Factors determinant of horse selling price in Tolo animal market Kelara district Jeneponto regency

S Wiranata, S Kadir and K Kasim
Department of Social Economic, Animal Science Faculty, Universitas Hasanuddin, Makassar, Indonesia

E-mail: kasmihirdan@yahoo.co.id

Abstract. This study aims to determine the external level of performance (shoulder height, waist height, body length and chest circumference) and transaction costs as a determinant for the sale price of horses in the Tolo Animal Market, Kelara District, Jeneponto Regency. This research was carried out from January to March 2020. The type of research used is a quantitative explanation that aims to determine the impact of independent variables on the dependent variable. The type of data used is qualitative data. The sample used in this study included 50 horse sales transactions. The data was collected using questionnaires and interviews. Analysis of the data used in this study is a multiple linear regression using SPSS windows 24. The results of this study show that performance exterior (shoulder height, waist height, body length, chest circumference), body weight and transaction costs all have a significant impact on determinants of the selling price of horses in the Tolo animal market, while individually or partial variable body weight significantly influence the determinants of the selling prices for horses in the Tolo animal market, Kelara District, Jeneponto Regency.

1. Introduction

One type of livestock that needs attention and potential for meat production is horse livestock. Horse farming can be an alternative provider of meat, as well as working cattle [1] and can also be used as a competition arena in the community such as horse races. Horses are closely related to humans who play an economical role in transportation (wagons, saddles) and load carriers [2] and are even used as a source of animal protein (producing meat and milk). It was further explained that horses can be used as war horses, race horses, recreational horses and used as symbols of social status in certain cultures [3].

Horses are included in the animal group in the Chordata phylum, namely animals that have vertebrates and belong to the class of mammals, namely animals that breastfeed their children [2]. This livestock has long been one of the most economically important livestock and has played an important role in the transportation of people and goods for thousands of years. Horses can be ridden by humans using a saddle and can also be used to pull something like a wheeled vehicle [3].

South Sulawesi is one of the provinces in Indonesia which is the center for the development of horse farms. The potential number of horse livestock population by Regency in South Sulawesi can be seen in table 1.
| No. | Regency  | Horse population | Percentage (%) |
|-----|----------|------------------|----------------|
| 1   | Selayar  | 4,062            | 2.04           |
| 2   | Bulukumba| 29,428           | 14.80          |
| 3   | Bantaeng | 16,938           | 8.52           |
| 4   | Jeneponto| 92,945           | 46.771         |
| 5   | Takalar  | 720              | 0.36           |
| 6   | Gowa     | 9,151            | 4.601          |
| 7   | Sinjai   | 2,605            | 1.31           |
| 8   | Bone     | 11,192           | 5.63           |
| 9   | Maros    | 7,163            | 3.602          |
| 10  | Pangkep  | 10,211           | 5.131          |
| 11  | Barru    | 3,346            | 1.68           |
| 12  | Soppeng  | 4,220            | 2.12           |
| 13  | Wajo     | 2,693            | 1.352          |
| 14  | Sidrap   | 226              | 0.11           |
| 15  | Pinrang  | 1,088            | 0.54           |
| 16  | Enrekang | 89               | 0.04           |
| 17  | Tanah    | 694              | 0.35           |
| 18  | Palopo   | 0                | -              |
| 19  | Luwu     | 0                | -              |
| 20  | Luwu Utara | 1,796     | 0.90           |
| 21  | Luwu Timur| 0           | -              |
| 22  | Makassar | 54               | 0.02           |
| 23  | Pare-Pare| 6                | 0.003          |
| 24  | Toraja Utara | 85         | 0.04           |

Total  198,712 100

*Source: Sectoral Statistical Data from the Livestock Service Office of South Sulawesi Province, 2018 [4]*.

Based on Table 1 it can be seen that the highest horse population is in Jeneponto Regency as much as 92,945 heads with a percentage of 46.771%, while the lowest is in Pare-pare City 6 with a percentage of 0.003% and Palopo City, Luwu Regency and East Luwu Regency do not have horse population [4].

Along with a high population, Jeneponto Regency is also synonymous with the city of horses. Apart from the habit of raising horses, they also like to consume horse meat. This is in accordance with the opinion of [5] which states that consumer preferences of processed horse meat are very good as well as several reasons that cannot be explained rationally in consuming processed horse meat, namely increasing stamina and being able to treat tetanus.

The highest horse population in Jeneponto Regency is in Kelara Subdistrict as many as 23,167 heads with a percentage of 24.92% [6]. In Kelara Subdistrict, there is one animal market that sells the largest horse in South Sulawesi, where this market tends to sell horse livestock compared to other livestock because the people of Jeneponto Regency are more likely to consume horse meat. This market also conducts sale and purchase transactions of live livestock and livestock when they have been slaughtered. Horses in the Tolo Animal Market in Jeneponto Regency are not only horses in Jeneponto, but also those from Bima, West Nusa Tenggara, Sumba, to Merauke, Papua.

