Determinant of Funding Accessibility and its Impacts to the Performance of Beef-Cow Breeding Enterprises in South Sulawesi Province, Indonesia

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Abstract
Objective of this study is to test the influence of determinant funding accessibility to the performance of beef-cow breeding enterprises in South Sulawesi Province, Indonesia. The samples used in this study consist of independent breeders and assisted breeders of 110 persons each, so that altogether there are 220 samples. The data are collected by using questionnaires and analyzed by multiple regression analysis using the SPSS – the Statistical Package for Social Sciences. Output of this study indicates that the determinant funding accessibility consisting of relationship, availability of information, procedure and requirements in conveying the credit proposals, as well as the location or distance between domicile of the breeders and the creditors have the influence to performance of beef-cow breeding enterprises. Partially, the relationship, procedure and requirements for credit proposal are significant and have positive relationship with performance of the enterprises, whereas availability of information and breeders’ location are not significant.

Keywords: Beef-cow breeders, business performance, and funding accessibility.

1. Introduction
One of the cattle breeding undertakings or enterprises actively performed by rural communities and has its business development motivated by the government at present is the beef-cow breeding enterprise, because during the last few years, particularly before 2010, the total production of beef was relatively low compared to the demand and consumption of beef. This is also strengthened by the Program of Minister of Agriculture on Self Fulfillment in Buffalo Meat and Beef for the year 2014, including production increase of local cows already been launched in 2010. One of the objectives of this effort is to accelerate the development of beef-cow breeding enterprises in order to increase the total population of cattle and beef production, so that the demand can be fulfilled nationally.

The access to external funding still becomes the constraint encountered by majority of the breeders in developing their cattle breeding enterprises. Factors of their constraint derive from two sides, namely from the banking factor - as the loan provider and from breeders – as the credit acceptors. The bank usually applies tight or prudent selection to its candidate debtors with the collateral requirements difficult to be fulfilled by the breeders. Kumar and Fransico (2005) explain that from the banking point of view, their business is sometimes considered as not being feasible and vulnerable to the risk and has low credit ceiling and requires high monitoring costs. Nurmanaf (2007) explains that from the view point of bank, the constraints in credit realization for agricultural sector in general are due to the fact that they consider such business is very risky and they apply the prudence principles, so that selection of clients becomes very tight with the collateral requirements, which in general are not in possession of the farmers. Meanwhile from the breeders’ point of view, they are handicapped by the requirements of collateral, complicated and time consuming administrative procedures, as well as the minimum amount of available information about the fund sources. Hyz (2011) states that some constraints in accessing the credit in bank are the high rate of interest, collateral requirement needed by the bank, long and timely procedure related to the credit proposal. Therefore, the bank credit with the lighter requirements is very much needed to help the survival of beef-cow breeding enterprises.

The limitedness of the access to external funding on the breeders constitutes one of the implications of ‘Pecking Order Theory’ (Myers, 1984). Some of the relevant research outputs are the ones as performed by Holmes and Kent (1991); Fazzari and Petersen (1993) that the small scaled enterprises use more versions of ‘pecking order theory’ in their funding decision, because their access to the external financing is very limited, so that they prefer to choose the internal funding. Several breeders are able to access to the external funding deriving from the sources of bank and of government assistance due to the fact that they generally have already developed a cooperation previously, so that the funding obstacles can be overcome. However, development of their business
shall periodically be reported to the loan providers and utilization of their funds is always monitored in order to prevent and avoid the misuse and mistarget of the fund and they have to be adherent to regulations already been agreed by both parties. This is in line with the Agency Theory (Jensen and Meckling, 1976) explaining about the relation or contract between the loan provider (principal) and the loan acceptor (agent). The use of loan as a form of external financing by the breeders is expected to be able to support development of their business. This is in line with the output of research held by Kaplan and Minton (1994) that the turnover produced by a management will be higher if a relationship is established between the bank as the principal and the company as an agent in term of external financing. This also confirms the research conducted by McMahon et al. (1993) declaring that the financing decision has the impact to the profitability of a business. The funding access facility of the breeders will influence their ability to obtain the profits. This is due to the fact that the obtained fund will be used to provide the production factors required, such as: procurement of stable or stall, seeds / calves, feeds, machines and other equipment. Improvement in these production factors will motivate them to work more efficiently, because all the required inputs have already been provided, therefore the production process can run smoothly, since it is supported by good quality of seeds /calves and feeds available in suitable amount as required so that the rearing period can be shortened. This is also described by Bigsten et al (2003) stating that ability to make profit is related to the ability to access the credit. The benefit of loan utilization is also explained by Olutunia and Obamuyi (2008) declaring that the availability of external funding or loan has positive influence to the profitability, meaning that the profits of the small and medium scaled enterprises tend to increase in line with the increase of loans. Some outputs of different researches indicate that loan as an option for the company funding also has a negative impact to the profitability as shown by outputs of researches done by Gleason et al. (2000); Hammes (2003). Based on the abovementioned subjects, this study is intended to test and analyze the determinant funding accessibility of the cattle breeders and its impacts to the performance of beef-cow breeding enterprises.

