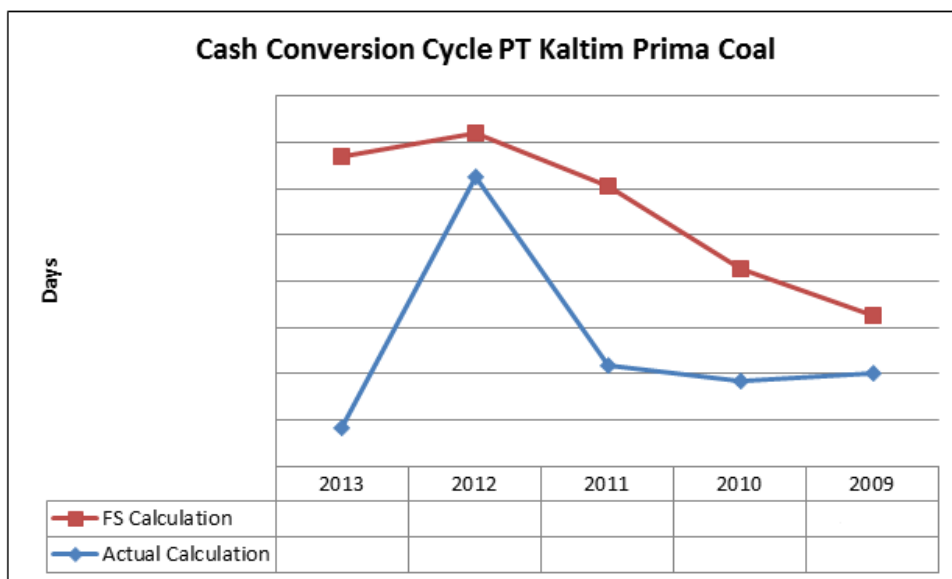

Figure 7. *Comparison CCC Calculated from Financial Statement and Actual Days.*

Clearly show above that the Cash Conversion Cycle from Financial Statement calculation is overstated compare to actual Cash Conversion Cycle that counted physically.

Based on the Audited Financial Statement 2009 to 2013 that available on www.idx.co.id below are the calculations of Cash Conversion Cycle. Comparison is made between same industry (Coal Mining) and from different industry (Plantation, Crude Oil, Nickel, Cement, Tire). Each company selected based on the highest price of each industry, except for PT. Adaro Energy Tbk. and PT. Berau Coal Energy Tbk.. They are taken because they also major player in the industry and have same background with KPC which is mine operation conducted in Kalimantan.

Stock Code	Company	Industry	Year				
			2013	2012	2011	2010	2009
ADRO	PT. Adaro Energy Tbk.	Coal Mining	(6)	3	(8)	(12)	(9)
BRAU	PT. Berau Coal Energy Tbk.	Coal Mining	(2)	21	(4)	(3)	17
ITMG	PT. Indo Tambangraya Megah Tbk.	Coal Mining	19	26	23	19	21
BYAN	PT. Bayan Resources Tbk.	Coal Mining	4	10	17	(9)	(9)
PTBA	PT. Tambang Batubara Bukit Asam (Persero) Tbk.	Coal Mining	67	83	77	76	93
AALI	PT. Astra Agro Lestari Tbk.	Plantation	4	36	13	21	39
APEX	PT. Apexindo Pratama Duta Tbk.	Crude Oil	91	58	44	77	94
INCO	PT. Vale Indonesia Tbk.	Nickel	61	76	59	69	107
INTP	PT. Indocement Tunggal Prakarsa Tbk.	Cement	66	72	86	87	103
GDYR	PT. Goodyear Indonesia Tbk.	Tyre	22	28	26	33	53

