AGRISOCIONOMICS
Jurnal Sosial Ekonomi dan Kebijakan Pertanian

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

FARMER'S DECISIONS TO TAKE CREDIT IN INDONESIA

Dwi Martha Yulia*, Dwi Rachmina, and Feryanto
Departement of Agribusiness, Faculty of Economics and Management, IPB University, Bogor, Indonesia

*Correspondence Email: dwi_marthayulia@apps.ipb.ac.id

Submitted 02 November 2022; Approved 11 December 2022

ABSTRACT

Credit is one of the most effective financings at the farmer level because it is more easily accessible to micro-enterprises and is intended to empower farmers to increase their production. However, access to credit at the farmer level is not easy. In addition, the small scale of the farmer's business causes the limited ability of farmers to increase business capital through microfinance institutions and banks. This study aims to analyze factors influencing farmers to take credit in Indonesia. The data analysis method used is binary logit regression which can analyze the relationship between variables that are thought to influence the decision of farmers to take credit using fourteen predictor variables consisting of five demographic variables and nine livestock business variables. The data is sourced from the 2014 Livestock Business Household Survey with a total sample of 42,392 because data that can be used to represent and complete on a national scale for the livestock sub-sector. The results showed that the variables that influenced the decision of farmers to take credit, namely the location of the livestock business, the age of the breeder, gender, type of livestock, number of dependents in the family, farming experience, land ownership, association membership, collective membership, farmer groups, counseling, and partnerships had a significant effect. Statistically. While the variables of education level and ownership of livestock business facilities are not statistically significant. Thus the policy of providing financing and capital facilities through credit distribution as a strategy for empowering farmers and micro business actors in the agricultural sector can be an incentive for farmers to increase their production and can continue to be an instrument of agricultural capital policy.

Keywords: *credit, livestock business, binary logit regression*

BACKGROUND

Credit is one source of financing that can improve business performance if used for productive purposes. Giving credit to a business can have a positive impact because it can increase the income and profits obtained by a business (Firmansyah et al., 2017; Mayangsari et al., 2014; Putri et al., 2021). Credit in the agricultural sector is generally used as a form of inclusive financing that aims to increase productivity and income as well as farmers' welfare by providing capital to increase inputs in the agricultural sector (Mawesti et al., 2018). In general, the main purpose of building wealth is to grow business in quantity and quality. Thus, the existence of financing and capital facilities is expected to be a strategy for empowering farmers at the household level (BPS, 2015).

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

Capital is part of the supporting subsystem that is useful for supporting business success. Capital can be realized through direct cash assistance or the state of credit. This stimulus stimulates intensive business capacity development so farmers can increase their business scale (Atmakusuma et al., 2019; Fauzan, 2017; Ogwuike et al., 2022). In addition, the low ranking of a business in most types of livestock businesses and the requirements of financing institutions, especially banks, which are quite difficult for breeders, have caused livestock business production to be still considered low so that the performance of the livestock sub-sector is believed to need still to be improved (BBP2TP, 2011; BPS, 2015). Therefore, strengthening the capital structure through the use of credit in the form of business capital is very much needed by farmers.

In improving the performance of the livestock sub-sector, access to credit sources with the aim of productive investment loans needs to be improved (Tampubolon et al., 2017). People's Business Credit (KUR) is one of the most effective forms of financing because it provides loans with financial institution credit schemes with lower interest rates than market interest rates, making them more accessible to the public with micro-enterprises. According to Ditjen PKH (2021) based on the program credit information system (SIKP) of the Ministry of Finance, the realization of people's business loans (KUR) for the livestock sector amounted to 13.8 trillion in 2015 - June 2019 period for productive businesses in the livestock sector. With the support for farmers in terms of financing, it is expected to encourage livestock businesses to meet local needs, which are still high and highly dependent on imports. In addition, improving the quality and effectiveness of farmer financing can be the main key to boosting the scale of farming. That way, it can improve farmers' bargaining position on market demand. The financial support can be focused on increasing productivity, added value, and competitiveness of agricultural products. Currently, the distribution of agricultural banking financing in the agricultural sector is relatively low at 7.10% (OJK, 2021). The low disbursement of credit in the farm sector is related to the contraction in credit growth caused by the public's mistake about KUR as a grant fund, causing many moral hazards.

Several studies on the factors that influence the decision of farmers to take credit have been carried out by previous researchers. Several variables used in previous studies are thought to influence farmers to take credit positively. However, some studies contradict one another or negatively influence farmers' credit use decisions. This study aims to analyze what factors influence the decision of livestock businesses to take credit in Indonesia, which will be suspected of using fourteen variables that are suspected of supporting and reducing the decision of farmers to take credit. These factors can affect farmers in terms of ease of credit accessibility, support credit collectibility, business development, and encourage business success, so they also affect the performance of livestock businesses.

