



Factors determining the amount of working capital requirements for business sustainability at UD SAS in Oebufu District Kupang City-NTT

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ABSTRACT

Working capital is crucial in opening or developing a business. Working capital can be seen from its quantity, quality and function. In this study we will use the functional concept. Many factors influence the amount of working capital needed, including: Nature or type of company, time required to produce goods, purchase or sales conditions, inventory turnover time, receivables turnover rate, sales volume, seasonal and cyclical factors. However, the factors that determine the size of working capital requirements related to company operations have not been seen as variables that are very important in maintaining the continuity of company activities. The research took the form of a case study conducted at CV SAS, by collecting documents in the form of financial reports, interviews with company leaders and owners. The data is analyzed using comparative techniques, including determining the company's operational needs, cash turnover time, accounts receivable turnover time, inventory turnover time, and determining the amount of working capital requirements. The research results show that the main determining factor is the length of capital turnover time through the purchasing process, waiting time (purchase, storage and sales) while the capital required each period is IDR 64,000,000.

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1. INTRODUCTION

Forest products are biological, non-biological objects and their derivatives, as well as services originating from forests (Sari, 2020). As in the explanation, it is stated that biological forest products can be in the form of (a) vegetable forest products and their derivatives such as wood, bamboo, rattan, grasses, mushrooms, medicinal plants, resins and others, as well as parts of plants or produced by plants in the forest (Basri, 2023), (b) animal forest products and their derivatives such as wild animals and their captive bred animals, game animals, beautiful animals, and other animals and their parts or products produced therefrom (Semoin, 2020), (c) non-biological forest products which ecologically constitute an ecosystem unit with the biological organs that make up the forest such as water, clean and healthy air and other goods but do not include mining goods (Salama et

al., 2022), (d) services obtained from forests such as tourism services, beauty and uniqueness services, hunting services, and other services (Sila, 2022), (e) production results that are directly obtained from the processing of raw materials originating from the forest, which is primary production, including logs, sawn timber, plywood and pulp (Ali Musa Pasaribu, 2012).

According to Norlaili Isnaini (2018) wood is one of the forest products that has high economic value, and when using wood for a particular purpose you must pay attention to the properties of the wood, so that the choice of wood type can be appropriate to the use and knowing other types of wood that have the same properties can be used. replace in case of shortage. Wood is used for various purposes such as cooking, making furniture, building materials, paper materials, and so on (Sylvia, 2020).

One company that provides log sawing services and also prepares wood in the form of beams and boards is UD SAS which meets the needs of customers in the city of Kupang, East Nusa Tenggara. This company obtains wood from the Timor mainland (Kupang Regency, TTS Regency, TTU Regency and Malaka). The wood in question is logs which will then be sawed according to the required shape and size in the form of blocks and boards. Working capital is always a problem because of the pattern of using cross-capital subsidies for various company activities (Wibowo, 2020). The size of the working capital requirements really depends on various aspects which must always be calculated carefully and diligently. The aspects in question are turnover time requirements, business volume, market access area (Halidah, 2022).

At UD SAS, there is a problem of not being able to meet market demand on time due to inadequate material needs as a further consequence of a lack of capital to purchase materials in cash, insufficient funds to pay for electricity, arrears in labor costs, as well as customer spending patterns. tend to delay payments.

Sawing is the first process which is still simple in various advanced processing, but the sawing process is the most important process in the wood processing industry. (Utama et al., 2019), because after this process the wood will be easier to process in the next stage. The sawing process is also an effort to increase production effectiveness and minimize the resulting yield, so this process requires attention specifically (Aldi Dwi Laksono, et al, 2016). Industry Sawmills play a role in bridging the obligation to process wood forest products, create jobs and create a business climate, provide wood raw materials for the wood industry, and generate money or foreign exchange for development. In this case, especially the export trade value of sawn wood commodities or follow-up products. On the other hand, the sawmill industry also plays a role in making national development a success, especially providing wood for the housing industry and other advanced timber companies. Because wood harvested from these forests cannot be used directly for various purposes, the initial stage of utilization and processing is through the sawmill industry. Newly harvested wood from the forest is cut and split to be made into sawn timber or other products so that it can be used for various purposes, both for individual, government and industrial needs (Wahyudi, 2013).

