THE EFFECTIVENESS OF WORKING CAPITAL USE TO MAXIMIZE COMPANY VALUE: A STUDY ON TELECOMMUNICATION COMPANIES IN INDONESIA

Ahmed Mohamed Annegrat, Kukuh Lukiyanto

Abstract

This research is driven by the notion that companies will not be able to develop in difficult situations. The telecommunications construction companies are facing great pressure after their golden era. Government regulation and tight business competition force these companies to create new strategies to survive and if possible, to develop the business. The objective of this research is to analyze how the telecommunication construction companies survived in the difficult business era. This research also aims to reveal the comparison of the effectiveness of the availability of the working capital with the project value to be conducted within a year. In addition, this research also tries to reveal how the strategies used to provide the working capital needed could benefit and increase the company value. This is an explanatory research with qualitative approach. This research was conducted in Surabaya with the sample consisted of three telecommunication construction services companies. The results show that increasing the effectiveness of all business sectors is the main key to increase the company value. In terms of working capital, the effective working capital availability which is 18.3% of the project value in a year will guarantee the successful project implementation. The use of working capital is a determinant factor in increasing company value in the difficult situations.

Introductions

The rapid development of telecommunication technology should be supported by new infrastructures. Referring to Citigroup's analysis in 2007, until 2012, Indonesia's cellular industry needed about 158,030 telecommunication towers. Assuming that the investment value per tower is IDR 1.098 billion, it will cost about IDR 173.5 trillion for the 5-year development. Indonesian Cellular Telecommunication Association predicts that the total investment of Indonesia's telecommunication infrastructure will increase between 50% - 60% throughout the year. Indonesia as the world’s fourth largest population is a huge and promising market for the telecommunications industry. The big companies are racing to enter the telecommunications business in Indonesia. Supported by conducive government regulation and potential market share, telecommunication
operators are growing so fast. The golden age of telecommunication sector provided a positive impact for the telecommunication contractors as many job opportunities were available with good investment value (Asnudin, 2008). Telecommunication operators had intensely built infrastructures that made them as the strategic partners for infrastructure development.

However, these conditions did not last long as more and more new operators joining the market, resulting in a tighter competition (Lukiyanto, 2008; Rizal, 2015). Consumers had many options with various considerations, including price (Rizal, 2015). Government regulation also required all operators to implement efficiency in all sectors. Business opportunities were decreasing as the results of tight competition as more telecommunication construction companies entering the market and finally causing many companies went bankrupt (Asnudin, 2008). Another impact was the low price offered by the operator for the construction service company in order to build the infrastructure. The unit price and volume of work were reduced for one unit of the required BTS (Base Transceiver System) (Lukiyanto, 2008).

The impact of these conditions required telecommunication construction companies to change their business strategies. One of them is related to the use of working capital (Brigham et al., 2003). The past condition showed that without having sufficient working capital, the project could still be conducted and the payment system could be adjusted. Nowadays, the situation is different. Working capital must be provided at the beginning of the project. In terms of time, the payment system was getting longer, and even when the job has been finished, the payment has not been made. This condition caused many telecommunication construction companies went bankrupt (Iskandar, Nur & Darlis 2014). They made wrong decisions related to capital investment or project preference that put them in financial problem.

Nevertheless, a company, including a telecommunication construction company, should develop and sustain in the business. One of the indicators of company development is the increase of company value (Sunarko & Sihotang, 2011) that can be achieved if the company is able to effectively utilize its working capital (Fadly, 2013). The effectiveness of working capital is closely related to the selection of projects, including financial value and the source of working capital (Iriani, 2011; Fadly, 2013). The financial value of the project does not always make the use of working capital effective, as many other factors to be considered.

However, even though many telecommunication construction companies went bankrupt in the difficult business conditions, there were some companies survived and even able to develop their business. This phenomenon is interesting to be examined in terms of how these growing companies are able to develop their business in the difficult times. In terms of the use and source of capital, how do these companies seek the funding sources to develop the business and manage the cash flow to all of its projects? It is also interesting to analyze how the value of the company can still be increased in such difficult situations. It is expected that the results of this study can be used as a reference for a company in facing difficult business conditions. In particular, it can be used as a consideration for the company’s executives or the experts to take relevant actions to increase the company value in difficult business conditions.

