

Profit Analysis Of Cattle-Slaughtering Business Based On Cattle Procurement And Meat Sales System

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ABSTRACT: The aim of study was to determine the profits of beef slaughter based on procurement in slaughterhouse and meat sales system. This study was conducted from April to June 2013 in the Makassar Regional Slaughterhouse (PD. RPH). The type of research was case study with the selection of case was not in a normal case (Wirartha, 2006). The samples were selected from butchers group who work regularly is at least 15 days a month. Ten butchers were selected as samples from about 30 total butchers population in slaughterhouse. Data were collected through direct observation and interview using a questionnaire. Data were analysis by descriptive and simple statistical analysis. The profits were calculated by using the formula $\Pi = TR - TC$. The results showed that the butchers with the highest profit who sold their meat with grading systems (Rp. 393.855/ head or Rp 6.902 /kg), then butcher who procure through cooperation with inter-island traders and sold their meat with no grading systems (Rp. 372.704/ head or Rp 3.929/kg), butchers who purchases at slaughterhouses without grading system (Rp. 217.744/head or Rp 2.693/kg), then butchers who purchases based on carcass weight after slaughters without grading systems (Rp. 258.752/head or Rp 2.608/kg). The lowest profit were gain by butchers group who purchased their cattle from interland area and sold meat without grading systems (Rp. 166.555/head or Rp 2.072/kg).

Key word: Profit, Cattle-Slaughtering Business, Procurement System, Sales System

INTRODUCTION

Beef is one of the farm products that have a very important role, both in economic terms and in terms of community nutrition. But lately rampant talk about the high price of beef. Local beef prices higher than the price of beef in other countries, for example the price of beef Rp 45.000/kg Singapore, Malaysia Rp 50.000 /kg (\$ 0.43), Thailand between Rp 40.000 - Rp 50.000/kg while in Indonesia Rp 90.000/kg (Anonymous, 2013)[1] and in Makassar around Rp 70.000 - 80.000/kg. One of the factors that influence the magnitude of the retail price of a commodity is determined by the profit margin of each distribution chain (Prastowo, et al., 2008)[2]. One of the institutions that constitute the distribution chain is beef slaughterhouse. Most of the Butcher in Makassar, cattle slaughtering activities in PD RPH Makassar. Local Company Slaughterhouse (PD.RPH) Makassar is a locally-owned enterprises engaged in the management of the abattoir as well as services and trade related to the results of animal slaughter (Anonymous, 2010)[3].

However, the function of PD. RPH Makassar is still limited to the provision of services to the slaughterhouse. Butcher the activities here, is the main support of local beef supply in the city of Makassar, the average number of cattle slaughtering 57 head / day (approximately 5 tons of beef / day) which consisted of 40% steers and 60% heifers (Secondary Data PD RPH Makassar, 2013)[4]. Therefore the costs and benefits butchers at this location will determine the price of meat at the retail level. In addition, the determination of the purchase price by the cattle slaughterhouse largely based on the estimated weight of the meat with speculation. According to Abidin (2002)[5], price assessment criteria are generally based on age, body weight and after cow carcass cut. Therefore slaughterhouse must have the ability to assess beef live weight, in order to make a profit. One appraiser may cause losses or gains for the slaughterhouse. The results of the initial survey to the slaughterhouse, that one appraiser may reach about 5 kg/cow, cow because same physical condition, do not necessarily produce exactly the same weight of meat. To meet the needs of beef cattle supply, and to increase profits, then the Butcher implement several systems in the procurement and sale of beef cattle. Under these circumstances, it is necessary to study to analyze the business benefits based procurement system slaughterhouse beef cattle and meat sales in PD RPH Makassar. The results of this study are expected to know the problems faced and the advantages associated with the slaughterhouse system implemented as well as efforts to overcome them.