2. Literature Review

2.1. Funding Accessibility

Some theories on the existing financing decision are used more for the corporation, but its implication can be applied for micro, small and medium scaled enterprises. One of them is the Pecking Order Theory (Myers, 1984) illustrating about the financing hierarchy stating that: a) The company prefers the internal financing (financing from company operational outputs in the form of retained profits), b) If the external financing is required, the company will issue the safest security first, namely starting from issuing the bond, then followed by the optional characterized securities, and finally if still not yet sufficient, new shares will be issued. According to this theory, there is no target of Debt to Equity Ratio (DER), since there are two types of self capitals, namely internal and external capitals. Self capital deriving from the internal company is more preferable than the self capital deriving from external resources. The company prefers to use the funding from internal capital, namely the fund deriving from the cash flow, retained profit and depreciation. Chronology of fund resources application referring to the Pecking Order Theory is as follows: Internal Fund, Debt, and Equity (Self Capital). Implication of opinion to this pecking order on this study is more for the constraints faced by the breeders to access into the external funding, so that they have to use the internal financing. Holmes and Kent (1991) declare that the small scale enterprises prefer to choose the internal funding. Berger and Udell (1995) state that the significant difference between the funding deriving from the loan resources at the Small and Medium Scaled Enterprises (SME) and at the big scaled company is that the big company can access more easily into the various kinds of resources by using the loan financing, whereas the SMEs tend to use the short term loan. Another research performed by Becchetti and Trovato (2002) stated that the constraint in funding availability influences the growth of the small scaled companies.

On the other hand, the Agency Theory (Jansen and Meckling, 1976) declare that the agency relationship is a contract between a manager (agent) and the investor (principal). The conflict of interests between the owner and the agent occurs because there is a possibility that the agent does not always act in conformity with the interests of the principal, so that it creates the agency cost. This can occur due to the fact that there is a vivid split between the Owner and the Manager. However, it is completely different from the small scaled enterprises in which between the owner, the fund holder and the manager become one unity, and so is the case in the beef-cow breeding business. The agency relationship also covers the relationship between the loan provider as principal and the loan acceptor as the agent. The relevance and application of agency theory on the small scaled enterprises are described more by several outputs of researches. One of them is by Hand et al. (1982) illustrating that although there is an agency relationship in all businesses, its impact is sufficiently significant for the small scaled enterprises. Further it is explained that there are several things from the agency theory able to be applied
at the Small and Medium Scaled Enterprises (SMEs), namely: 1) The agency context is not merely between the owner and the manager, but between the enterprise management (insider) and the outside party as the fund provider (outsider); 2) Some opportunities able to be carried out by the owner-manager, such as: transferring the received resources can make the monitoring costs higher, so that the loan provider tends to limit this subject by giving it to the expert parties, such as the bank in order to monitor the activities of SMEs, the party they provide the loan.

The research outputs of Abel (2008) states that in general the small companies under research have very weak position in their finance and they rely on credit facility deriving from the commercial loans to finance their operational activities. Meanwhile, according to Fazzari and Petersen (1993); Petersen and Rajan (1997), most of the assets owned by the SMEs – Small and Medium Scaled Enterprises are in the forms of ‘current assets’, while the ‘current liabilities’ constitute one of the main resources of their external funding, because they get difficulty to access the long term loan.