**Literature Review**

**Working Capital Management**

Working capital management is one aspect that must be considered by the company. If the company cannot maintain a good level of its working capital, then it is likely that the company will be in an insolvent state (unable to pay its due obligations). The amount of current assets should be sufficient to cover current debts so that it can represent the satisfactory level of the safety (margin of safety).
According to Weston and Copeland (1999), working capital management is all aspects of the management of current assets and current liabilities. While Esra and Apriweni (2002) define working capital management as an activity that includes all functions of management of current assets and short-term liabilities of the company in order to be able to finance the company’s expenses or operational activities. Referring to these definitions, it can be concluded that the main point of working capital management is on the management of company's current assets, i.e., cash, securities, receivables, inventories, and the funding (especially current liabilities) needed to support current assets.

Martono and Harjito (2010) propose several reasons underlying the importance of working capital management as the followings:

a. Current assets of the companies, both manufacturing companies and service companies, have a considerable amount compared to the amount of all assets.
b. For the small companies, short-term debt is a major source of external funding. These companies do not have access to capital markets for the long-term funding.
c. Financial managers and their members need to provide an appropriate portion of time for the working capital management.
d. The decision about working capital has a direct impact on the level of risk, profit, and the stock price of the company.
e. There is a direct relationship between the sales growth and the need for funds to finance the current assets.

Company Value

Maximizing company value is very important for a company as maximizing company value also means maximizing the shareholder wealth which is the main goal of the company (Prastuti & Sudiartha, 2016). The higher the stock price, the higher the value of the company. High company value will increase market trust not only on the company's current performance but also on the future prospects of the company.

Prastuti & Sudiartha (2016) state that the value of the company will be reflected from its stock price. The market price of a company's stock formed by the transaction between buyer and the seller is called the company's market value as the stock market price is considered as a reflection of the true value of the company's assets. The company value can provide a maximum wealth for the shareholder if the company's stock price increases. In general, the investors trust their stock management to professionals. Professionals are positioned as managers or commissioners explaining that enterprise value (EV) or also known as firm value is an important concept for investors (Wang, 2016), because it is an indicator for the market to assess the company as a whole. According to Keown (2004), the company value is the market value of the company’s debt securities and outstanding equity.

Construction Services Company

Construction is defined as an activity to build facilities and infrastructures that include building construction, civil infrastructure, and mechanical and electrical installations (Soeharto, 1995). Although the construction is known as one work activity, but in reality, construction is an activity consisting of several different works which is then assembled into one unit of a building. Thus, there is a segment/sub-segment of construction known as classification.

In general, construction activity starts from planning conducted by a consultant planner (team leader) and then implementing the plan by the construction contractor as the project manager/project head. These people work in the office, while the implementation of the physical work is carried out by project supervisors who supervise the construction workers, the builders, and other construction specialists to complete the
physical construction. The transfer of the command is conducted by the field executor. The work is also supervised by supervisory consultant (supervisory engineer).

Conducting a construction work requires an integrated plan. This is related to the method of determining the required cost, design of the buildings, and other impacts that will occur during the construction. A good planning schedule will determine the success of a building construction related to the funding, environmental impacts, environmental safety, material availability, logistics, public discomfort due to construction work, preparation of tender documents, and so forth (Soeharto, 1995). The construction service company has two projects, i.e., the telecommunication and the general construction.

**Telecommunication Construction Projects in Indonesia**

Since 1961, telecommunication services in Indonesia have been organized by state-owned enterprises. In general, as in other developing countries, the development and modernization of telecommunication infrastructure play an important role in the development of the national economy (Lukiyanto, 2008). In addition, large populations and rapid economic growth have driven high demand for telecommunications services.

The government sets telecommunication sector regulations under the Ministry of Communication and Information. At first, the government implemented a monopoly system on the telecommunication services in Indonesia. The reform era has created a regulatory framework that fosters competition and accelerates the development of telecommunication facilities and infrastructure. The reform of regulation in September 2000 was aimed to increase competition by removing monopolies, increasing transparency and certainty over the regulatory framework, creating opportunities for strategic alliances with foreign partners, and facilitating the new entrants in the telecommunications industry.

At that time, the deregulation of telecommunications sector was closely related to the national economic recovery program supported by the International Monetary Fund. In terms of international standards, the fixed line penetration in Indonesia is still low. In line with the previous studies, in December 31, 2009, the fixed line penetration in Indonesia (including fixed wireless subscribers) was estimated at only 14.9%, while mobile penetration was estimated at 71.9%. Some significant trends in the telecommunications industry in Indonesia are as follows:

1. **Sustainable growth.** Indonesian telecommunications industry will continue to grow in line with economic growth, which is expected to increase the demand for telecommunications services.