The sawmill business is a long-term business. Therefore, in carrying it out, you need to be careful so that the business you run can produce high profits. In running a long-term business, it is necessary to carry out financial or financial planning. One way is by investing.

Various studies have been conducted with an emphasis on the effect of working capital on income (B. Wahyono, 2017; DMA Artaman, NN Yuliarmi, 2015 P. Yuniarti, 2019; IAD Mithaswari, IW Wenagama, 2018; KA Lamia, 2013; NPR Sasmita, 2017), The influence of working capital on liquidity (LP Sugiono, 2013), capital influences the development of MSMEs (H Hartono, DD Hartomo, 2016). However, the factors that determine the size of working capital requirements related to company operations have not been seen as variables that are very important in maintaining the continuity of company activities.

Based on the conditions faced, it seems that many previous researchers have studied working capital turnover, working capital needs, but have not studied further the role of the length of working capital (cash) turnover on the amount of working capital needed to make company operations more effective. Therefore, the question that needs to be answered is a) how long does the cash turnover take? b) how much working capital is needed for the company's continued and effective operations.

Thus, this study focuses more on the volume of activity which is of course related to market share as one of the determinants, apart from ending inventory being a reserve to meet sudden demand, especially towards the end of the period. Likewise, it is important to know the length of the business cycle starting from procurement, production, storage time, length of sale and payment by the buyer.

2. RESEARCH METHOD (10 PT)

The research took the form of a case study conducted at CV SAS (Assyakurrohim et al., 2023). Data collection techniques include collecting documents in the form of financial reports, interviews with company leaders and owners. The analysis technique uses comparative techniques, including determining the company's operational needs, cash turnover time, accounts receivable turnover time, inventory turnover time, determining the amount of working capital requirements. Respondents include company leaders, employees, wood buyers and suppliers. Data collection techniques use interviews, observation, open questionnaires. The analysis technique uses qualitative and quantitative analysis.

3. RESULTS AND DISCUSSIONS

The company's working capital needs are very dependent on operational effectiveness, especially real needs and depend on customer demand. Therefore, it is necessary to study the company's needs and the length of cash turnover during one operating period to determine the amount of working capital required.

3.1 Requirements based on customer requests

The demand for wood according to market trends during 2022 averages 319 m² per month, which is further shown by fluctuations as follows:

Table 1. Wood demand by market trend during 2022

Month	number of requests(m ²)
January	130
February	141
March	243
April	302
May	441
June	380
July	387
August	432
September	411
October	345
November	443
December	263
Amount	3818

Based on the average demand, the capital requirements for purchasing wood will be calculated for each period. Thus, the average capital requirement for purchasing wood every month is IDR 255,200,000 (319 m² X IDR 800,000). Meanwhile, the calculation is based on fluctuations in the lowest demand of IDR 104,000,000 (130 X IDR 800,000) and the highest demand of IDR 354,400,000 (443). The availability of capital based on average or fluctuating demand guarantees smooth company operations. However, demand depends on the length of capital turnover during the year. This is determined by the effective time

required starting from the wood procurement process and storage as well as payment from the customer (Andharsaputri, 2021).

3.2 Length of Turnover Time for Working Capital (Cash)

The calculation is based on the length of time required to purchase raw materials

- a. During the rainy season (December - April) the sawing cycle time, the length of time for purchasing logs is 12 days, the length of time for sawing logs is 2 days, the length of time for sawing logs to be stored in the warehouse is 8 days, the delivery time to customers is 10 days. Payment from the customer 15 days after the goods arrive at the customer. Time requirements: 47 days for each turnaround period during the rainy season.

