Impact of Entrepreneurial Characteristics and Access to Credit on Business Performance of Small Business (Case: Brown Sugar Processing in Agam District)

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Abstract. Small businesses' performance needs to be improved because it plays an essential role in driving economic growth and development. This study focuses on examining the effect of entrepreneurial characteristics on small business performance. Data was collected through a survey by giving questionnaires to 100 small business entrepreneurs processing brown sugar. Structural Equation Model (SEM) was chosen to ensure the relationship between variables. Empirical findings indicate that entrepreneurial characteristics affect business performance directly and indirectly through credit access, entrepreneurial characteristics affect credit access, and credit access affects business performance. Business performance improvement of brown sugar entrepreneurs needs government assistance and building networks.

Key words: access credit, business performance, entrepreneurial characteristic, structural equation model (SEM)

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1. Introduction

A Small Business is an independently owned, operated, and funded business with a small number of employees less, which has a relatively small influence on the industry [1]. Small business has a significant impact on the Indonesia economy, looked by the amount of the business that reaches 91.67% in Indonesia in 2015. The development of small business companies is currently unable to increase business income, economic improvement, and social welfare because the support of the central and regional government policies is not yet maximum [2] [3] [4].

Business performance can be improved by characterizing entrepreneurship, one's character and motivation have a positive impact on business development [5] [6]. The entrepreneurial character and business performance influence the success of the small business. Entrepreneurial style influences business performance; better entrepreneurial character will have better business performance [7]. The character of the entrepreneur has a positive impact on the success of small businesses [8].
The problem of entrepreneurs in developing business is capital. Capital loans can increase entrepreneurial passion. Entrepreneurs who have character will use credit to improve operations and improve business performance. The availability of capital will make entrepreneurs better manage the company and better business performance.

The brown sugar processing business is one of the small business that has been developing in the Agam District for a long time. Brown sugar is the result of sugarcane processing, which is done traditionally or mechanically by processing farmers in rural areas. The brown sugar processing business still uses simple tools, carried out by entrepreneurs who are over 40 years old, have low education, have low entrepreneurial character, have not been managed with good management, so the business performance is low. Most brown sugar entrepreneurs have received capital loans, but business performance has not improved because the capital loans received are used to meet their daily needs. Improving business performance and entrepreneurship of brown sugar entrepreneurs in the Agam District needs to be done to use capital loans to develop their businesses.

The problem of entrepreneurs in developing business is capital. Capital loans can increase entrepreneurial passion. Entrepreneurs who have character will use credit to improve operations and improve business performance. The availability of capital will make entrepreneurs better manage the company and better business performance. This research is essential for the development of small business and entrepreneurship to improve the performance of brown sugar processing businesses in the Agam District. Entrepreneurial character and credit loans are needed to improve the business performance and income of small business entrepreneurs. Improved business performance will contribute to the increase in small business entrepreneur welfare and employment.

The formulation of the problem of this research is: "What is the effect of the character of the entrepreneur and loan credit on the performance of the brown sugar processing business in Agam District, West Sumatra?" This study aims to: (1) analyze the impact of entrepreneurial characteristics on the performance of brown sugar processing business, (2) analyze the impact of entrepreneurial characteristics on access to brown sugar processing credit, and (3) analyze the impact of access to credit on the performance of brown sugar processing business.

2. Research Methods

Agam District is used as a research site because it has the largest area of people's sugar cane plantations in West Sumatra Province. The method used in this research is survey method. The population in this study is brown sugar processing entrepreneurs who can access credit from financial institutions. Samples were obtained by simple random sampling and cluster sampling.
methods. The number of samples is 100. Variables are business performance, characteristics entrepreneurship (Long, and access to credit, with indicators as in Table 1.

Table 1. Research Variable and Indices

| No | Variable (PU) | Indices |
|----|---------------|---------|
| 1  | Business development | UU Age |
|    |                | AM Accumulation of Capital |
|    |                | BI Internal business process |
|    |                | TK Workforce amount |
| 2  | Entrepreneurship Characteristic (KK) | SI Instrumental |
|    |                | SP Creative |
|    |                | SKB Sociable |
|    |                | SKK Hard-work nature |
|    |                | KD Confidence in nature |
|    |                | SPR Calculated risk-taking nature |
|    |                | SSK Self-control nature |
|    |                | SIF Innovative Nature |
|    |                | SM Independent Nature |
| 3  | Access to Credit (SK) | SK Credit amount received |

Data collection was done by interviews using a questionnaire, respondents' answers used a Likert scale with the lowest score of 1, and the highest score of 5 [9]. To measure and construct structural models using the partial least squares structural equation modeling (PLS-SEM) using SmartPLS software.