Farming factors that are positively correlated with opportunities for access to farm credit mean that financial institutions, especially formal financial institutions, must provide new policies to make it easier for farmers to access credit for their businesses. The high level of credit fungibility in small farms indicates that the use of farm credit for investment in the production process is inefficient, so financial institutions that provide credit need to control or supervise and need to guide borrowing farmers so that credit is used efficiently and can maximize production. Thus, research on the factors that influence the decision of farmers to take credit in Indonesia can provide results on whether the credit provided has a positive influence on the performance of a business. These factors will be

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

analyzed using a logit regression analysis tool to estimate their influence on the decision of farmers to take credit.

RESEARCH METHODS

The type of data used in this study is secondary data in the form of quantitative cross-sectional data sourced from the 2014 Livestock Business Household Survey by the Central Statistics Agency. because data that can be used to represent and complete on a national scale for the livestock sub-sector and issued by BPS directly was only available in 2014. This relates to the 2014 livestock business household survey which is data taken from the 2013 Agricultural Census and will be available again in year 2023. The data analysis carried out aims to analyze how farmers' decisions to take credit to see what factors influence farmers' decisions to take credit in Indonesia using binary logit regression analysis techniques. These factors are divided into two characteristics: demographic and business. Demographic characteristics are influenced by several factors, including the location of the livestock business, the age of the breeder, gender, education level, and the number of dependents in the family. In contrast, the characteristics of livestock business aim to describe the factors that influence the decision of breeders through the variables of livestock types, livestock experience, land ownership, ownership of livestock business facilities, membership of cooperatives, farmer groups, association membership, counseling, and partnerships.

Binary Logit Regression

Binary logit regression is one of the data analysis methods used to find the relationship between the response variable (y), which is binary, and the predictor variable (x). Binary logit regression aims to analyze the factors that influence the decision of livestock businesses to use credit, where the decision to use credit will be estimated using a binary form with values 0 and 1. If these variables affect our business decisions, we use decent credit (y=1) and unfit credit (y=0). The logit function model estimates the model with the following general structure (Hosmer & Lemeshow, 2013). The use of variables and specifications for the binary logit function model refers to the research of Feryanto & Rosiana (2021); Mawarni (2021); and Sinaga et al. (2019).

$$P_i = \ln\left(\frac{P_i}{1-P_i}\right) = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \ldots + \beta_{14} X_{14} + \varepsilon_i$$

Information:

P_i : The decision of livestock business to use credit worth (1) and not to use credit value (0)
α : Intercept (constant)
ε_i : Natural number (2,7182)
X_1 : Location of livestock business (dummy, Jawa Island = 1)
X_2 : Age (years)
X_3 : Gender (dummy, male = 1)
X_4 : Education level (years)
X_5 : Number of dependents in the family (person)
X_6 : Type of livestock (dummy, ruminant = 1)
X_7 : Farming experience (years)

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

X_8 : Land ownership (dummy, own =1)
X_9 : Ownership of livestock business facilities (dummy, own =1)
X_{10} : Cooperative membership (dummy, cooperative member =1)
X_{11} : Farmer group (dummy, farmer group member =1)
X_{12} : Association membership (dummy, association member =1)
X_{13} : Counseling (dummy, received counseling =1)
X_{14} : Partnership (dummy, have partners =1)

Where Pi is a dummy variable that influences the decision of livestock businesses to use credit (1=influence, 0=no effect), in this study, the decision model for farmers to take credit in Indonesia is estimated by the logit function consisting of fourteen variables, namely: location of livestock business (X_1), age (X_2), gender (X_3), an education level (X_4), number of dependents in the family (X_5), type of livestock (X_6), farming experience (X_7), land ownership (X_8), ownership of livestock business facilities (X_9), cooperative membership (X_{10}), farmer group (X_{11}), association membership (X_{12}), counseling (X_{13}), and partnerships (X_{14}). Based on the binary logit function model, the research hypothesis is formulated as follows:

H_1 : The location of livestock business is influential positive on the decision of livestock business to use credit
H_2 : The breeder's age harms the livestock business's decision to use credit
H_3 : Gender has a positive effect on livestock business decisions using credit
H_4 : Education level has a positive effect on livestock business decisions to use credit
H_5 : The number of dependents in the family positively affects the decision to use credit for livestock business
H_6 : The type of livestock harms the decision of livestock businesses to use credit
H_7 : The experience of raising livestock has a positive effect on the decision to use credit for the livestock business
H_8 : Land ownership harms livestock business decisions to use credit
H_9 : Ownership of livestock business facilities harms livestock business decisions to use credit
H_{10} : Cooperative membership has a positive effect on livestock business decisions using credit
H_{11} : Farmer groups have a positive effect on livestock business decisions to use credit
H_{12} : Association membership has a positive effect on livestock business decisions to use credit
H_{13} : Counseling has a positive effect on livestock business decisions using credit
H_{14} : Partnerships have a positive effect on livestock business decisions to use credit

