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INCOME ANALYSIS OF FRESH PORK BUSINESS ACTORS ON DIFFERENT PAYMENT PATTERNS IN LANGKE REMBONG SUBDISTRICT OF MANGGARAI DISTRICT, INDONESIA

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ABSTRACT

Payment patterns both direct cash and credit in pork selling will influence profit levels of each seller. Therefore, a research was conducted with an objective to evaluate the difference of income of the pork sellers using different payment patterns namely cash and credit. In the research area, the credit pattern called *leis*, a payment pattern that consumers were listed before selling the pork include edible non-carcass and the payment will be held a month later. The research method used was survey. Primary data were taken using techniques of observation and direct interview based on prepared questionnaires. Method of data analysis applied were income analysis followed by comparison test of two averages. The result showed that averages income of direct cash pork sellers gained was IDR 1,347,055.56,-/head of pig, while the *leis* pattern gained was IDR 1.904.896,73,-/head of pig. There was a significant difference of income between direct cash and *leis*. In conclusion, the income of pork seller in *leis* pattern was higher than that of direct cash.

KEY WORDS

Fresh pork, payment pattern, credit, *leis*.

Manggarai Regency is a regency in Flores Island Province of Nusa Tenggara Timur (NTT), Indonesia. The regency capital is located in Ruteng. The regency width covers 7,136.4 km² and it civilized by 325,530 people with density 149 persons/km² (Badan Pusat Statistik Kabupaten Manggarai 2021). The regency is a potential area to develop farm sector include livestock sub sector. Data of Manggarai Regency showed that in 2021, there were 93,470 farmers both in food crops and livestock. Besides, the agriculture still has the biggest contributes toward economic structure in Manggarai Regency with its contribution is 1,54%. The data showed that the agriculture sector is the major economical sources for the community and the area. The regency has a significant potential of pigs. It can be seen on the pig's population in period of 2019-2020. In the year of 2019 the pig's population reached at 47,316 heads and in 2020 it was increased 20 % and reached to 56,779 heads (BPS NTT, 2021).

One of the pig's production centers in Manggarai Regency is Langke Rembong Sub-district. The pig's population in Langke Rembong Sub-district was increased 3% in period of 2019–2020 because the population were 3,328 heads in 2019 and increased to 3,437 heads in 2020 (Kabupaten Manggarai dalam Angka, 2021). The increasing of the pig's population influenced by the community realizes to raise the pigs in order to support household economy. Commonly, the finisher pigs were sold to the pork's sellers to be slaughtered in abattoir and outside of the abattoir. It was reported that in Langke Rembong Sub-district, the pigs' slaughtered at the abattoir reached at 2,234 heads comprise 1,155 heads of male pigs and 1,079 heads of female pigs; while at outside abattoir were 8,936 heads (BPS Kabupaten Manggarai, 2021).

Each pig's slaughtering place in Langke Rembong Sub-district has some characteristics. The characteristics cash pattern were as follow: 1) the slaughtering was done by the pork sellers in abattoir, 2) the pork selling was in cash and the pork was sold in a unit based on IDR /kg, 3) the abattoir's sellers gained cash revenue directly during transaction, 4) the products sold were vary, such as pork, bones, and edible non carcass, 5) the pork, etc.,



were sold every day at the abattoir as fresh pork, then unsold products will be frozen to be sold at the next 2–3 days. Then, the characteristics of credit (*leis*) pattern were as follow: 1) the pigs were slaughtered at farmer house, 2) the products were sold in credit called *leis* and it will be paid a month later, 3) the products were sold in a unite or a collection products comprise pork, bones, and edible non carcass namely *per kumpul* 3) the farmer will gain the payment a month later or based on agreements, 4) the consumers were listed (called *leis*) before slaughtering the pigs, 5) all consumers got the same products in one unite, 6) the products were sold as fresh products just after slaughtering, and 7) commonly the selling system namely *leis* was done before Christmas, New Year, Easter, or to gain an income for education and pre harvest time of coffee, clove, or rice. The similarity of those two selling systems was to support the household economy; while the differences were the selling system and cash income gained.

Thus, it can be stated that the pork's selling system in Langke Rembong Sub-district was done in two different ways namely on cash and on credit based on the list name of consumers called *leis*. The selling of pork on cash was located in two traditional markets, while on credit (*leis*) was located in the farmer's house.