This research has hypothesis to be analyzed, such as:

H1 : entrepreneurial characteristics significantly impact brown sugar processing business performance

H2 : entrepreneurial characteristics significantly impact access to credit

H3 : access to credit significantly impacts the performance of the brown sugar processing business

3. Results and Discussion

The number of respondents consisted of 56% of women and 44% of men, mostly in the form of middle-aged adults, resilient in character, and had sufficient experience with having tried around 15-40 years and hereditary businesses. The education level is dominated by primary and secondary schools. Entrepreneurs' characters in the medium category are: instrumental, achievement, friendship, risk-taking, self-control, innovation and those in the high category are hard work, self-confidence.
Brown sugar entrepreneurs need capital to purchase mechanical presses, renovate factories, and replace production equipment. Most entrepreneurs get credit from 97% of Agribusiness Microfinance Institutions (LKM-A) and others from banks.

### 3.1. Measurement Model

Based on the results of the convergent validity test on entrepreneurial characteristics, access to credit, and business performance, it is found that all indicators that have met the convergent validity criteria are loading factors > 0.5, which can be seen in Figure 1. The reliability value of the research variable is more than 0.7 and has met the composite reliability criteria.

![Figure 1. Measurement and Structural Model Results](image_url)

From the analysis results obtained the value of the square root of the Average Variance Extracted (AVE) on the business process variable is 0.7784, can be seen in Table 2. The value is higher than the correlation value between business processes and other variables that is 0.7484. The square root value of AVE is higher than the correlation value between different variables, meaning that all latent variables in this study have good discriminant validity. Based on a holistic evaluation of the results of convergent validity, discriminant validity, and composite reliability, it can be concluded that the indicator as a measurement of latent variables is a valid and reliable measurement.
### Table 2. Average Variance Extraction (AVE) Value

|                          | AVE         | Square root AVE | Correlation Maximum Value |
|--------------------------|-------------|-----------------|---------------------------|
| Business Process         | 0.605935    | 0.778418268     | 0.748443                  |
| Innovative               | 0.582681    | 0.763335444     | 0.722627                  |
| Instrumental             | 0.815994    | 0.903323862     | 0.709005                  |
| Hard-work                | 0.607413    | 0.779367051     | 0.645811                  |
| Sociable                 | 0.617195    | 0.785617591     | 0.684352                  |
| Confidence               | 0.651586    | 0.807208771     | 0.646001                  |
| Independent              | 0.558525    | 0.747345302     | 0.371200                  |
| Calculated Risk Taker    | 0.654039    | 0.808726777     | 0.702032                  |
| Pretative                | 0.570412    | 0.755256248     | 0.723242                  |
| Self-control             | 0.627264    | 0.792000000     | 0.542325                  |
| Business age             | 0.882843    | 0.939597254     | 0.722627                  |

#### 3.2. Structural Model

From the R square test results obtained that the greater the value of R-square, the more significant the ability of exogenous variables can be explained by endogenous variables so that the structural equation is better.

### Table 3. R-square Value

| R Square                          |
|-----------------------------------|
| Entrepreneurship characteristic → Credit absorption | 0.593379 |
| Entrepreneurship characteristic → Credit absorption → Business development | 0.803296 |

Based on the R-square value above, it states that the business performance variable is influenced by the entrepreneurial characteristics variable and access to credit by 80.32%. Access to credit can is influenced by the characteristic entrepreneurial variable of 59.33%. Q-square value is in the amount of 0.9198. Q-square value > 0 shows that model has predictive relevance. Q-square has a value between $0 < Q^2 < 1$, we're closer to 1 means that the model is better.

#### 3.3. Impact of Entrepreneurship Characteristics on Business Performance

From the results of the analysis in Table 4 shows the T-value in the amount of 7.23 whose value is higher than T-table 1.645 at 95% confidence intervals and alpha levels of 5% and 99 df. It can be concluded that the entrepreneurial characteristics positively influence the performance of the sugar processing business brown. The average sample value of 0.463751 shows that entrepreneurial characteristics have a positive and significant relationship to business performance, where 46.37% increase in entrepreneurial characteristics contribute to improving
business performance. The results show that there is more than 60% of other factors that affect business performance.

Table 4. Result for Inner Weight of Entrepreneurship Characteristic Variable Role Toward Business Development

| Entrepreneurship characteristic → Business development | Original Sample (O) | Sample Mean (M) | Standard deviation (STDEV) | T Statistics (|O/STERR|) |
|--------------------------------------------------------|---------------------|-----------------|---------------------------|--------------------------|
|                                                        | 0.460095            | 0.463751        | 0.063631                  | 7.230703                 |

Business development requires all stakeholders such as internal business support, and government support to provide entrepreneurship education, guidance and counseling, and capital assistance. Government support will increase the intention of companies to improve their business performance. The intention of entrepreneurs to improve business performance is determined by their understanding of entrepreneurship, socio-economic factors, community culture, and business opportunities.