Figure 8. Cash Conversion Cycle Comparison KPC with Other Listed Company.
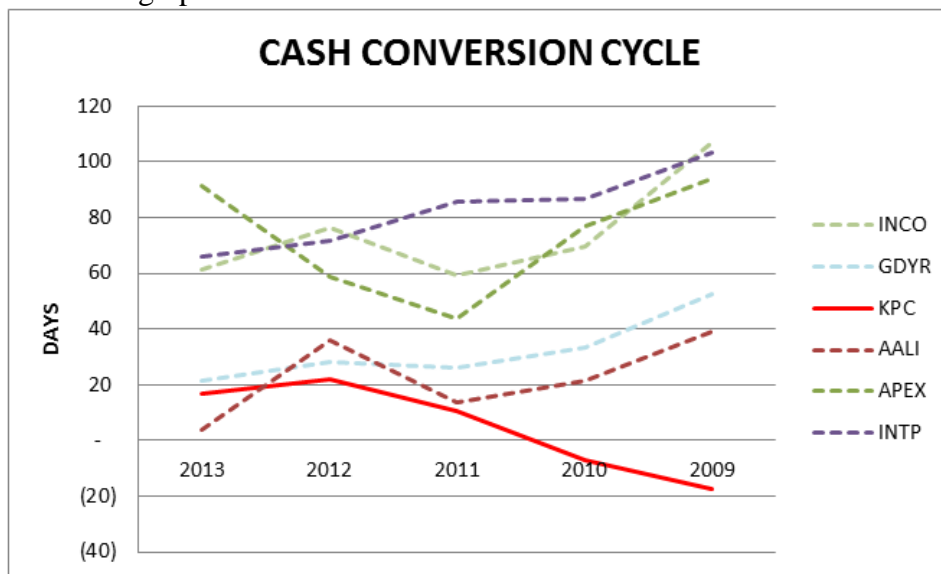
Presented as graphic is as below:

Figure 9. *Cash Conversion Cycle Comparison KPC with Other Non-Coal Listed Company*.
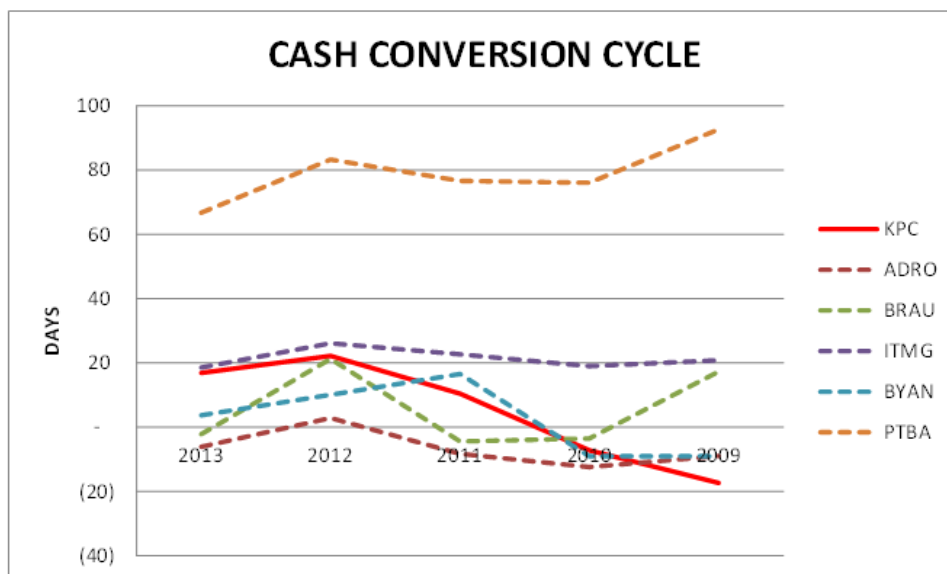

Figure 10. *Cash Conversion Cycle Comparison KPC with Other Coal Listed Company.*

According to the table, coal mining industry has relatively low cash conversion cycle compare to other industry, except plantation industry. That means coal mining company can have lower cash available to pay its due liabilities before received cash from the customer compare to another industry. For Example, KPC have cash conversion cycle 26.33 days on 2013. That means, KPC must have enough cash to operate the mine and pay its liabilities for 26.33 days before received cash for sold inventory. PT. Berau Coal Energy Tbk. has the best cash conversion cycle which is negative number -2.2 days.

Interview efforts has been conducted to interview PT. Adaro Energy Tbk., PT. Bayarn Resources Tbk., PT. Berau Coal Energy Tbk., PT. Indotambang Megah Raya Tbk., and PT. Bukit Asam (Persero) Tbk. considering those companies are within same industry with KPC and have approximately same size. The interview efforts were found to be unresponded until the study is finalized.