RESEARCH METHODS

This study was conducted from April to June 2013 in Local Company Slaughterhouse Makassar. This study was performed using methods Case Study, with the selection of a case is not a normal case (Wirartha, 2006) [6] is selected butchers who routinely cuts are minimal 15 days a month. Considering that this is the butcher who is a major supplier of beef sourced from PD RPH Makassar. Total populations were 30 people, but who routinely perform cutting only about 13 people. Of the 13 samples randomly taken 10

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people. Data collected by the method of direct observation of the activities carried out starting from the procurement of cattle slaughterhouse in slaughterhouses, cutting process, until the meat is ready to be marketed and interviews by using a set of questionnaires that have been prepared, including the identity of respondents, activities undertaken, costs incurred, components of the product, the price of each product, the components of investment, prices and economic age. For the calculation of benefits, the samples taken from cattle slaughterhouse implemented various systems in the business. Total samples taken 190 cows tail. Secondary data were obtained from the PD . RPH Makassar. The data obtained were tabulated and analyzed using a simple statistik and descriptive analysis. The calculation of the advantages of using the formula : $\Pi = TR - TC$ (Soekartawi, 2003)[7], where Π is the net profit (Rp/head), TR is Total revenue (Rp/head) and TC is the total cost (Rp/head). TR in this study is the value of the sale of meat and by-products, the TC is the total cost incurred starting from the procurement process until the meat is ready to be marketed cattle consisting of fixed costs and variable costs. From the results of this calculation will be analyzed descriptively to see the connection between the systems is applied starting from the procurement of cattle through the sale of meat is associated with costs and benefits.

RESULTS AND DISCUSSION

Costs, Revenues And Profits In PD RPH Butcher Makassar.

Business profits are the main components that the company continued (sustainable). To analyze the butcher business profits, it must first know the components forming the advantage that the costs and receipts.

Cost

In producing the product can not be separated from issues of production costs, i.e costs that must be paid by the manufacturer to obtain and use production inputs (Mappangaja ,2012)[8]. According Nasehatun (1999[9]), the cost of goods and services or an asset that is sacrificed in the company to generate revenue during the accounting period. According Siagian (1999)[10], the cost is the burden of payment for service, such as materials, wages, insurance, material needs, transportation, depreciation, taxes, procurement and sales promotion. Costs consist of fixed costs and variable costs. Fixed costs are costs that do not change according to changes in the quantity of goods produced or entity sold. Variable costs are direct costs that can be changed according to the changes in the number of unity of goods produced or sold (Winardi , 1993)[11]. Total fixed costs (BTT) is the total fixed cost for production inputs. Total variable costs (BVT) is the number of elements of variable production costs. In a production process, the total cost (BT) is the sum of total fixed costs and total variable costs (Mappangaja,2012)[8]. Costs incurred by the butchers who operate on PD RPH Makassar, varies depending on the procurement system of beef cattle (Table 1). The main components of business costs in cattle slaughterhouse in Makassar RPH is the purchase price and the cost of beef cattle procurement process to become flesh.

1. Price Buy Cattle

Butcher cows implement two pricing systems buy cows, the purchase price is based on weight of beef cattle after the cut and cattle purchase price based on estimated live weight of beef. The purchase price is based on weight of beef cattle after beef cut that is carried by cattle traders (especially the fixed supplier of butcher) or other cattle traders who agree with the system will be carried live cattle slaughtering of meat and then the results are carefully weighed and multiplied by the price designated buy butcher meat (Rp 71.000 /kg) is higher than the selling price of meat to the butcher (Rp 68.000/kg) or a difference of Rp 3.000/kg. The purchase price per head of cattle estimated live weight of beef varies because, meat weight differences and the difference in price per kilogram based purchasing system. To overcome the problem of the difference in weight of meat per head of cattle, the cattle price is calculated per kilogram of meat produced. This system also occurs at RPH Makassar, that to determine the price of live cattle, meat obtained from the estimated weight at certain specified times the price of butcher (Rp 71.000 - Rp 72.000 /kg). This estimation system that sometimes causes a big profit or loss slaughterhouse large, that missed estimates after the cut of meat production. Table 1. seen that the purchase price is based on an average cow per kilogram of meat, the highest in the purchase of cattle at slaughter location Makassar (Rp 711.56.91/kg),and lowest in cooperation with the purchase through traders in NTT and NTB (Rs 64641.54 /kg). This happens because the price of cattle purchased in Makassar RPH location includes the cost of procurement of cattle from bovine source area to Makassar. Prices of cattle that go through cooperation with inter-island trader's collector simply submit a collective price (the total value of cattle being sent) to the slaughterhouse and include costs incurred until the cows arrive at the port Jeneponto, but not including profits from traders and costs after got off the ship until the cows arrived in Makassar. The cost of the port of Jeneponto up to Makassar to be borne by the slaughterhouse and profits from the sale of the meat will be split between the slaughterhouse and inter-island traders.