2. **Migration to wireless network.** Wireless services will be increasingly popular as the result of wider coverage areas, improved wireless network quality, decreased mobile phone prices, and widespread prepaid services.

3. **Increased competition.** The growing competition in Indonesia’s telecommunications market is as a result of government regulatory reform.

**Conceptual Framework**

The company's goal is to maximize profits and optimize company value. Investment decision, working capital decision, and financial operations are important when a company intends to create value. Investment decision helps managers make efficient use of resources. It can be concluded that the more efficient the company uses its resources, the greater the potential investors' trust to buy company's stocks (Hasnawati, 2005). Therefore, the higher the company's profit, the higher the company value, which means that the greater the benefit that will be received by the owner of the company.

Given the relationship between investment decision, working capital decision, financial operations, and company value, this study proposes the following framework:
Working capital can be sourced from internal and external funds. In addition, the source of funding can be derived from debt or owner's equity. According to Brigham and Gapenski (1996), company value can be increased through debt policy. The amount of debt used by the company is a policy related to capital structure. Modigliani and Miller (1963) in Mulianti (2010) stated that the higher the debt proportion, the higher the company value because some companies consider that the use of debt is more secure than issuing new stocks.

Fama and French (1998) found that the investment generated from the leverage will provide positive information about the company in the future that will finally have a positive impact on company value. Hasnawati (2005) found that funding decision affects company value positively by 16%. Wahyudi and Pawestri (2006) also found that funding decision affects the company value. Referring to agency theory, the separation of ownership and the management will create a situation where management will act for its own sake. The management will make optimal decisions only if they receive appropriate incentives and only if they are being monitored. Based on these assumptions, then the decision in the selection of working capital sources and the efficiency of its use will increase the value of the company.

Method
This research uses qualitative approach with explanatory method. An explanatory research is a research conducted to provide explanations or confirmations by describing the symptoms caused by the research object, then testing and explaining how it can happen (Fatchan, 2011; Denzim & Lincoln, 200). An in-depth interview is used to gather the necessary information, supported by secondary data obtained from the object of research. Finally, the conclusion is inferred from the formulation of the specified problem. Data collection methods are the followings:

Survey of Research Location
The sample of this research is the telecommunication construction companies that have passed the golden era of telecommunication construction business. These companies survive in the business until today. The research location is in Surabaya. Initial data were taken from two telecommunication construction companies, namely PT. BMJ and PT. AWR. But, these data were incomplete. Using snowball sampling method, this research completed the data from another company, which is PT. MAP, as recommended by the research informant.

Data Collection Method
Research data were sourced from primary and secondary data. Primary data were obtained from the informants based on in-depth and gradual interviews. Secondary data were taken by observing relevant company’s documents to complete primary data.

Qualitative Data
According to Newman and Benz (1998), qualitative data are detailed descriptions of situations, events, societies, relationships, observed behaviors, direct expressions of the people about their experiences, attitudes, beliefs, thoughts, and the quotations or the entire paragraphs of documents and letters. Referring to Denzim and Lincoln (2000), the data collected in this research are: (1) researcher's observation notes, (2) results of in-depth interview, and (3) notes of personal experiences.
Results and Discussion

According to data analysis, the results of research are the followings:

Working Capital Needs and Effectiveness of Its Use

Working capital has a significant role for a company to increase its profitability. However, it does not mean that every increase in working capital is always followed by an increase in company’s profit (Riyanto, 2001). The addition of working capital that is not in line with the needs of project funding will be an operating expense to a company. In general, the addition of working capital in the construction companies is conducted for the short term, adjusting to the need of working capital based on the amount and value of the project.

This research employs three informants to provide information related to the research in telecommunication construction companies. The three informants agree that the amount of working capital is not always in line with the amount of company’s profit. The amount of available working capital does not guarantee the profit gained because it depends on the effectiveness of the working capital use. The percentage calculation of the needed working capital cannot only be based on the initial agreement written in the contract. Other factors are also important in determining the payment duration. Unexpected events can occur and hinder the payment process. These conditions should be seriously considered to determine the amount of working capital needed. If everything runs well as the determined agreement, the actual working capital needed for the construction of a telecommunication project is not too high. The description of the working capital needed based on the ideal payment time is explained in Table 1.