Character of business actors and the character of small businesses influence the success of small businesses [10]. A person's character and motivation have a positive impact on business performance [11].

3.4. Impacts Entrepreneurship Characteristic to Access to Credit

The results of the analysis in Table 5 shows that the T-value in the amount of 21.48 is higher than t-table 1.645 at the 95% confidence interval and the alpha level of 5% and df 99. It can be concluded that entrepreneurial characteristics have a positive effect on the performance of the colored sugar processing business chocolate. The average sample value of 0.772035, so that the characteristics of entrepreneurship have a positive and significant impact, where an increase of 77.20% entrepreneurial characteristics contribute to increasing access to credit.

Table 5. Result for Inner Weight Credit Absorption Amount towards Business Development

| Entrepreneurship characteristic → credit absorption | Original Sample (O) | Sample Mean (M) | Standard deviation (STDEV) | T Statistics (|O/STERR|) |
|-----------------------------------------------------|---------------------|-----------------|---------------------------|--------------------------|
|                                                     | 0.770311            | 0.772035        | 0.035848                  | 21.488493                |

Based on the test results, it can be concluded that the entrepreneurial characteristics strongly influence the amount of credit received by business actors. Entrepreneurial characteristics influence decision making and risk-taking. Therefore, entrepreneurial characteristics are the determining factors that affect credit access. Entrepreneurial characteristics will change managerial practices, which will ultimately affect business performance. Access loan from banking or non-banking financial institutions must be supported by the charm of entrepreneurial abilities, innovative abilities, and business management to make small business competitive.
Business actors who have entrepreneurial characteristics will manage their business optimally and try to develop their business by utilizing credit as business capital assistance [13].

3.5. Impacts Access to Credit on Business performance

The results of the analysis in Table 6 show that the T-value in the amount of 7.32 is higher than T-table 1.645 at a 95% confidence interval and an alpha level of 5%, and df 99 so that it can be concluded that access to credit has a positive effect on the brown sugar processing business. The average sample value is 0.487339, meaning 48.73% of the amount of access to credit contributes to influencing business performance.

| Table 6. Result for Inner Weight Credit Absorption Amount towards Business Development |
|-----------------------------------------|------------------|------------------|-----------------|
|                                         | Original Sample (O) | Sample Mean (M) | Standard deviation (STDEV) | T Statistics (|O/STERR)| |
| Credit absorption amount → Business development | 0.492471 | 0.487339 | 0.066966 | 7.354035 |

Access to credit by entrepreneurs can be useful in improving business operations, managing finances, as well as managerial aspects. Capital can improve business management, which results in improved business performance [14]. The higher the capital used, the easier access to credit for business development [15].

Based on empirical studies, it can be concluded that access to credit will increase the accumulation of venture capital so that it can increase the use of factors of production and better use of technology. Credit can be used to purchase sugar cane presses, repair equipment, increase labor, and raw materials. Increasing business activity will improve business performance.

| Table 7. Calculation of Direct Effect, Indirect Effect, and Total Effect |
|-------------------------|------------------|------------------|-----------------|
| Between Variables Effect | Direct Effect (SK) | Indirect (Through) Effect (SK) | Total Effect |
| KK - PU                  | 0.4637            | 0.4873*0.7720 = 0.3762 | 0.8399         |
| KK - SK                  | 0.7720            | -                | 0.7720          |
| SK - PU                  | 0.4673            | -                | 0.4673          |

The analysis results in Table 7 show that entrepreneurs' characteristics affect business performance directly and indirectly through credit absorption of 83.99%. Improved business performance can be achieved if business people have the characteristics of entrepreneurs and can access credit. Credit in the form of capital can be used by businesses to improve their business performance.

[16] states that efforts to develop small businesses can begin with improving production equipment, increasing efficiency and productivity through work systems that aim to improve production processes; continued improvement in the quality of human resources through education and training; after that, the availability of raw materials and is easier; availability of
capital that can be accessed by a simple procedure; increasing small business competitiveness and business managerial ability.

4. Conclusion and Recommendation

4.1. Conclusion

Based on the results of research and discussion, it can be concluded that:

1. The characteristics of brown sugar processing entrepreneurs in the Agam District can be categorized at a moderate level. Entrepreneurial characteristics affect business performance directly and indirectly through the access to credit.
2. Entrepreneurial characteristics directly affect credit access. Credit accessed by brown sugar entrepreneurs from Agribusiness Microfinance Institutions (LKM-A) and others from banks.
3. Access to credit directly affects business performance

4.2. Recommendation

The recommendations of this study are:

1. Improving business performance requires government support through training, mentoring, consulting, and facilitating the creation of business networks.
2. Brown sugar business performers need to improve their entrepreneurial character to improve business performance and courage to access credit.
3. The availability of credit that can be accessed with more comfortable procedures.

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