2. The cost of the procurement process until the cows into meat.

The cost of the procurement process until the cows into meat includes all costs incurred from procurement of cattle (other than the purchase price of cattle) until after the sale of meat. The cost of the procurement process until the cows into meat and postsale consist of : the cost of procurement of livestock (call charges, service charges fixed supplier for butchers who do, the cost of transportation of cattle for the cattle purchases outside the slaughterhouse, the commission fee for the launcher (the person who helps merchants to get the cow up for sale but did not decide the price of cattle), the cost of administration and inspection of cattle for the cattle purchases directly to the area), the cost of slaughter (labor costs and rental services abattoir PD.RPH Makassar), the cost of marketing/after meat sales (cost of packaging/ plastic bags, fee billing). Fixed cost component is the depreciation of equipment (knives, rocks up and private cars to transport the cattle to buy in the area).

Table 1. Average Meat Production, Variable Costs, Fixed Costs, and Total Costs By Buying And Selling System

No	Commentary	Average Meat Production	Variable Costs			Fixed Costs	Total of Cost
			Average purchase price of cattle	The cost of cattle procurement process - the sale of meat	Total Variable Costs		
			(Rp)	(Rp)	(Rp)		
1	Price Buy Beef Meat Based on weight after being cut; Sales Meat In grading						
	Average/ head	57,07	4.051.733	152.254	4.203.988	76,92	4.204.065
	Average/ kg meat	1,00	71.000	2.668	73.668	1,35	73.669
2	Price Buy Beef Meat Based on weight after being cut; Sales Meat Not In grading						
	Average/ head	99,20	7.043.200	153.771	7.196.971	76,92	7.197.048
	Average/ kg meat	1,00	71.000	1.550	72.550	0,78	72.551
3	Cows Based Estimated Purchase Price; purchase locations in the area; Sales Meat Not In grading						
	Average/ head	80,40	5.653.333	321.561	5.974.894	7.018	5.981.912
	Average/ kg meat	1,00	70.315	4000	74.315	87,29	74.402
4	Collective Cow Bid Price; cooperation with inter-island traders; sales meat not in grading						
	Average/ head	94.85	6.131.250	278.884	6.410.134	108,13	6.410.242
	Average/ kg meat	1.00	64.642	2.940	67.582	1,14	67.583
5	Cows Based Estimated Purchase Price; Purchase at locations PD. RPH Makassar; Sales Meat not in grading						
	Average/ head	80.87	5.754.426	156.581	5.911.007	132.09	5.911.139
	Average/ kg meat	1.00	71.157	1.936	73.093	1.63	73.095

Table 1. It can be seen that the slaughterhouses are issuing fee procurement process to be the largest meat cows are cows that make purchases directly to the regions (Rp 4000/kg of meat). Costs incurred include a commission fee for the launcher average Rp 75000 /head, livestock transportation costs Rp 50000 /head, administrative costs Rp 55.000 cattle in the area / head while the other costs are similar to PD RPH slaughterhouse in Makassar. The cost of cattle procurement process to become the second largest meat is a butcher who makes a purchase through cooperation with inter- island traders, due to bear the cost of transportation from the port Jeneponto to Makassar (Rp 2940 /kg of meat). The cost of major components of the process is labor costs around Rp 100.000 - Rp 175.000/head and rental RPH services including all facilities required in cutting cattle, except knives and grindstone is Rp 32.000/head.