3.4 Multiple Regression Analysis

The study research use regression analysis to investigate further the relation between Cash Conversion Cycle and profitability of the company. The determinant of probability is estimated with 9 regression models expressed as follows:

$$Profit = \alpha + \beta_1 AAI + \beta_2 ACP + \beta_3 APP + \varepsilon$$
$$NPM = \alpha + \beta_1 AAI + \beta_2 ACP + \beta_3 APP + \varepsilon$$
$$ROA = \alpha + \beta_1 AAI + \beta_2 ACP + \beta_3 APP + \varepsilon$$
$$ROE = \alpha + \beta_1 AAI + \beta_2 ACP + \beta_3 APP + \varepsilon$$
$$Profit = \alpha + \beta_1 DAY\_DELAY + \beta_2 AR\_RISK + \varepsilon$$
$$COGS = \alpha + \beta_1 DAY\_DELAY + \beta_2 AR\_RISK + \varepsilon$$
$$ROA = \alpha + \beta_1 DAY\_DELAY + \beta_2 AR\_RISK + \varepsilon$$
$$ROE = \alpha + \beta_1 DAY\_DELAY + \beta_2 AR\_RISK + \varepsilon$$
$$NPM = \alpha + \beta_1 DAY\_DELAY + \beta_2 AR\_RISK + \varepsilon$$

NPM = Net Profit Margin
ROA = Return On Asset
ROE = Return On Equity
COGS = Cost of Goods Sold
DAY_DELAY = the average of how many days the collection is late received in bank compare to the contract.
AR_RISK = the average amount of collection that late received in bank.

From regression model, below are summary of the hypotheses:

No.	Dependent	Desc.	Constant	AAI	ACP	APP	Adj. R2
1	Profit	Coefficient	174.01**	-0.99	-2.46	0.50	-0.09
		t	2.34	-0.75	-0.80	0.38	
		Sig.	0.03	0.46	0.44	0.71	
2	NPM	Coefficient	11.77*	0.10	0.20	-0.11	-0.04
		t	2.08	1.01	0.84	-1.11	
		Sig.	0.05	0.33	0.41	0.28	
3	ROA	Coefficient	12.38***	-0.01	0.01	-0.06	-0.12
		t	3.27	-0.14	0.08	-0.82	
		Sig.	0.00	0.89	0.94	0.43	
4	ROE	Coefficient	73.76***	-0.19	-0.04	-0.41	-0.06
		t	3.32	-0.49	-0.04	-1.03	

No.	Dependent	Desc.	Constant	Day_Delay	Amnt_Delay		Adj. R2
		Sig.	0.00	0.63	0.97	0.32	
5	Profit	Coefficient	-234.45*	1.87	66.92***		0.24
		t	-1.82	0.68	3.16		
		Sig.	0.08	0.50	0.00		
6	COGS	Coefficient	246.08	36.63*	74.89		0.07
		t	0.29	1.99	0.53		
		Sig.	0.78	0.06	0.60		
7	ROA	Coefficient	-8.29	0.04	2.67***		0.21
		t	-1.53	0.31	2.99		
		Sig.	0.14	0.76	0.01		
8	ROE	Coefficient	-4.57	-0.05	6.75		0.01
		t	-0.16	-0.08	1.45		
		Sig.	0.87	0.93	0.16		
9	NPM	Coefficient	-3.08	-0.07	2.362***		0.26
		t	-0.68	-0.69	3.15		
		Sig.	0.51	0.50	0.00		

Significant at: *) 10% critical value
               **) 5% ciritical value
               ***) 1% critical value

Figure 11. *Summary of Regressions Analysis*

Based on above Summary of regression analysis above, days of late payment has significant relationship with COGS at 10% critical value. Sales amounts of late payment have significant relationship with Profit, have significant relationship with ROA and have significant relationship with NPM each at critical value 1%.

AAI has negative relationship with Profit, ROA, and ROE. AAI also has positive relationship with NPM. ACP has negative relationship with Profit and ROE. ACP also has positive relationship with NPM and ROA. APP has positive relationship with Profit, and has negative relationship with NPM, ROA and ROE.