<table>
<thead>
<tr>
<th>Payment</th>
<th>Progress (%)</th>
<th>Bills Percentage</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Down Payment</td>
<td>0</td>
<td>30</td>
<td>2 weeks</td>
</tr>
<tr>
<td>50 %</td>
<td>50</td>
<td>20</td>
<td>6 weeks</td>
</tr>
<tr>
<td>100 %</td>
<td>100</td>
<td>40</td>
<td>10 weeks</td>
</tr>
<tr>
<td>Retention</td>
<td>100 %</td>
<td>10</td>
<td>26 weeks</td>
</tr>
</tbody>
</table>

Table 1. The Working Capital Based on Ideal Payment Time

The previous explanations are still limited to the need of working capital for one project. However, a company might have more than one project a year. The sample companies in this research conducted up to 200 projects a year or about 17 projects per month. However, the fact was different. But, this is the most possible approach to be applied in this research. Another difficulty is that this research could not obtain the real data as the data were the company’s confidential data. Therefore, this research used calculation with assumption.

Table 2. Basic Assumption of the Working Capital Calculation Needed by the Telecommunication Construction Company

<table>
<thead>
<tr>
<th>Project Quantity</th>
<th>15 projects per month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Period</td>
<td>2 months</td>
</tr>
<tr>
<td>Project Value</td>
<td>IDR 200,000.00</td>
</tr>
<tr>
<td>Down Payment</td>
<td>30% (to be paid a month prior to working time)</td>
</tr>
</tbody>
</table>

Payment System:
- 50% Progress: 20% (to be paid a month after the documents needed are complete)
- 100% Progress: 40% (to be paid a month after the documents needed are complete)
- Retention: 10% (to be paid a month after the documents needed are complete)

Full payment (100%) is assumed to be paid within 4 months

<table>
<thead>
<tr>
<th>Working Capital</th>
<th>55% (IDR 110,000,000.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit</td>
<td>15% (IDR 30,000,000.00)</td>
</tr>
</tbody>
</table>
Disregard to the retention payment as it is already included in the profit calculation, then the basic assumption of the calculation of working capital needed for the telecommunication construction companies is formulated from the information gained from the three key informants as presented in Table 2.

Referring to the assumption presented in Table 2, the calculation of working capital needed by telecommunication construction companies based on the value of the project is explained in Table 3.

### Table 3. Basic Assumption of Working Capital Requirement Needed by the Construction Company

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total amount of the project</td>
<td>15 x 12 x IDR 200,000,000,00</td>
</tr>
<tr>
<td>Project cycle based on completed payment</td>
<td>IDR 36,000,000,000.00</td>
</tr>
<tr>
<td>The amount of working capital needed</td>
<td>15 x 4 x IDR 110,000,000.00</td>
</tr>
<tr>
<td>The percentage of working capital and project value comparison within a year</td>
<td>IDR 6,6 billion/IDR 36 billion x 100%</td>
</tr>
<tr>
<td>Profit per year</td>
<td>15 x 12 x IDR 30,000,000.00</td>
</tr>
<tr>
<td>The percentage of profit and working capital comparison per year</td>
<td>IDR 5.4 billion/IDR 6 billion x 100%</td>
</tr>
<tr>
<td></td>
<td>90% per year</td>
</tr>
<tr>
<td></td>
<td>7.5% per month</td>
</tr>
</tbody>
</table>

Referring to the above calculation, it can be stated that the profit percentage of the telecommunication construction companies is quite small. The fixed costs have not been calculated in the above assumption. The three informants agree that the labor cost and the operational cost are quite high in the telecommunication construction company. The companies hire many permanent employees due to certified labor requirement for every project. The operational cost is also quite high because the project location has to move from one place to another within the short time period with a great distance between locations. Anticipating these conditions, the companies should make effective planning and use of the working capital. The effectiveness measurement in the above assumption is based on the fulfillment of working capital needs to avoid work termination due to lack of capital or the excess of capital that will charge a great cost of capital for the company.

### Working Capital and Increasing the Value of Telecommunication Construction Company

The effectiveness of working capital is not only based on its effective use, but also based on the origin of the sources of funds. Sources of funds are related to the costs of capital to be spent (Arthur et al., 2002). The sources of working capital that commonly used by the telecommunication construction companies are the company's own funds, the shareholders’ funds, and the bank loan funds. Every source of funds is adjusted to the company background. Sole proprietorship companies have different strategies compared to public companies or the companies owned by many people.

