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MARGIN ANALYSIS AND MARKETING EFFICIENCY OF BALI CATTLE POST COVID-19 PANDEMIC

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Margin, Efficiency, Bali Cattle, Covid-19 Pandemic

ABSTRACT

This research is a literature study on margins and marketing efficiency. This study aims to analyze the margins and marketing efficiency of Bali cattle post covid-19 pandemic. The research method used in this study is a qualitative descriptive method. The type of data used in this study is qualitative data, which is categorized into two types, namely primary data and secondary data. Sources of data are obtained through library research techniques (library study) which refers to sources available both online and offline such as scientific journals, books, and news sourced from trusted sources. The results of the study concluded that based on the marketing margin, farmer's share, and the efficiency of the marketing channel pattern that had been carried out, it was concluded that the Bali cattle marketing system was efficient. This can happen because it is influenced by several factors, namely the general condition of Bali cattle business actors.

INTRODUCTION

On March 11, 2020 the World Health Organization (WHO) has declared a global pandemic status (Takian et al., 2020) . This pandemic has caused severe global socioeconomic disruption, including Indonesia. Many businesses are experiencing difficulties, causing a considerable impact on socio-economic development, including livestock business.

Cattle farming is dominated by smallholder farms around 97% only 3% is carried out by companies (Astiti, 2018b) . Cows are the most important livestock as a source of meat, milk, labor and other needs (Ambarawati et al., 2002) . About 50% of the world's meat needs come from the Bovidae family (Brihandhono et al., 2022) .

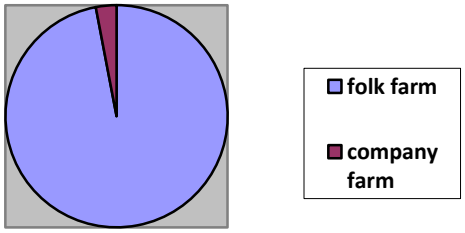

Figure 1
Percentage of cattle farms in Indonesia

Stable prices can occur because the Ministry of Trade through the Directorate General of Trade (Astiti et al., 2021) one month before Eid released data on the National meat stock in April of around 36,000 tons. The breakdown of the stock is 30,000 tons from Gapuspindo, 3,800 tons from Aspidi (Association of Indonesian Meat Importers), 2,200 tons apart from Aspidi and 106.78 tons from Bulog (Lisson et al., 2010) .

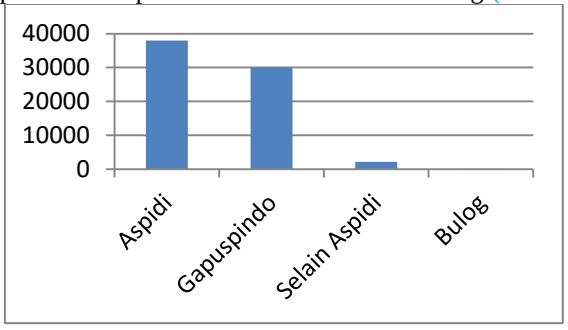

Figure 2
National Meat Stock

Market organization and rules *determine* how many actors are involved and how the transaction process occurs (Astiti et al., 2019) . Thus, even though the commodities traded are the same, the market organization may be different (Maria et al., 2021) . The number of marketing agencies involved in the marketing process will affect the length of the marketing chain and the amount of marketing costs (Astiti et al., 2016) . The amount of marketing costs will lead to a greater price difference between producer and consumer farmers (marketing margin) (Munadi et al., 2021) . The larger the marketing margin, the smaller the price received by the producer breeders and indicates an inefficient marketing system (Astiti, 2019a) .

One of the main problems experienced in the marketing process is the distribution pattern of marketing. Research (Astiti, 2019a) explains that in a long and disorganized traditional marketing distribution pattern will involve many market participants (Astiti, 2019b) . The marketing channels are complicated and long, causing an increase in marketing margins, which is an average of more than 50% of the price paid by consumers, so that marketing efficiency is low (Pratama & Supranianondo, 2017) . The marketing strategy is one of the beginnings in order to introduce products to consumers and this will be very important because it will be related to the benefits that will be obtained by the company (Astiti, 2018a) . Marketing strategies will be optimally useful if they are supported by structured planning both internally and externally (Astiti, 2018a) .