The easiness in accessing the external funding resources for the cattle breeders depends on several subjects, such as: relationship with the loan provider, availability of information on fund resources, procedures, requirements and location. Good relationship established between the fund resources and the loan acceptor will influence and facilitate the breeders to access into the external funding. As already been explained at some results of the previous researches that the benefits able to be obtained from banking relationship between the borrower and the bank is that it will reduce the inefficiency in the form of the increase in flexibility in negotiation to obtain the loan; and one of the visible aspects is the duration or length of relationship developed between those two parties (Boot and Thakor, 1994). If the bank relationship runs smoothly, it will reduce the inefficiency so that the company obtaining the loan again will surely be considered as having good reputation and will be easier to get the loan (Diamond, 1991). Relationship with the external parties, including the partnership, network, and alliance constitutes an important thing in driving the small scaled enterprise in order to increase the success and profitability (Street and Cameron, 2007). The benefit of relationship is that it will reduce the information asymmetries between both parties; the borrower will get more information about several subjects including information concerning with the funding. Other benefit obtained from the relationship is that it will give more flexible and free space to the contract already been agreed previously. In addition, through monitoring, it will make the relationship between both parties closer (Boot, 2000).

The other factor determining the easy access into external funding is the availability of sufficient information on several fund resources, easily fulfilled requirements and non-complicated procedures. The availability of information in a big amount, easily obtainable and understandable will make the cattle breeders easy to get the access to the funding due to the availability of several options with their respective requirements and provisions according to the types of their funding.

The collateral requirement is one of the factors hampering the cattle breeders to obtain the loans, since in general they do not have assets to be put as collaterals, meanwhile the banks require them. This is in line with the result of research conducted by Rand et al. (2009) stating that some of the small and medium scaled enterprises cannot access the credit from the formal institution due to lack of collaterals they have, and the process to obtain the credit is too difficult, and also the rate of interest is too high. Almost the same case is explained by Beck et al. (2008) that the small scaled enterprises use the external financing lower than the big companies, because they are hampered by lack of collaterals they have, and consider that its procedure is too complicated and too long time consuming. Meanwhile for the condition in Indonesia, Nurmanaf (2007) also explains that the complicated procedure and the too much time consumption become one of the constraints for the cattle breeders to access into the funding from the bank.

The other factor determining the easy access to the fund is the distance or location or domicile or the business place between the loan acceptor and the loan provider. Sugiaro and Wiryono (2004) explain that in the loan process for capital required by the cattle breeders to the financial institution commencing from the moment of its proposal till the time when the loan is realized is influenced by the distance or location or domicile to the financial institution, the amount of visits to the said financial institution and duration of the process in credit disbursement. The same case is explained by Akram et al. (2008) that the distance from the farmer domicile to the formal financial institution is one of the factors influencing the credit activities of the farmers. The demand for credit from the formal institution is negatively related to distance of domicile to the said sources of fund. This is the reason that makes the farmers take the loans from the informal funding.

2.2. Performance of Beef-Cow Breeding Enterprises

Evaluation on business performance, particularly the financial performance at the beef-cow breeding enterprises which in general is classified as micro and small scaled enterprises cannot be carried out by using the financial
ratios. This is due to the fact that generally they do not have any complete and well-arranged financial records, such as: Financial Statement (Income Statement), Balance Sheet or the Cash Flow Report. Majority of them only have the financial record and the progress report of the business in simple way, illustrating the incoming and outgoing cash flow in a certain production period. Therefore in order to dig up the business performance, particularly the financial one, it shall be conducted by using the qualitative approach. The performance measurement applied in this study is the tendency of increase at the amount of income and the amount of cattle owned. The increase at the amount of income compares the income earned at the current year to the income earned at the previous year. The income in beef-cow breeding enterprise can derive from the sales of cows and the sales of side-products such as feces and organic fertilizer. As explained by Soekartawi (1995) that the gross income constitutes the total product value in a certain period of time, whereas the net income is the gross income after deducted by all expenses occurred in a certain period of time. The increase amount of cows in breeding compares the amount of cows taken care of at the current year to that in the previous year. Amount of these cows derives from the amount of seeds or calves purchased and the amount of calves born during the care in the said period. Those two indicators are used under consideration that the cattle breeders in general do not have a complete financial statement, while in one side they always consider that the performance or business success that they get can be seen from the amount of their net income in one production cycle and the total increase of cows reared in the following period.