The most urgent problem (urgent) and must be resolved at this time in the horse livestock trade, especially in the Animal Market of Tolo Village, Kelara District, Jeneponto Regency, is information...
about the factors that influence horse livestock traders in determining the selling price of livestock. Based on these problems, the objective of this research is to determine the exterior performance (shoulder height, hip height, body length and chest circumference), body weight and transaction costs to determine the selling price of horses in the Tolo Animal Market, Kelara District, Jeneponto Regency.

2. Material and methods
The population in this study were all traders who made transactions in the sale of horse livestock at the Tolo Animal Market, Kelara District, Jeneponto Regency, carried out for 2 months (in 1 week 2 market days), namely 100 transactions on Tuesday and Thursday. To determine the sample size, the Slovin formula is used. The number of samples obtained from the calculation using the Slovin formula is 50 samples

The analytical tool used in this research is Multiple Linear Regression which aims to determine / predict the existence of factors that influence the determining of the selling price of horses in the animal market using SPSS 24 for windows [7].

3. Result and discussion

3.1. An overview general market animal Tolo
The tolo animal market is one of the largest animal markets in South Sulawesi. The tolo animal market or commonly known as the Tolo horse market is unique because the animal market only sells horse livestock. The Tolo animal market has been around for decades and has become the center of horse sales in South Sulawesi. Tolo animal market operates every Tuesday and Saturday from 06.00 am to 03.00 pm. Horses sold at the Tolo animal market come from Jeneponto to Bima and Flores. The price of horse livestock at the Tolo animal market ranges from IDR. 7.000.000, up to tens of millions of Rupiah depending on the traditional wedding season in Jeneponto Regency. Horses originating from Bima and Flores are marked with a stamp (Tatto) on the horse's back. Horses sold at the Tolo animal market must have a live livestock sales permit card from the Tolo Village Office. The horse transaction process in the tolo animal market is the same as in other markets. To get an animal card, the buyer is charged IDR. 10.000/head. In addition, sellers operating in the tolo animal market are charged a cleaning fee of IDR. 5.000.

3.2. Test influence simultaneously (F-Test)
The F-Test is used to prove whether the independent variables (Shoulder Height, Body Length, Chest Circumference, Body Weight, and Transaction Costs) together (simultaneously) have a significant effect both positively and negatively on the dependent variable (Horse Selling Price). The simultaneous test results or the F-Test can be seen in this Table 2.

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---|----------|-------------------|---------------------------|
| 1     | 0.823  | 0.77    | 0.640             | 457385.708               |

Table 2. F Test Test Model Summary.

Based on table 2, it can be seen that the R-value shows the correlation between the independent variable and the dependent variable. Based on the results of the processed data, the R number obtained is 0.823. means that the correlation between the independent variable Shoulder height (X1), Body Length (X3), Bust (X4), Body Weight (X5) and Transaction Costs (X6) to the horse selling price (Y) is 0.823. This means that there is a very close relationship because it is close to one.
The value of Adjusted R Square shows the coefficient of determination. This figure will be converted into a percent, meaning the percentage of the influence of the independent variable. Shoulder height (X1), Body Length (X3), Chest Circumference (X4), Body Weight (X5), and Transaction Costs (X6) to the dependent variable horse selling price. (Y) is 0.640 or 64%, while the remaining 36% is influenced by other variables that are not included in this model.

3.3. Result analysis regression use linear multiple

The results of the analysis using multiple linear regression are used to see the effect of the independent variable Performance Exterior (shoulder height, body length, chest circumference), body weight, and transaction costs on the dependent variable selling price of horses at the Tolo animal market, Kelara District, Jeneponto Regency seen in this table 3.

| Variable Free | Variable Bound | Coefficient Regression (B) | T Count | Sig | Information |
|---------------|----------------|-----------------------------|---------|-----|-------------|
| Constant      | Selling price (Y) | 2426896.781 | 1.338 | 0.188 |             |
| X1 (T. Shoulder) | 14898.793 | 1.355 | 0.182 | Significant |
| X3 (P. Body) | 1227.640 | .125 | 0.901 | Not significant |
| X4 (L. Chest) | 10205.334 | .752 | 0.456 | Not significant |
| X5 (Body Weight) | 36402.425 | 6.485 | 0.000 | Significant |
| X6 (B. Transaction) | 2.250 | 1.985 | 0.053 | Significant |

Multiple R = 0.823; R Square = 0.677; Sign = 0.000; F Count = 18.427

Source: Primary data that has been processed, 2020.