In carrying out marketing activities, an effective and efficient and profitable marketing distribution channel is needed (Puarada & Gurning, 2022) . There are several reasons why producers cooperate with traders in distributing their products, namely as follows: 1. work efficiency factors and the use of funds 2 (Rusdiana & Soeharsono, 2017) . State of regional infrastructure 3. Knowledge and experience in handling marketing areas. Bali cattle have bright prospects to meet market demand because of the characteristics of Bali cattle which have the ability to maintain their condition and body weight even though they are kMEt in low quality pastures (Setiaji, 2017) .

A similar study was also conducted by (Pabbo, 2016) with the title "Marketing Margin Analysis of Bali Cattle Farmer's Groups in The Village of Environmentally Friendly Galung District Barru". the final price that must be paid by the consumer becomes higher and the share of the price that must be received by the farmer as a producer becomes smaller. In previous studies, the variables studied were only about marketing margins, while in this study, apart from marketing margins, researchers also analyzed marketing efficiency for Bali cattle. Based on the discussion above, the research problems are; How is the condition of selling cows during the pandemic. The research objectives are: 1) To analyze the marketing margin of Bali cattle during the pandemic. 2) To analyze the marketing efficiency of Bali cattle during the pandemic.

METHOD RESEARCH

The research method used in this study is a qualitative descriptive method. The type of data used in this study is qualitative data, which is categorized into two types, namely primary data and secondary data. Sources of data obtained through library research techniques (library study) which refers to sources available both online and offline such as: scientific journals, books and news sourced from trusted sources. These sources are collected based on discussion and linked from one information to another. Data collection techniques used in this study were observation, interviews and research. This data is analyzed and then conclusions are drawn.

RESULT AND DISCUSSION

A. Marketing Margin

Marketing margin is the price difference that occurs in each marketing agency (Takian et al., 2020) . The amount of marketing margin can be calculated by adding up marketing costs with the amount of profit for each marketing agency involved in the marketing channel (Sumantri et al., 2022) . This margin can also be shown by the difference between the selling price and the purchase price at the institution concerned. The amount of marketing margin is different in each channel (Waluyo et al., 2021) . This is due to differences in selling prices, marketing costs incurred and profits from each marketing agency in the marketing channel (Suwignyo & Kusumastuti, 2022) .

Marketing margin is calculated from the difference between the price at the consumer level and the price at the producer level (in IDR/head). The first thing to do is to calculate the average price of cattle at each marketing agency, then the marketing margin is calculated based on that average price. Table 3 shows that the longer the chain of marketing channels, the lower the price received by farmers (producers). The price received by producers in marketing channel I is mostly around Rp. 12,000,000 up to Rp. 12,500,000. However, in channel II, there are producers who have received more than Rp. 12.75 million, while on channel I there is none. In marketing channel III, the price received by consumers is mostly around Rp. 12,000,000.

Table 1 Distribution of Cattle Prices in Each Marketing Agency

Price	Friday (Person)		
	collector	Retailer	Consumer
12,500,000	5	3	-
12.750.000	17	14	2
12,000,000	4	7	14

Source: primary data processed by researchers

The implementation of the marketing system carried out by each marketing agency is accompanied by marketing costs. The amount of marketing costs incurred by each marketing agency is different. This dMEends on the added value given to the commodity by each marketing agency.

The added value includes use value, form, time, place and ownership. The difference in prices received by producers is caused, among others: retailers and collectors in purchasing cattle, taking into account marketing costs such as transportation costs, maintenance costs, labor costs and feed costs. In addition, traders are more experienced in assessing the price of cattle, while consumers in making purchases usually do not take into account the above factors and do not know how to determine the price of cattle (Astiti, 2022) . The average price of cattle in each marketing channel is higher as the length of the marketing channel increases. In channel III, there are no middlemen involved so that the price received by consumers is the same as the price at the farmer level. In channels I and II, there are one or more traders involved so that the price received by consumers is already different from the price at the farmer level. In channels II and III, the price received by consumers is higher than the price received by producers, this is because each intermediary trader takes the price difference which is the marketing margin.