The problem faced that whether the different selling system caused the difference income gained by the pork's sellers. Actually, information about the problem was limited. Therefore, the analysis applied was comparison analysis of income gained by the pork sellers through those two different selling system. This analysis used in order to evaluate which selling system was more effective to increase the income of the pork's sellers.

The research problem formulation was: How much difference of pork sellers' income between direct cash payment pattern and credit (*leis*) pattern in Langke Rembong Sub-district, Manggarai Regency. Actually, the cash pattern was done by the pork's sellers in abattoir, while the *leis* pattern was done by the pork's sellers at outside of the abattoir.

The research objective was to evaluate the income difference between the pork's sellers based on cash payment pattern (in abattoir) and credit (*leis*) payment pattern (at outside of abattoir) in Langke Rembong Sub-district, Manggarai Regency, Indonesia.

METHODS OF RESEACRH

The research was conducted in Langke Rembong Sub-district, Manggarai Regency. The research used a survey method to collect primary data. The primary data were collected by applying techniques of observation and direct interview to the pork's sellers as samples. The interviews were taken based on prepared questionnaires. Then, secondary data were collected by applying documentation technique. The secondary data were collected from Government and private institution's reports include relevant journals.

There were three methods of the data analysis, namely analysis of qualitative descriptively, income, and comparative. Analysis of qualitative descriptively was based on analysis of averages, standard deviations, and cross tabulation. Then, the analysis of qualitative descriptively was continued with the income analysis according to Soekartawi (2006) and the comparative analysis using t-test according to Sudjana (2002).

RESULTS AND DISCUSSION

Lay *et al.* (2022) cost is the price paid by business actors for the procurement of all input factors needed in the production process. Production cost in selling pork entrepreneurship spent by the pork's sellers in Sub-district of Langke Rembong Manggarai Regency comprise by fixed cost and variable cost as shown on Table 1. The fixed cost of both cash and credit (*leis*) systems cover the cost of depreciation of cages and slaughtering equipments.

The fixed costs of cash and credit (*leis*) in selling pork were the cost of buying pigs and slaughtering equipments. Which includes the fixed cost component, namely the depreciation cost of cages and equipment (Abraham *et al.*, 2013). The results of the analysis showed that the total fixed costs in the direct cash payment pattern were IDR 110,333, while the total



fixed costs in the credit payment pattern were IDR 223,681. The types of fixed costs in the direct cash and credit (*leis*) payment pattern were the average depreciation cost of the cage in *leis* was IDR 117,016.67, and the average depreciation cost of direct cash cutting equipment was IDR 110,333, while the average depreciation cost of credit cutting equipment (*leis*) is IDR 106,665.

The variable costs in cash system of selling pork enterprise in Sub-district of Langke Rembong consist of labor cost, abattoir cost, transportation cost, and rope's cost; while the variable costs in credit (*leis*) system cover costs for feed, health care (medicine), transportation, and ropes. Variable costs are costs incurred in a business whose magnitude changes following changes in sales (Jo *et al.*, 2022). The result of analysis showed that the total cost of cash system was IDR 6,220,944; while the total cost of credit (*leis*) system was IDR 3,261,769.94. Fukson *et al.* (2021) states that the sale of pork outside the market is carried out by farmers themselves where the sale uses the raka/*leis* system, namely the sale of meat in piles.

Based on the total cost on Table 1 it can be known that there were some kinds of costs in pork's selling system either cash or credit. Average cost of buying pigs of cash system reached at IDR 5,700,000; while in *leis* system reached at IDR 1,715,196. Actually, the pigs bought by the cash pork's sellers were finisher pigs that ready to be slaughtered. However, the pigs bought by the credit (*leis*) pork's sellers were anak babi that must be raised until reaching the finisher phase that ready to be slaughtered and sell in *leis* system for consumer. Regarding the cash selling system, the average costs of: labor was IDR 115,833, abattoir rent was IDR 30,000, rope was IDR 19,833, transportation was IDR 111,833, and others was IDR 133,333. Further, in case of credit system, the average costs of: feed was IDR 833,333, medicine was IDR 230,882, transportation was IDR 85,000, rope was IDR 27,303, and others were IDR 146,372.