Each rotation period will occur for $(47/26)$ 1.81 or 1 month 21 days. The rainy season is 5 months (December – April) every year so that effective working time can be calculated as $(5 \times 26 \text{ working days})$ 130 working days. Thus, the season length divided by the turnover time $(130/47)$ of working days results in 2 periods and 36 effective working days or 3 turnovers. In the rainy season, it can be seen that the rotation is only 2 times or rounded up to 3 times. This means that the frequency of working capital turnover is less than the effective working time, which is 5 months. This event occurred due to various factors that contributed to the obstacles, starting from purchasing wood to delivery to customers and the customer's repayment period. Likewise, during the rainy season, suppliers experience delays in felling trees due to consecutive rains over several days, also road access from the logging area to the main road which is difficult to pass in a short time, shortcut roads which are not easy to pass because of the mud. Wood deliveries to customers outside the island are often delayed due to weather so ships do not sail. The land road to the destination is not easy to reach due to landslides and muddy terrain. Often blocks or boards that are ready and stored in the warehouse take a little longer because customers delay the time to collect the available materials.

- b. During summer (May-November)

The length of time for purchasing logs is 8 days, the length of time for sawing logs is 2 days, the length of time for sawing wood to be stored in the warehouse is 6 days, the time for delivery to customers is 5 days and payment from customers is 15 days after the goods arrive at the customer.

Time required: 36 days so $36/26 = 1.38$ or 1 month 10 days. Working days for 7 months $\times 26$ working days = 182 working days. If the number of working days is divided by the length of turnover, the number of turnovers is $(182 : 36)$ 5 times.

Thus, in a year the frequency of capital turnover occurs 8 times (the turnover time in the rainy season is 3 times and in the summer 5 times).

In summer the turnaround time is slightly faster but seems almost the same because the idle time in the rainy season is 2 months and in the summer it is 2 months. It should be understood that this idle time occurs between working days each month. This idle time is always used to serve requests for sawmill services from customers.

If the calculation is carried out for an annual period, the following will be found:

Wood requirements per year: $8 \times 26 \times 15$ cubic = 3120 cubic

The capital required to buy wood is $(3120 \text{ cubic meters} \times \text{Rp. } 800,000)$ Rp. 2,496,000,000. The average machine operation per working day is 15 cubic meters, so the amount of wood required per period is $(26 \times 15 \text{ cubic meters})$ 390 cubic meters. Capital requirements for purchasing wood each period are $(\text{Rp. } 800,000 \times 390 \text{ cubic meters})$ Rp. 312,000,000.

3.3 Determining the Amount of Working Capital Requirements

Working capital requirements if you pay attention to market trends and company operations are as follows:

- a. Material:

Market trend $(319 \text{ m}^2 \times \text{Rp. } 800,000)$	Rp. 255,200,000
Inventory (Reserves) $71 \text{ m}^2 \times \text{Rp. } 800,000$	<u>IDR 56,800,000+</u>

Amount		IDR 312,000,000
b. Labor costs		
Operator	Rp2,750,000 X 12	=IDR 33,000,000
Servant	Rp2,000,000 X 12	=IDR 24,000,000
Technician	Rp2,500,000 X 12	=IDR 30,000,000
Money for side dishes	Rp50,000/ week X 4 X 12	=IDR 2,400,000
Christmas Gift	Rp1,000,000/person X 4	=IDR 4,000,000 +
Amount		Rp.93,400,000
c. Other costs		
Buy oil	IDR 300,000/monthX 12 months	= IDR 3,600,000
Fuel	(Rp. 10,000 X 15 X 26 days	= IDR 3,900,000 X 12
		= IDR 46,800,000
Electricity	IDR 400,000/ monthX 12	= IDR 4,800,000
Water	Rp. 75,000 X 3 tengki	= IDR 225,000 X 12
Amount		= IDR 2,700,000 +
		=IDR 57,900,000
d. Sales Costs		
Freight costs	Rp. 75,000 X 4 cubic meters	= Rp. 300,000
Labor	Rp. 50,000 X 4 cubic meters	= Rp. 200,000
Amount		IDR 500,000
Transportation funding requirements: (390/4) X IDR 500,000		<u>IDR 48,750,000+</u>
TOTAL (1+2+3+4)		<u>Rp512,050,000</u>

The total costs required for company operations for one year of operation are IDR 512,050,000. This does not take into account unexpected costs which must be the responsibility of the company. However, this is not a problem because other businesses are still being built, such as a sawmill service which is the backbone of this lumber business. Even though there are various obstacles, including increasingly fierce competition, it is increasingly difficult to obtain logs due to strict regulations on removing wood from the area of origin, the company leaders continue to maintain the sustainability of this business because they still have advantages that other companies do not have. For example, having workers who are able to adjust the machine to obtain neat sawing results for logs and boards.