3. Research Method

This is a quantitative study under a category of an explanatory research trying to explain generalization of its samples to their population or to explain about relationship, difference or influence of one variable to the others. This research applies the approach of survey method, namely the data are collected from samples of population to explain and represent the whole populations and uses questionnaire as a tool to collect information. Population in this study is a number of breeders of beef-cow breeding enterprises spread out in territory of South Sulawesi Province. The objects becoming the target of this study or the unit of analysis are the beef-cow breeders who do not get any banking credit nor government assistance, who are then referred to as “Independent Breeders” and also the breeders getting the banking credit and government assistance who are then called “Assisted Breeders”. The total amount of samples used in this research is 220, consisting of 110 samples of ‘Independent Breeders’ and 110 samples of ‘Assisted Breeders’. Samples are collected by using ‘the two stage sampling technique’. This technique is applied because the population spreads in some regencies in South Sulawesi Province, and not all regencies in the first stage will be included in this research. There are two stages to be performed, namely as follows:

Stage-I: Selecting the regencies as samples of the First Group consisting of four regencies, namely: Bone, Bulukumba, Gowa and Barru Regencies. Regency selection is based on the respective regional division in South Sulawesi based on their geographical location, due to the very large territory, so that each regency represents one region, apart from the other considerations as follows, namely: a) Bone, Bulukumba and Barru regencies are the centers of beef-cow development in South Sulawesi apart from Regency of Luwu. b) Those four regions have the biggest amount of cattle population that certainly will give impacts to the numbers of breeder group and to the amount of breeders, either the Independent or the Assisted Breeders.

Stage-II: Selecting the beef-cow breeders as the samples at the respective regencies already been previously selected. The stage in determining the samples in this study can be seen in Drwaing-1. There are 3,528 breeders in four regencies that have already received the government assistance. The ‘assisted breeders’ at the respective regions are as follows: 1,416 breeders are in Bone Regency, 876 breeders are in Bulukumba, 780 breeders are in Gowa and 556 breeders are in Barru Regency. Proportionally the amount of samples of ‘assisted breeders’ for those four regencies are respectively as follows:

- Bone Regency = 1,416 → 40.14% x 110 = 44.
- Bulukummba Regency = 876 → 25.00% x 110 = 28.
- Gowa Regency = 780 → 22.11% x 110 = 24.
- Barru Regency = 456 → 13.00% x 110 = 14

There are 3,528 breeders. Hence there are 153,486 Independent Breeders in four regencies. The amount of independent breeders in each regency is as follows: 90,441 independent breeders are in Bone, 16,954 breeders in Bulukumba,
28,813 breeders in Gowa and 17,278 breeders are in Barru Regency. Proportionally the total samples of Independent Breeders in those four regencies are respectively as follows:

- Bulukumba Regency = 16,954 \(\Rightarrow 11.05\% \times 110 = 12\).  
- Gowa Regency = 28,813 \(\Rightarrow 18.77\% \times 110 = 21\).  
- Bone Regency = 90,441 \(\Rightarrow 48.92\% \times 110 = 65\).  
- Barru Regency = 17,278 \(\Rightarrow 11.26\% \times 110 = 12\).  

Total = 153,486 \(\Rightarrow 110\)

4. Outputs And Discussion

Output of multiple regression obtained by using the Statistical Package for Social Sciences (SPSS) can be seen in Table-1. From the ANOVA Test or F-Test, the F arithmetical progression is 3,006 with the significance level of 0.012. Since the probability (0.012) is lower than 0.05, then regression model can be used to predict the performance of beef-cow breeding enterprises. Or, it can be stated that the relationship, availability of information, procedure, requirements and location jointly give the influence to the performance of beef-cow breeding enterprises.

Regression equation obtained in this study is as follows:

\[ Y = 3.672 + 0.056X1 - 0.050X2 + 0.178X3 - 0.202X4 + 0.020X5 \]

Output of the research indicates that relationship has the influence and positive connection with performance of the beef-cow breeding enterprises (\(\alpha = 10\%\)). The well established relationship between the fund resources and the loan acceptors will influence and facilitate the breeders to access into the external funding. As already been explained by the results of several previous researches that the benefit obtained from banking relationship between borrowers and bank is that it will reduce inefficiency in the form of flexibility to make a negotiation in the effort to get the

<table>
<thead>
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<th>Variables</th>
<th>Coefficient</th>
<th>t-Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
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<td>19.410</td>
<td>0.000</td>
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<td>Relationship</td>
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<td>1.343</td>
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<td>Availability of Information</td>
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<td>Procedure</td>
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<td>2.773</td>
<td>0.005**</td>
</tr>
<tr>
<td>Requirements</td>
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<td>-3.310</td>
<td>0.001***</td>
</tr>
<tr>
<td>Location</td>
<td>0.034</td>
<td>0.473</td>
<td>0.636</td>
</tr>
</tbody>
</table>

N = 220  
\(R^2 = 0.44\)  
F-Value = 3,006  
* and ** are significant in 10% and 5%.  