From the multiple linear regression equation, the regression coefficient value for the variable Shoulder Height (X1) is 14898.793, the variable body length (X3) is 1227.640, the variable chest circumference (X4) is 10205.334, the variable body weight (X5) is 36402.425 and the transaction cost variable (X6) which is 2,250 has a positive correlation. This shows that the variables of shoulder height, body length, chest circumference, body weight, and transaction costs with the horse selling price variable (Y) have a unidirectional influence, meaning that each increase in the variable shoulder height (X1), body length (X3), chest circumference. (X4), body weight (X5) and transaction costs (X6) cause an increase in the selling price of the horse (Y).

The regression coefficient value of each independent variable which affects the selling price of horses is as follows:
1. The regression coefficient of the Shoulder Height variable (X1) is 14898.793, meaning that every 1 cm increase in Shoulder Height will increase the selling price of the horse (Y) of IRD 14.898.793 assuming the other variables are fixed.
2. The variable regression coefficient of Body Length (X3) is 1227.640, which means that every 1 cm increase in body length will increase the selling price of the horse (Y) of IRD 1.227.640, assuming other variables remain.
3. The variable regression coefficient of chest circumference (X4) is 10205.334, meaning that every 1 cm increase in chest circumference will increase the selling price (Y) of IRD 10.205.334, assuming other variables remain.
4. The regression coefficient of the Body Weight variable (X5) is 36402.425, this indicates that each 1 kg increase in body weight will cause an increase in the price of horse livestock as much as IRD 36,402.425, assuming the other variables are fixed.
5. The variable regression coefficient of Transaction Costs (X6) is 2.807, which means that each increase in transaction costs will increase the selling price (Y) of IRD 2.807, assuming the other variables are fixed.
3.4. Test Individual Parameters (T Test)
The individual parameter significance test (T test) was conducted to see the significance of the effect of the independent variable on the dependent variable individually and to consider other variables constant. The parameter used for the t test in this study was to compare the significance value with the 95% real level. Tests were carried out using the sig level 0.05 ($a = 5\%$). Acceptance of the hypothesis is done if the significant value $t <0.05$ then $H_0$ is rejected, meaning that there is a significant influence between one independent variable ($X$) on the dependent variable ($Y$). The individual parameter significance test (T test) can be seen in this Table 4.

| Variable Free | Variable Bound | Coefficient Regression (B) | T Count | Sig  | Information      |
|---------------|----------------|----------------------------|---------|------|------------------|
| Constant      | Selling price (Y) | 2426896.781               | 1.338   | 0.188| Not Significant |
| X1 (T. Shoulder) |               | 14898.793                 | 1.355   | 0.182| Not Significant |
| X3 (P. Body)  |                | 1227.640                  | .125    | 0.901| Not significant  |
| X4 (L. Chest) |                | 10205.334                 | .752    | 0.456| Not significant  |
| X5 (Body Weight) |            | 36402.425                 | 6.485   | 0.000| Significant     |
| X6 (B. Transaction) |        | 2.250                     | 1985    | 0.053| Not Significant  |

Multiple R = 0.823; R Square = 0.677; Sign = 0.000; FCount = 18,427;

Source: Primary data that has been processed, 2020.

In this Table 4 the significant column (sig) is a number that shows the significance level of the test individually. Based on the significant column, it can be seen that the significance value of the variable body weight is 0.000 where the result is smaller than the significance value of 0.05 and is positive, meaning that the variable body weight has a positive and significant effect on the variable selling price of horses.

In Table 2 and 1, the significant column (sig) is a number that shows the significance level of the test individually. Based on this significant column will be discussed as follows:

1. The significance value of the shoulder height variable is 0.188, and the value is greater than 0.05, meaning that the shoulder height variable has no significant effect on the horse selling price variable.

2. The significance value of the variable body length is 0.18, and the value is greater than the significance value of 0.05 and is positive, meaning that the variable body length has no significant effect on the variable selling price of horses.

3. The significance value of the variable chest circumference is 0.901. and the value is greater than the significance value of 0.05, meaning that the chest circumference variable has no significant effect on the horse selling price variable.

4. The significance value of the bodyweight variable is 0.000, and the value is smaller than the significance value of 0.05 and is positive, meaning that body weight has a positive and significant effect on the horse selling price variable.

5. The significance value of the Transaction Cost variable is 0.053, and the value is greater than the significance value of 0.05 and is positive, meaning that the Transaction Cost variable effects on but not significant to the horse selling price variable.

4. Conclusion
Based on the result and discussion that has been done, then could drawn conclusion that Performance Exterior (High Shoulder, High Hip, Long Body and Circumference chest), Weight body and Cost transaction in a manner together (simultaneously) take effect in a manner significant to price selling livestock horse in Market Animal Tolo sub-district Kelara district Jeneponto. Currently on in a manner
individual (Partial) only variable weight body that take effect significant to price selling livestock horse in Market Animal Kelurahan Tolo sub-district Kelara district Jeneponto.

Acknowledgment
The authors would like to thank the Faculty of Animal Science, Universitas Hasanuddin for providing research facilities.

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