Table 2

Average Cattle Marketing Margin in Each Marketing Channel (Rp)

Description	Marketing channel		
	collector	Retailer	Consumer
Price in Manufacturer	12,000,000	12,500,000	12,000,000
Prices in Consumer	12,500,000	12.750.000	12,000,000
Margin	500,000	250,000	0

Source: primary data processed by researchers

Table 2 shows that the average marketing margin of cattle in each marketing channel. In channel I and II there is a marketing margin, while in channel III there is no marketing margin. In addition, it can be identified that the longer the marketing channel, the greater the marketing margin. The marketing margin of each marketing channel is used as the costs to be paid and the profits that the intermediary trader wants to earn. The amount of the margin fee dMEends on the amount of costs incurred by each trader and the amount of profit that each trader wants to earn. The greater the costs and profits that the merchant wants to take, the greater the marketing margin will be.

The distribution of costs and benefits of each marketing channel for each merchant is not evenly distributed. The amount of costs incurred by each trader between one channel and another is different. This is influenced by the quantity of cattle sales. Sales in large quantities which are generally carried out by collectors require greater costs because they are accompanied by marketing costs, namely transportation costs, maintenance costs, feed costs, user fees and labor costs. Farmer's share is calculated from the percentage comparison of the price received by the farmer with the price paid by the consumer.

Table 3

Farmer's share of Cattle in Each Marketing Channel (%)

Description	Marketing channel		
	Collector(IDR)	Retailer(IDR)	Consumer(IDR)
Price in Manufacturer	12,000,000	12,500,000	12,000,000
Prices in Consumer	12,500,000	12.750.000	12,000,000
Farmer's share	90.90	95.45	100

Source: primary data processed by researchers

Table 3 shows that the share received in each marketing channel by producers from the price paid by consumers (*farmer's share*) is different. The difference is based on the shape of the channel traversed, so that the marketing margin analysis is reviewed based on the channel traversed. The longer the marketing channel, the smaller the Farmer's share. This is because many traders or marketing agencies are involved in it, so that

the share of the price received by farmers is getting smaller. The largest farmer's share received by producers is in channel III, which is 100%, meaning that producers receive a price of 100% of the price paid by consumers, which is Rp. 12,000,000. This is because there are no traders involved in it. Channel III pattern is the simplest pattern because there is only one marketing agency involved, namely the farmer as a producer, so that the farmer receives all marketing margins. While the marketing channels I and II show that not all of the selling prices of cattle are accMEted by producers, but there is a remainder that is enjoyed by the marketing agencies involved. However, the high share received by the farmer does not indicate that the share of the price is received by the cattle farmer.

The Eco-Friendly Farmers' Group is sufficient. This is because in the short marketing channel there is less marketing activity when compared to the longer marketing channel. In channel III, farmers directly relate to consumers, both people who live around/in the group area and those from outside the group area. Not so with marketing channels I and II, farmers do not deal directly with consumers, but through traders who are involved in marketing channels.

The market behavior of cattle marketing in the Eco-Friendly Farmers Group is seen based on two criteria, namely pricing and uniformity of marketing costs. The initial price determination at the farmer level is based on the price information obtained. When bargaining occurs in transactions with traders, in general, traders have stronger bargaining power compared to farmers. Traders have the ability to reduce prices to the limit of the selling power of farmers. Even though the limit of selling power of farmers is not necessarily the same as the limit of purchasing power of consumers, so that the limit of consumer purchasing power is greater than the limit of selling power of farmers, traders can earn more profits than breeders. This event usually occurs when the farmer needs financial funds in a short time, such as meeting the educational needs of his children, health and an urgent need, so that the livestock raised must be distributed immediately.

This is also due to knowledge of market conditions and good price information. However, when there is bargaining between farmers and consumers, farmers have a stronger bargaining power than consumers. This is due to lack of knowledge about market conditions and price information. Prices are formed following the amount of supply and demand that occurs in the market. When the demand for cattle increases, the price of cattle will increase and vice versa if the demand for cattle decreases, the price of cattle will fall so that the price of cattle currently tends to fluctuate. For example, during the festival of sacrifice, the demand for bulls ready for sacrifice will experience a significant increase, then the price of bulls at this time will increase and when the feast of sacrifice has passed, the demand for bulls will decrease and the price of bulls will also decrease.