Thus, the average working capital requirement for each period is IDR 64,006,250 (512,050,000/8 periods) or rounded up to IDR 64,000,000. The amount of working capital required if normal operations occur. If calculated every month, it is IDR 42,670,833,333 (512,050,000/12) or rounded up to IDR 43,000,000. This figure will be more anticipatory towards variations in conditions, both demand and unexpected things.

The question that will arise is that a year there is a turnover of 8 times, which means there is unemployment, both machines and labor? Initially, CV SAS only carried out its main activity, namely sawmill services. In the course of work experience, we are often faced with the need for wood for private house buildings or building projects. Often he buys from companies that are available but there is always not enough available and is often late resulting in the completion of the work not being done on time. Meanwhile, there is also increasing demand from areas outside its working area.

Competitors for sawmill services are increasing so that the work volume of sawmill services is decreasing so that they are unable to meet operational financial needs. These opportunities and threats are the trigger for the need to develop a business providing beams and boards to meet customer needs. Company leaders also immediately built a network with suppliers from various regions and many gave positive responses. However, there are many obstacles that cannot be denied, starting from the process of felling logs to shipping them to the company's premises.

Based on the experience and conditions faced by the company, the main business focus was finally determined into two parts, namely sawmill services and supply of logs and boards. However, the leadership/owner of this company found that there was so much that could be utilized that the capital they had could not be allocated appropriately to the type of business being built. It is more accurate to say that the use of finance still uses a cross-subsidy pattern, meaning that cash can be used at any time for work that immediately brings profits, but this hope is not timely, resulting in the cessation of other work that requires business capital. The problem is how much capital should be reserved for the wood procurement business? The main capital requirement is the provision of logs to change their shape into beams and boards.

Finally, it was found that the capital turnover was so fast in the log wood procurement business each period amounted to IDR 64,000.00. If the company provided funds amounting to IDR 128,000,000 as operational costs including for the procurement of wood for two periods then business stagnation would be avoided. If calculated on a monthly basis, the capital requirement required is IDR 43,000,000. If you want to maintain the continuity of the company's operations, capital of IDR 86,000,000 is needed for two months of company operations.

It should be understood that working capital requirements will be used for company operations for an effective 12 months. This means that activities focus on wood procurement and sawmill services. The capital required for these two forms of business is accommodated during a year of work. The capital required for all wood procurement and sawmilling can be seen from the operating capital requirements for a year.

Factors that determine the smooth running of the company's operations are time, payment terms, and policies or regulations regarding the release of wood in each log bag area. The behavior of intermediaries or suppliers is more likely to avoid various pressures that hinder or increase the costs of sending wood to its destination.

The local government has established rules for removing wood from its territory, especially quality wood with a fee, but the wood owner or wood taker commits deviant actions, including transporting it at times that cannot be detected by the authorities. They also use shortcuts that are difficult for authorities to monitor. There are various types of heat used to remove wood from its location.

4. CONCLUSION

Determining factors in the working capital turnover process include seasonal factors, length of payment from customers, waiting time from customers (storage) and delivery time to customers.

Effective company operations only occur 8 times of working capital turnover during a year. Therefore, if you use market trends, the amount of capital required for a year is IDR 512,050,000, while the funding requirement for each period is IDR 64,000,000. However, to maintain continuity and additional demand throughout the year, a working capital stock of IDR 43,000,000 is needed per month. This is also a form of maintaining the continuity of the company's operations every day because the company carries out its main activities which consist of sawmill services to fulfill customers' requests for sawmill services and sawmills to provide boards and beams for other customers who need them throughout the company's operating years.

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