3. Fixed Costs

Component of fixed costs incurred slaughterhouse because only a very small knife and equipment depreciation grindstone. The size of this cost depends on the price of buying a knife (Rp 25.000 - Rp 500.000 /unit) and economical age of 2 years to 7 years. All other infrastructure needed for cattle slaughtering prepared by PD RPH Makassar and butchers only pay rent abattoir services and all existing facilities in the area of PD RPH Makassar.

Reception (Value Sales Meat by-products)

Acceptance (revenue) is multiplication of the amount of production obtained by selling price (Soekartawi, 2003) [7]. Different components according to system acceptance butcher meat sales. Acceptance butcher meat sales method in grading obtained from the production of meat and all by-products such as skin, bone thigh to foot, head meat, "tetelan", offal, tripe, bone head and "konro" bones (cervical vertebrae, spine, ribs to head) multiplied by the price of each; While Acceptance butcher meat sales system that is not graded obtained from the production of meat and some by-products (skin, bone thigh to foot, head meat, and some viscera, "tetelan") multiplied by the price each. Which belongs to the category of meat by butchers is all the meat after removed from the bone plus liver. These two components are combined in a weighting for the calculation of acceptance of meat non-graded. As for meat is meat graded/grouped into three namely: thigh meat group consists of meat: the hamstrings (shank, inside/knuckle, silverside, and rump, topside), sirloin, and tenderloin/fillet, the quads (chuck and shank). "Patompo" meat group consists of meat: blade and cuberoll. thin meat group consists of meat : flank, rib meat, brisket and liver. The grouping of the different meats with SNI classifies meat according to group/grade I, II, III. Group I consisted of grade meat Cuberoll/lamusir, sirloin, and tenderloin/Fillet/ has in; Group II consists of meat class: inside/knuckle, Silverside, rump, topside, kijen/chuck tender, chuck and blade; meat group consists of class III: blade, Flank, Rib meat, brisket (Anonymous , 2008) [12]. The price of meat is graded: grade/group thigh meat Rp 67.000/kg, meat "patompo" Rp 60.000 /kg and thin meat Rp 53.000 /kg. Servings of meat

each group is different in one cow, so we get the average price in beef grading Rp 62.853.97/kg, while sales prices of meat that is not in the grading at the slaughterhouse level of Rp 68.000 - Rp 69.000/kg, leather Price Rp 8.000 - Rp 10.000/kg, the price of meat heads "tetelan" partial bowel (weighed join) varies between Rp 28.000 - Rp 37.000/kg; price to the bones of the thigh to the foot of Rp 110.000 - Rp 130.000/head; price of the parts that separated: "tetelan" (fat without meat) = Rp 20.000/kg; meat head/"kalakasa" (beef cheeks, lips, ears, nose) Rp 40.000/kg, the price of the small intestine and lungs Rp 37.000/kg. Average receipts butcher business by buying and selling system can be seen in Table 2. From Table 2 it can be seen, that the meat is graded system sales/receipts grouped largest total gain per kilogram of meat and by-products, namely Rp 80.571/kg. Even if only seen from the receipt of any meat for meat at a lower grading, because the average price of meat in grading only Rp 62.854/kg, lower than the price of meat that is not in the grading of Rp 68.000/kg. This low price is covered meat from meat by-product acceptance is greater. Average follow- acceptance results in meat that is not grading Rp.710.200/head or Rp 7.159/ kg of meat, meat by-product while in the grading of Rp 1.011.053 /head or Rp 17.717 /kg meat.

Profit

Profit is the difference between total revenue and total cost, which is often written with the formula $\Pi = TR - TC$, where Π is the profit, TR is the total revenue and TC is the total cost (Soekartawi, 2003)[7]. From Table 2 it can be seen that the greatest benefit derived butchers who make purchases based on weight of beef after slaughtering and meat sales grading system that is Rp 393.855/head Rp 6.902/kg or meat and by-products. This is because the value of sales of high meat byproduct. Butcher the highest benefit to the two butchers who are cooperating with inter island traders of Rp 745.408/head or Rp 7859/kg. Despite this advantage is still divided between butchers and traders between islands, so that each earn a profit of Rp 372.704/ head or Rp 3.929/kg meat and by-products. Butcher is the lowest gain butchers who make a purchase of cattle to the region of Rp 166.555 /head or Rp 2.072 / kg, because of the huge costs incurred. Overall the system implemented by the slaughterhouse profitable; accordance with the results of this study Suryanto (2006)[13], that the cattle slaughterhouse business profitable and feasible to be developed.