Based on the information gained from the key informants, the three companies in this research have different sources of funds for their working capitals. PT AWR uses its own funds for the working capital. If the working capital needed exceeds the company's own fund, then the working capital addition will be collected from the shareholders because the process is faster and easier compared to adding the funds needed from other sources. While the profit from the cost of capital will remain as the shareholder's profit.
PT. AWR applies different strategy. This company relies on its shareholders to provide working capital needed for each project. The loan is approximately 60% of the working capital need. The cost of working capital provided is 1.5% per month, which is higher than the bank loan whose average of its interest rate is 11%-13% per year. The repayment of the loan to the shareholders is referring to the payment process from the employer, since the loan is calculated per project.

The analysis of such strategy is as follows:

1. The shareholders expect that the company will be able to gain profit in every project.
2. The company profit can be gained directly by the shareholders without depending on the dividend distribution.
3. The process to gain the working capital is easy and fast.
4. Due to the higher cost of capital sourced from the banks, it is better to gain working capital from the shareholders.
5. There is no working capital accumulation if the projects are only a few.
6. The cost of working capital does not have to be paid on a monthly basis like the bank loans, so that the monthly expense is not too high.

The working capital analysis of the telecommunication construction companies also relies on the company's background. The telecommunication companies should be adaptive to any difficult business conditions by implementing new appropriate strategies in managing the use of working capital effectively. They have to be selective in finding the sources of fund. There are various ways to increase the company value based on the amount of the working capital.

Management decisions and shareholders’ support are the cornerstone of any strategies. The differences in shareholders’ characteristics will also make a difference in the company development method. The company value will be perceived differently by the shareholders. They might have different views of the short-term or long-term profits. However, the company expects to develop and sustain its business and having a good company value.

Combining the two minor propositions of the above discussion, the major proposition of this research is as follows:

From the results of hypothesis testing, it be can be explained as follows: “The effective use of the working capital is 18.3% of the value earned by a telecommunication construction company in a year. The strategy of using its own capital is aimed to increase company's value even in the difficult business situations”.

The Effective Use of Working Capital Strategy to Increase Company Value

We cannot compare the three companies’ strategies in using effective working capital sources without understanding their backgrounds. Different backgrounds are resulting in the different implementation of strategies. Referring to the telecommunication projects investigated in this study, the selection of effective working capital sources to increase company value is presented in Table 4.

Table 4. The Selection of Effective Working Capital Sources to Increase Company Value

<table>
<thead>
<tr>
<th>Company</th>
<th>Internal Capital</th>
<th>External Capital</th>
<th>Company Profit</th>
<th>Company Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT. BMJ</td>
<td>75%</td>
<td>25% - bank</td>
<td>Good</td>
<td>Increase</td>
</tr>
<tr>
<td>PT. AWR</td>
<td>25%</td>
<td>75% - shareholders</td>
<td>Not So Good</td>
<td>Decrease</td>
</tr>
<tr>
<td>PT. MAP</td>
<td>100%</td>
<td>For other projects</td>
<td>Uncertain</td>
<td>Decrease</td>
</tr>
</tbody>
</table>
Referring to Table 4, it can be concluded that the most effective strategy is the use of internal working capital. The profit gained from the telecommunications projects can be used as additional working capital without having to pay the cost of capital from the external sources. The strategy applied by PT. BMJ is the most effective strategy among the three companies. Focusing on telecommunications projects and long-term plan will make company able to face any possibilities in the future. PT BMJ will be ready to face any better or worse changes of the business situation. Any possibilities of the invention of new technology will increase the opportunity to win the competition.

Conclusion and Suggestion
The telecommunication construction company must provide minimum working capital of 18.3% of the value of the project to avoid financial problems while conducting a project in a one-year period. The strategy of using the working capital and the source of working capital fund are the important points to increase company value. Since most telecommunication construction companies are private or family companies, the shareholders’ perspective is crucial for the development of company value. The use of company's own working capital is the most effective option to increase the company value from the shareholders’ perspective.

Every telecommunication construction company should have a long-term plan to face any changes in business. They should be optimistic that the business is very prospective and that they have to maximize the company resources to win the tight business competition.

This research is a preliminary study analyzing the limited data. In order to gain more valid results, it is recommended that further research can collect more comprehensive data with wider coverage of research area.

References