Day delay has negative relationship with Profit, ROE and NPM. Day delay has positive relationship with COGS and ROA. Amount delay has positive relationship with Profit, COGS, ROA, ROE and NPM.

3.5. Risk Quadrant
Focusing on current collectibility level, KPC need to map the risk based on its late days and value.
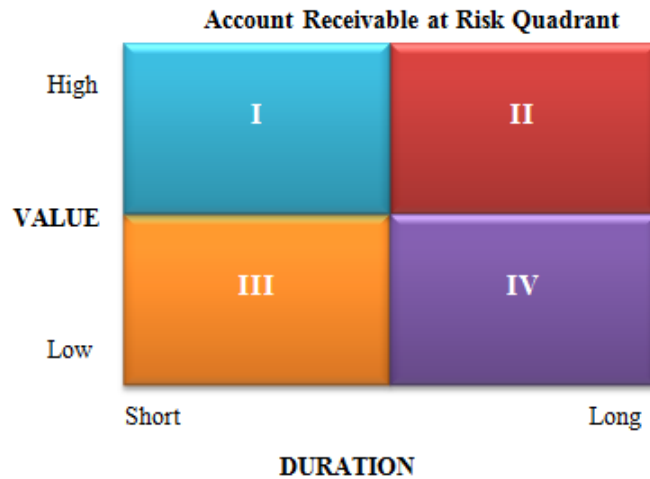
Figure 12. *Account Receivable at Risk*

Value means average amount in USD for every shipment for each customer. Duration means average days how long one shipment being paid by every customer. The longer the duration the riskier it will be. The higher the value, the riskier it will be. This Quadrant will provide awareness of how riskier is KPC business at the moment considering poor collectibility of Account Receivable.

Quadrant I consist of customer with low risk and have high value. They have high amount of Account Receivable and they paid in short time.

Quadrant II consists of customer with high-risk high value. This type of customer is a risky since they have big amount of Account Receivable but paid for long period of time. This type of customer will harm KPC cash flow and need serious attention and follow up so they can pay their obligations.

Quadrant III include customer with low risk and low volume sales. They paid on time and usually they are growing company search its way to expand.

Quadrant IV is the type of customer with low volume but paid in long time.

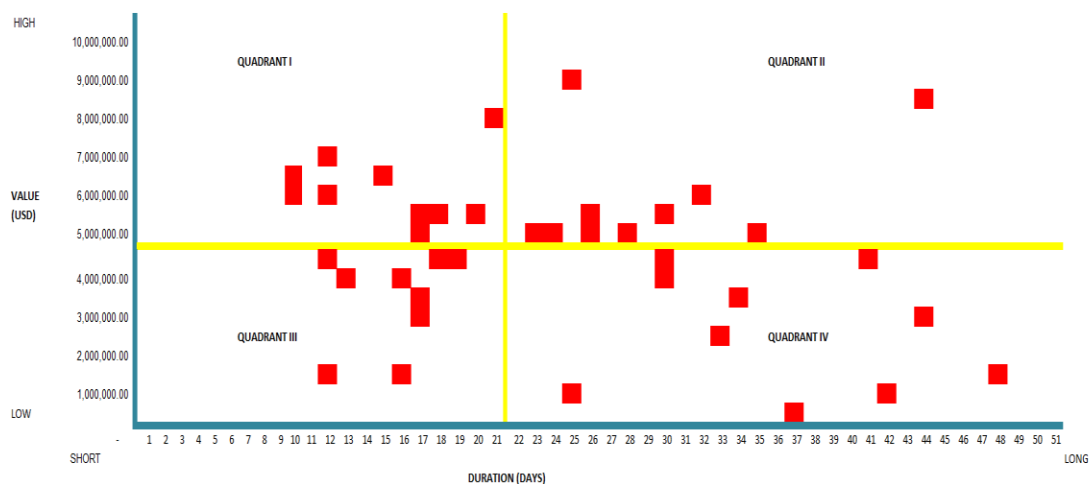Mapping risk based on Average Collection Days and Average Amount Delay for the Year 2014

Figure 13. *Risk Based Collection Days and Amount Delay*

The quadran above shows the Quadrant I consists of customer with low risk and have high value. Some of them are Japanese customer. Quadrant II consists of customer

with high risk high value. This type of customer is a risky since they have big amount of Account Receivable but paid for long period of time. This type of customer will harm KPC cash flow and need serious attention and follow up so they can pay their obligations. Some of them are trader. Quadrant III include customer with low risk and low volume sales. They paid on time and usually they are growing company search its way to expand. Quadrant IV is the type of customer with relative low amount but paid in long time. Some of them are trader and not end user.