Table 2. Average Receipts, Total Costs and Benefits of Butcher based system of buying and selling cow meat.

No.	Commentary	Average Receipts (Rp)	Average Cost (Rp)	Average Gain (Rp)
1	Price Buy Beef Meat Based Weight After the cut; Sales Meat In grading			
	Average/ head	4.597.920	4.204.065	393.855
	Average/kg meat	80.571	73.669	6.902
2	Price Buy Beef Meat Based on weight after being cut; Sales Meat Not In grading			
	Average/ head	7.455.800	7.197.048	258.752
	Average/kg meat	75.159	72.551	2.608
3	Cows Based Estimated Purchase Price; purchase locations in the area; Sales Meat Not In grading			
	Average/ head	6.148.467	5.981.912	166.555
	Average/kg meat	76.473	67.582	2.072
4	Price Buy Cattle collective; cooperation with inter-island traders; sales in meat grading			
	Average/ head	7.155.650	6.410.242	745.408
	Average/kg meat	75.442	67.583	7.859
5	Cows Based Estimated Purchase Price; Purchase at locations PD. RPH Makassar; sales in meat grading			
	Average/ head	6.128.883	5.911.139	217.744
	Average/kg meat	75.787	73.095	2.693

CONCLUSION

Based on the results and discussion can ditari following conclusion :

1. Butcher cattle in PD.RPH Makassar apply some beef cattle procurement systems, namely : procurement of beef cattle directly to the area, the procurement of cattle through cooperation with inter-island traders and procurement of beef cattle in locations PD.RPH.
2. Butcher cows in PD.RPH Makassar apply two pricing systems buy beef cattle, namely : (a) the pricing is based on the production of beef after slaughtering multiplied certain specified price by the butcher (Rp 71.000/kg). The purchase price of beef is set higher than the selling price of meat to the butcher (Rp 68.000/kg for meat that is not in the grading and an average of Rp 62,854 / kg for meat in grading). (b) Determination of the purchase price of beef cattle based on the estimated beef of certain specified times the price of butcher (around Rp 71.000 - Rp 72.000/kg). The price difference is covered from meat by-product of Sales.
3. Butcher cows in PD.RPH Makassar apply two beef sales systems, i.e systems sales in grading and meat are not grading (mixed). Both of these systems differ in terms of pricing and distribution of meat byproduct. The price of meat is classified lower than the price of meat is not classified, but

the meat by-product in the grading, all taken by the slaughterhouse while for systems that are not in the grading of meat, meat by-product divided by the beef trader.

4. Procurement systems of cattle and meat sales associated with profit. Butcher the highest gain is implementing a system in grading meat sales (Rp 393.855/head or Rp 6.902/kg), then butcher who procure cattle through cooperation with inter-island traders with a system that is not grouped meat sales (Rp 372.704/head or Rp 3.929/kg) , butchers who make purchases at locations cattle slaughterhouses with systems that are not in the sale of meat grading (Rp 217.744/head or 2.693/kg), butchers who make purchases based on weight of meat cattle after cut and implement systems that meat sales not in grading (Rp 262.323/head or 2644/kg), lowest profit is a butcher who makes a purchase of cattle in the area with a system that is not in the sale of meat grading (Rp166.555/head or Rp.2072/kg).
5. If viewed from the side of the butcher, the best system is the highest benefit to the butcher, ie systems which make the purchase based on weight of beef cattle after slaughtering and apply of meat sales system in grading, but need further research to see how the influence of this system to upstream (cattle traders) and downstream (meat

traders), because the system is a good trading system that can provide a fair distribution to all agencies involved trading system.

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