In this cattle marketing, almost all group members use telMEhone services and group meetings to communicate with fellow group members about price information. Orientation criteria for the development of other marketing institutions can also be seen from the efforts of farmers and traders to form farmer groups or cattle trader associations. This group or association aims to increase the bargaining power of each party in obtaining a margin share. For example, every time the group administrator provides price information to its members to reduce pressure from traders in determining prices.

Table 4

Bali Cattle Marketing Costs

Channel Marketing	Institution Marketing	Cost Marketing ((IDR)/head)
Channel I	Breeders:	
	1. Cost Shelter	-
	2. Cost Retribution	-
	3. Cost Transportation	-
	4. Cost Power Work	-
	collector	
	1. Cost Shelter	5. 000
	2. Cost Retribution	50,000
	3. Cost Transportation	37. 0 00
	4. Cost Power Work	-
Total		9 2 . 0000
Channel II	Breeders:	
	1. Cost Shelter	-
	2. Cost Retribution	-
	3. Cost Transportation	-
	4. Cost Power Work	-
	collector	

	1. Cost Shelter 2. Cost Retribution 3. Cost Transportation 4. Cost Power Work Retailer 1. Cost Shelter 2. Cost Retribution 3. Cost Transportation 4. Cost Power Work	13,000 _ - 44,000 _ - - 50,000 - 35,000
Total		1 3 2,000 _
Channel III	Breeders: 1. Cost Shelter 2. Cost Retribution 3. Cost Transportation 4. Cost Power Work	 - - - -
Total		0

Source: primary data processed by researchers

B. Marketing efficiency

To find out the most efficient marketing channel mathematically it can be formulated as follows:

$$ME = \frac{TMC}{TPV} \quad x100\%$$

Note:

ME = Marketing Efficiency;

TMC = Total Marketing Cost;

TPV = Total Product Value.

By decision rule:

(a) 0 – 33% = Efficient,

(b) 34 – 67% = Less Efficient,

(c) 68 – 100% = Inefficient.

The activity of distributing or distributing beef cattle from the hands of farmers or producers to the hands of final consumers has passed through several marketing institutions. It is the length and shortness of the marketing chain that determines the prices at the slaughterhouse and inter-island traders as well as the high and low efficiency of the marketing carried out. Analysis of the marketing efficiency of a commodity is very important, including beef cattle marketing. For more details on the efficiency of Bali cattle marketing channels can be seen in Table 10. Based on Table 10, it can be seen that the efficiency of marketing channel I is 1.13%, marketing channel II is 1.29 %, and marketing channel III 0.75%. Where from these results indicate that marketing channel III is the most efficient because there are fewer marketing agencies involved and marketing costs are in accordance with product prices. Table 10. Marketing efficiency of beef cattle in each marketing channel.

Table 5

Beef Cattle Marketing Efficiency In Each Marketing Channel

Marketing channel	Total Score Product(IDR)	Total Cost Marketing(IDR)	Efficiency Institution Marketing (%)	note
I	12,500,000	9 2,000	0.007	Efficient
II	12.750.000	1 3 2,000	0.01	Efficient
III	12,000,000	0	0	Efficient

Source: primary data processed by researchers

93.125

$$ME_{channelI} = \frac{12{,}500{,}000}{} = 0.007$$

$$ME_{channelII} = \frac{1\,3\,2{,}000\ \_}{12.750.000} = 0.01$$

$$ME_{channelII} = \frac{0}{12{,}000{,}000} = 0$$

CONCLUSION

Based on the results of the marketing margin analysis that has been carried out, it is found that the marketing margin for cattle is in each marketing channel. In channel I and II there is a marketing margin, while in channel III there is no marketing margin. In addition, it can be identified that the longer the marketing channel, the greater the marketing margin. The marketing margin of each marketing channel is used as the costs to be paid and the profits that the intermediary trader wants to earn. The amount of the margin fee dMEends on the amount of costs incurred by each trader and the amount of profit that each trader wants to earn. The greater the costs and profits that the merchant wants to take, the greater the marketing margin will be. Based on the results of the analysis of the efficiency of the marketing channel pattern that has been carried out, it is found that the Bali cattle marketing system is efficient. This is proven through the Marketing Efficiency (ME) test, with an efficiency value above 0 $ME_{channel\ I}$ 0.007, $ME_{channel\ II}$ 0.01, $ME_{channel\ II}$ 0, which means it is efficient.

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