Above figure easy to understand how much risk is taken by KPC, which customer is have high risk and low risk. This figure should benefit KPC in order to lower the risk but improve its collectibility with doing more business with customer in Quadrant I and II, or even in Quadrant III.

3.6 Business Solutions

Based on Cash Conversion Cycle Calculation, Multiple Regression above and Fishbone Root Cause Analysis, focused effort of improvement will be on several root cause as shown on next page diagram.

Figure 14. *Alternative Business Solutions*

1. Trigger the awareness to the management of the differences on collection days between sales to Trader and sales to End User.

   As showed on the quadrant Day of collection and amount in delay that the most effective way to shorten the Collection Period is by choosing the customer selectively. Top Level of Management should aware of this issue as days of collection impact KPC's ability to pay its overdue payable. The improvement in collection days will be significant from this customer selection process.

   This also triggers the awareness to enforce contract. If the customer should pay in Sight LC as stipulated in contract, the management should not let them pay in Telegraphic Transfer over the due date. Once the management is not willing to enforce the contract, it will harm collection directly.

2. Quality Control for LC

   There should be an awareness of how to reduce discrepancies rate. Some discrepancy is because the bank's checker considering it as discrepant although it is not corresponds with KPC's view. For this kind of discrepancies, KPC need to obey with the bank and complete the documentation required by the bank. This type of discrepancy can be reduced by creating database system of past discrepancies and add another checker which qualified with Letter of Credit arrangement. The sample of checklist is provide below.

A Document Examination Checklist

The Draft:
- The Draft bears the correct LC ref number.
- The amounts in figures and words correspond and the currency is that in which the LC is issued.
- It has a current date
- It contains any necessary clauses required by the Letter of Credit.

The Invoice:
- The Invoice bears the correct LC ref number.
- The correct number of original(s) and copy(ies) is presented.
- It is issued by the Beneficiary named by the LC and, if an address is shown, it is the same address as that indicated in the LC.
- The Applicant (the customer) is indicated as the invoiced party, and, if an address is shown, it is the same address as that indicated in the LC.
- The description of the goods is in exact accordance with the merchandise description in, and includes the shipping terms indicated in, the Letter of Credit, and no extra goods are included, no additional detrimental description of the goods appears that may question their condition or value (e.g., "re-conditioned").
- Any other information supplied in the invoice, such as marks, numbers, transportation information, packaging, weight, freight charges or other related insurance and transport charges etc., is consistent with that in the other documents.
- The currency of the invoice is the same as that in the LC.
- The invoice amount is same with the amount of the Draft.
- If partial shipments are prohibited, the invoice covers the complete shipment as required by the LC or is within the 5% tolerance allowed by the UCP.
- If required by the LC, the invoice is signed, notarized, legalized, or certified.
- Coal quality stated in invoice is same with any other documents and within the range as stated in the LC.

Bill of Lading:
- The full set of originals issued is presented, unless otherwise allowed by the LC (for air waybills, the original Shipper's Copy constitutes the "full set").
- It clearly indicates the name of the vessel.
- Ensure it contains bill of lading charter party date.
- If an "ocean" or "port-to-port" bill of lading is required, it clearly indicates that the goods are on board a named vessel at a named port on a given date, the place of receipt/origination/taking in charge, port of loading, port of discharge, place of delivery/destination, etc. are as specified in the LC.
- It is not a "charter party" transport document, unless authorized in the LC, the name of the consignee is as stipulated in the LC.
- If the transport document requires endorsement and signature, it is appropriately endorsed and signed.

Certificate of Weight:
- It clearly indicates the name of the vessel, shipper , its address and consignee.
- The description of the goods is consistent with the description of the goods as stated in the other documents.
- It clearly indicates single port of loading if the LC is advised by Deutshce Bank.
- It clearly indicates the date of loading.
- It is properly signed.