Table 1 – Cost, revenue, and income of pork's sellers (cash and credit selling system)

Description	Values (IDR)			
	On Cash	Percentage (%)	On Credit (<i>Leis</i>)	Percentage (%)
Fixed cost				
Depreciation of cages	0,00	0.00	117,016.67	0.53
Depreciation of cutting equipments	110,333.11	0.31	106,665.03	0.48
Total fixed cost	110,333.11	0.31	223,681.70	1.01
Variable cost				
Buying pigs	5,700,000,00*	16.21	1,715,196.08**	7.77
Labors	115,833.33	0.33	0.00	0.00
Abattoir's rent	30,000.00	0.09	0.00	0.00
Transportation	111,833.33	0.32	85,000.00	0.39
Ropes	19,833.33	0.06	27,303.92	0.12
Feed	0.00	0.00	833,333.33	3.78
Medicine	0.00	0.00	230,882.35	1.05
Others	133,333.33	0.38	146,372.55	0.66
Total variable cost	6,110.833.33	17.38	3,038.088,24	13.77
Total costs	6,220,944.44	17.69	3,261,769.94	14.78
Revenue				
Sellers of cash system	7,568,000.00	21.52		
Sellers of credit system			5,166,666.67	23.42
Total revenues	7,568,000.00	21.52	5,166,666.67	23.42
Total income	1,347,055.56	3.83	1,904,896.73	8.63
Income/kg	21,359.23	0.06	38,705.07	0.18

Source: Primary data, 2023 (analyzed).

Note: *cost to buy finisher pigs; **cost to buy smaller pigs.

The pork's sellers of cash system gained the revenue from selling the pork in the market. They bought the pigs from neighbors and the other areas. The pigs, then, were slaughtered at the abattoir. In contrast, the pork's sellers of credit system gained the revenue from fattened pigs raised by them since the pigs were 2–3 months old. Naga *et al.* (2019) stated that revenue is the value of output produced in a business. Furthermore, Masu *et al.*



(2020) stated that the revenue component in a business consists of cash receipts and non-cash receipts. The result showed that the revenue of cash system reached IDR 7,568,000/head, while the revenue of the credit system IDR 5,166,666/head.

The income is a result of total revenue minus total cost spent in a production process. Lalus *et al.* (2019) stated that income is the amount of income earned by households in a month, both sourced from the head of the household and sourced from other household members who work and earn income. Data on Table 1 showed that the average income of cash system was IDR 1,347,055/head or IDR 21,359/kg; while the credit system was IDR 1,904,896.73/head or IDR 38,705.07/kg.

Comparison of income between those two selling system of pork namely cash and credit (*leis*) can be known by applying *independent t-test* according to Sudjana (2002). The t-test was done in order to compare the income of those two kinds of pork's sellers either cash or credit (*leis*) system in Sub-district of Langke Rembong Regency of Manggarai. The result of t-test was shown on Table 2.

Table 2 – Result of t-test

	F	df	Significance			95% confidence interval of the difference		
			One-sided p	Two-sided p	Mean difference	Std. error difference	Lower	Upper
Equal variances assumed	2,2680,1357,992130		<,001	<,001	2401333,33	300454,07	1806920,87	2995745,79
Equal variances not assumed	9,56465,727		<,001	<,001	2401333,33	251092,79	1899971,52	2902695,15

Source: Result of SPSS Analysis, 2023.

Average income/head of pig gained by the cash pork's sellers was IDR 1,347,055, while the credit pork's seller gained was IDR 1,904,896.73. Based on Table 2 it can be seen that t count = 9.564 with significance of < 0.001, it means there was a significant difference income per head of pig gained by the credit (*leis*) pork's sellers. The income gained by the credit (*leis*) pork's sellers was significant difference and higher than that of the cash system. It can be concluded that the difference of the income at IDR 557,841 was significant.

CONCLUSION

The income of the pork's sellers in cash payment system reached at 1,347,055.56/head, while in credit (*leis*) system reached at IDR 1,904,896.73/head; so the income of the credit (*leis*) system was higher than that of the cash system in Sub-district of Langke Rembong Regency of Manggarai.

The recommendations as follow:

- The pork's sellers both in cash and credit (*leis*) systems can develop the selling system since the systems were profitable;
- Government of Langke Rembong Sub-district Manggarai Regency, particularly Livestock Institution, should participate to improve the capability of the pork's sellers in developing their entrepreneurship;
- The next researchers can continue the same research but using different variables.

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