Figure 1. Stages in Determining the Samples of Research  
Table 1. Regression Analysis Result
loan; and one of the visible aspects is duration or the length of established relationship between both parties (Booth and Thakor, 1994). If the banking relationship runs smoothly, it will reduce inefficiency, so that the enterprises getting the loan again will surely be deemed as having good reputation and will be easier to obtain the loan (Diamond, 1991). Output of study by Petersen and Rajan (1994) finds out that if the companies obtaining the loan concentrate to maintain their relationship with the loan provider (bank), they will get lower rate of interest. Relationship with the external parties including partnership, network, and alliance is important in motivating the small scaled enterprises to develop. Benefit from relationship is that it will reduce the information asymmetry between both parties; the borrower will get more information on several subjects including information about funding. The other benefit obtained from relationship is that it will give more flexible and free space to the contract already been agreed previously. In addition, in term of collateral requirements which shall always be monitored, such monitoring system will cause the relationship between both parties getting closer and closer (Boot, 2000).

Output of this study indicates that the procedure on funding resources has the influence and positive relationship to the performance of beef-cow breeding enterprises ($\alpha = 5\%$). This output is consistent with Beck et al. (2008) that the small scaled enterprises use the external funding lower that that of big companies due to the complicated and time consuming procedures.

Output of this study indicates that collateral requirement on funding resources influences the performance of beef-cow breeding enterprises ($\alpha = 5\%$). Collateral requirement is one of the factors hampering the breeders in obtaining the loan, because generally they do not have assets to be used as collateral, while the bank requires them. This is in conformity with the output of research done by Rand et al. (2009) stating that some small and medium scaled enterprises cannot access the credits from the formal institution due to the lack of collateral they have, too complicated and difficult process to get the credit, and also due to too high rate of interest. Almost the same case is described by Beck et al. (2008) that the small enterprises use the external funding lower than that of the big company, because they are hampered by lack of collateral they have.

The other variables namely availability of information and location do not influence performance of beef-cow breeding enterprises. This is not consistent with the output of study conducted by Wangu (2011) stating that one of the factors hampering the funding access at the small and medium scaled enterprises is the lack of available information in credit proposing process. Sugianto and Wiryono (2004) also explain that in the proposing process for capital loan required by breeders to the funding institution, commencing from the proposing time till the moment the loan is realized is influenced by the distance between the location or domicile to the funding institution; total frequency of visit to the financial institution and duration in the process of credit disbursement. Nurmanaf (2007) also explains that from the banking point of view, in general there is still a handicap in realizing the credits for agricultural sector due to the fact that the bank still considers that such businesses are very risky and the bank applies the prudence principle. Consequently, customer selection becomes very tight with the requirement of having the collateral which, in general is not In the possession of the farmers. Meanwhile from the breeders’ point of view, they are hampered by collateral requirement, also by complicated administrative procedure and consuming too much time as well as the availability of minimum amount of information about the funding.

Distance between location or domicile of loan acceptor and the loan provider constitutes one of the factors causing the constraint for the breeders in accessing into the funding, although partially it is not significant. The same case is explained by Akram et al. (2008) that the distance from the farmer domicile to the formal financial institution is one of the factors influencing credit activities of the farmers. The demand for credit proposed to the formal institution has negative relation with the distance between domicile and the said funding resources.

5. Conclusion And Suggestions

Working capital needs a special attention from the beef-cow breeders, because their smooth production activities are also determined by such factor. Funding accessibility is strongly determined by good relationship established between the breeders and the loan provider, availability of information on funding, simple procedure, credit proposal requirements not giving a burden to breeders and location of credit providers, namely bank and government easily accessible by the breeders.

Suggested future that funding accessibility for breeders can be increased if availability of information on funding can be well obtained and understood by the breeders by improving socialization of the available fund resources from the loan providers, either from banks or from government. In addition, initiatives of the breeders need to be motivated to look for the available fund resources themselves without waiting for information from the loan provider. The location obstacle between the breeders and the loan provider can be overcome by improving the road infrastructure, so that the matter of distance can be solved and no longer becomes a constraint for the breeders.
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