Draft Survey Report:
- It clearly indicates the name of the vessel, shipper, its address and consignee.
- The description of the goods is consistent with the description of the goods as stated in the other documents.
- It clearly indicates single port of loading if the LC is advised by Deutshce Bank.
- It clearly indicates the date of loading.
- It is properly signed.

Certificate of Quality:
- It clearly indicates the name of the vessel, shipper, its address and consignee.
- The description of the goods is consistent with the description of the goods as stated in the other documents.
- It clearly indicates single port of loading if the LC is advised by Deutshce Bank.
- It clearly indicates the date of loading.
- It is properly signed.

LC General:
- Ensure the document presented before the LC expired

Figure 15*. LC document flow proposal*

IV. Conclusion

Based on research question stipulated before, the study found:

1. Sensitivity analysis using linear regression provide proof that there are impact of poor collectibility to Profit / Loss, COGS, and Profitability ratios of the company (ROA, ROE, Net Profit Margin).

   a. Relationship
   - Average Age of Inventory and Average Collection Period has negative relationship with NPM, ROA, ROE and Profit.
   - Average Payment Period has positive relationship with NPM, ROA, ROE and Profit.
   - The number of days of late payment has positive relationship with Profit, COGS and ROA.
   - The number of days of late payment has negative relationship with NPM and ROE.
   - Sales amount of late payment has positive relationship with Profit, COGS, ROA, ROE, and NPM.

   b. Significances
   - There is significant relationship between sales amounts of late payment with Profit.
   - There is significant relationship between sales amounts of late payment with ROA.
   - There is significant relationship between sales amounts of late payment with NPM.

2. Interview effort of collecting data through interview of best practice collection activities from other company in same industry and from another industry is found to be unresponded until the study is finalized.

3. Implementable framework and Improvement to KPC for better Account Receivable management and customers control system are:

   a. Implement analysis of Risk Quadrant on periodic basis. (Annually, mid annually, monthly)
   b. Ensure KPC and Bank both has same perception in recognizing the discrepancies item. For this purpose, LC training delivered by competent trade advisor from Company's bank is urgently needed.
   c. Implement reviewing LC using the checklist provided in chapter III to reduce the discrepancy rate.
   d. Implement longer time (1 month) review regarding the sufficiency of number of employee that handling invoice and supporting documents.
   e. Develop credit policy.

References

Garcia, Joana Filipa Lourenco. (2011). The Impact of Working Capital Management upon Companies' Profitability: Evidence from European Companies, Porto, Portugal: Faculdade De Economia Universidade Do Porto

Gitman, Lawrence J. & Chad J. Zutter. (2010), Principles of Managerial Finance, USA: Lawrence J. Gitman

Kroes, James R. & Andrew S. Manikas. (2014), Cash Flow Management and Manufacturing Firm Financial Performance: A Longitudinal Perspective, Boise, US: Boise State University Scholar Works

Rehn, Erik. (2012). Effects of Working Capital Management in Company Profitability, Helsinki, Sweden: Department of Accounting Hanken School of Economics

Sagner, James S. (2014), Working Capital Management Applications and Cases, New Jersey, US: John Wiley & Sons, Inc.

Samiloglu, F. & K. Demirgones. (1991), The Effect of Working Capital Management on Firm Profitability: Evidence from Turkey, Turkey: Asian Network for Scientific Information

Vernimmen, Pierre. (2009), Corporate Finance Theory and Practice, United Kingdom, UK: John Wiley & Sons, Ltd.

A, Ajantha. (2013), Working Capital Management (WCM) and Corporate Profitability (CP): A Study of Selected Listed Companies in Sri Lanka, Vol. 1 No.2: 10-17

Afeef, Mustafa. (2011). Analyzing the Impacts of Working Capital Management on the Profitability of SME's in Pakitas. Vol. 2 No.22: 173 – 183

Anser, Raheem & Qaisar Ali Malik. (2013). Cash Conversion Cycle and Firms' Profitability – A study of Listed Manufacturing Companies of Pakistan, Vol. 8 No.2: 83-87

Azhar, Nor Edi & Noriza Binti Mohd Saad. (2010). Working Capital Management: The Effect of Market Valuation and Profitability in Malaysia. Vol. 5 No.11: 140-147

Budambula, Vincent Timothy. (2014). Effects of Working Capital Management on Profitability of Tea Trading Companies – A Case of Chai Trading Company Limited. Vol. 5 No. 7: 86-94

Dinku, Tirngo. (2013). Impact of Working Capital Management on Profitability of Micro and Small Enterprises in Ethiopia: The Case of Bahir Dar City Administration. Vol.1 No.1: 15-24

Ebenezer, Agyemang Badu & Michael Kwame Asiedu. (2013). The Relationship between Working Capital Management and Profitability of Listed Manufacturing Companies in Ghana.Vol. 3 No. 2: 25-24

Garcia-Truel, Pedro Juan & Pedro Martinez-Solano. Effects of Working Capital Management on SME Profitability: 2-20

Gill, Amarjit, Nahum Biger, & Neil Mathur. (2010). The Relationship between Working Capital Management and Profitability: Evidence from The United States. Vol. 1: 1-9

Jayarathne, T.A.N.R. (2014), Impacts of Working Capital Management on Profitability: Evidence From Listed Companies in Sri Lanka, 269-274

Lamazari, Ahmad Aref. (2014). The Relationship between Working Capital Management and Profitability: Evidence from Saudi Cement Companies,Vol. 4 No.1: 140-157

Mausavi, Zahra & Azam Juri. (2012). The Relationship between Capital Management and Firm Performance: Evidence from Iran. Vol .2 No.2: 141-146

Mehra, Parul. (2013). Effect of Working Capital Management on the Profitability of the Indian Pharmaceutical Sector.Vol. 2 No.3: 1-7

Murugesu, Tharshiga. (2013), Effect of Cash Conversion Cycle on Profitability: Listed Plantation Companies in Sri Lanka, Vol. 4 No. 18: 132-137

Nakori, Daniel Mogako & Ambrose Jagongo. (2013). Working Capital Management and Firm Profitability: Empirical Evidence from Manufacturing and Construction Firms Listed on Nairobi Securities Exchange, Kenya. Vol. 1 No.1: 1-14

Olufisya, Akinlo Olayinka. The Effect of Working Capital on Profitability of Firms in Nigeria: Evidence from General Method of Moments (GMM). Vol.1 No.2: 130-135

Owolabi, Sunday Ajao & Salomon Small Obida. (2012). Liquidity Management and Corporate Profitability: Case Study of Selected Manufacturing Companies Listed on the Nigerian Stock Exchange. Vol. 2 No2: 10-25

Pouraghajan, Abbasali & Milad Emamgholipourarchi. (2012). Impact of Working Capital Management on Profitability and Market Evaluation: Evidence from Tehran Stock Exchange. Vol. 3 No.10: 311-318

Quayyum, Sayeda Tahmina. (2012). Relationship between Working Capital Management and Profitability in Context of Manufacturing Industries in Bangladesh. Vol. 7 No.1: 58-69

Ray, Sarbapriya. (2012). Evaluatin the Impact of Working Capital Management Components on Corporate Profitability: Evidence from India Manufacturing Firms. Vol. 2 No. 3: 127-136

SEN, Mehmet & Eda ORUC. (2009), Relationship between Efficiency Level of Working Capital Management and Return on Total Assets in Ise, Vol. 4 No. 10: 109-114

Sunday, Kehinde James. (2011). Effective Working Capital Management in Small and Medium Scale Enterprises (SMEs). Vol. 6 No.9: 271-279

Taani, Khalaf. (2012). Impact of Working Capital Management Policy and Financial Leverage on Financial Performance: Empirical evidence from Amman Stock Exchange-listed companies. Vol.1 No.8: 10-17

Vural, Gomze, Ahmet Gokhan Sokmen, & Emin Huseyin Cetenak. 2012, Affects of Working Capital Management on Firm's Peformance: Evidence from Turkey Vol. 2 No.4: 488-495

Wongthatsanekorn, W. 2010, Study of Cash-to-Cash Cycle Management on Profitability of Private Hospital in Thailand by Reguler and Panel Data Regression Analyses Vol. 2: 1-6