RESULT AND DISCUSSION

Characteristics of Livestock Business In Indonesia

The characteristics of livestock businesses used as variables and samples in this study are described statistically in Table 4. The total number of livestock business households used is 42,392, consisting of 38,554 livestock businesses that do not use credit and 3,838 livestock businesses that use credit. It shows that the use of credit in the livestock business is still low. The low disbursement of credit in the farm sector is related to the contraction in credit growth caused by the public's mistake

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

about KUR as a grant fund, causing many moral hazards. It is supported by data on agricultural banking financing credit distribution in the agricultural sector, which is considered relatively low at 7.10% (OJK, 2020).

Table 1. The Descriptive Statistical Sample of Livestock Business Households in Indonesia.

Variable	Information & Proportion (%)		Significance
	Dummy = 1	**Dummy = 0**	
Farm business household location (*dummy*, Java Island = 1)	47.34	52.66	0.000
Age (years)	Productive age (15-64 years):	89.13	0.000
	Non-productive age (>64: elderly):	10.87	
Gender (*dummy*, male = 1)	88.65	11.35	0.000
Education level (*years of school*)	Did not pass elementary school	13.25	0.171
	Elementary school graduate	38.35	
	Junior high school graduate equivalent	20.39	
	High school graduate or equivalent	21.44	
	D1/D2 graduate	0.98	
	D3 graduate	0.88	
	D4/S1 graduate	4.48	
	S2/S3 graduate	0.23	
Type of livestock (*dummy*, ruminant = 1)	**Ruminants (large livestock) (dummy=1): 87%**		0.000
	Beef cattle	39.28	
	Goat	19.58	
	Pig	11.69	
	Lamb	10.08	
	Buffalo	4	
	Dairy cow	1.82	
	Rabbit	0.15	
	Non ruminant (poultry) (dummy=0): 13%		
	Free-range chicken	9.58	
	Ducks	2.66	
	Manila duck	0.76	
	Laying hens	0.41	
Number of dependents in the family	7 person	4 person	0.000
Farming experience (years)	**Use credit: 3,838 breeders (9.05%)**		0.019
	0 – 1 years: 292 breeders (0.69%)		
	1-5 years: 1,701 breeders (4.01%)		
	5-10 years: 808 breeders (1.90%)		
	>10 years: 1,037 breeders (2.45%)		
	Do not use credit: 38,554 breeders (90.95%)		

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

	0 – 1 years: 2,927 breeders (6.90%) 1-5 years: 17,908 breeders (42.25%) 5-10 years: 8,159 breeders (19.25%) >10 years: 9,560 breeders (22.55%)		
Land ownership (*dummy*, own =1)	92.70	7.30	0.011
Ownership of livestock business facilities (*dummy*, own =1)	89.90	10.10	0.184
Cooperative membership (*dummy*, cooperative member =1)	7.10	92.90	0.000
Farmer group (*dummy*, farmer group member =1)	4.43	95.57	0.000
Association membership (*dummy*, association member =1)	10.40	99.60	0.000
Counseling (*dummy*, received counseling =1	7.30	92.70	0.000
Partnership (*dummy*, have partners =1)	0.73	99.27	0.023
Observasi (n)	**3,838 (9.05%)**	**38,554 (90.95 %)**	**42,392 (100 %)**

Location of Livestock Business

The farmers in the 2014 livestock business household survey came from various provinces in Indonesia. The data used in this study uses data from livestock business households in Indonesia which consists of 19 provinces with a distribution, namely Aceh (3.35%), Bali (8.50%), Banten (2.70%), Bengkulu (1.72%), DI Yogyakarta (4.86%), DKI Jakarta (0.25%), Jambi (2.18%), West Java (11.74%), Central Java (13.76%), East Java (17.20%), Bangka Belitung Islands (1.08%), Riau Islands (1.04%), Lampung (5.17%), West Nusa Tenggara (4.80%), East Nusa Tenggara (5.30 %), Riau (2.71%), West Sumatra (3.06%), South Sumatra (2.86%), North Sumatra (7.75%).

When compared between Javanese and non-Javanese livestock businesses, Java Island has a proportion of 47.34% of the total livestock businesses in Indonesia, with a total of 20,068. In comparison, provinces outside Java have a proportion of 52.66% with 22,324 livestock businesses. Thus the results of this study indicate that most of the livestock businesses in Indonesia are outside Java.

However, when viewed through credit, livestock businesses in Java use more credit than those outside Java. In Java, 2,178 livestock businesses use credit from a total of 20,068 livestock businesses. Thus, there are 17,890 livestock businesses in Java that have yet to use credit. Meanwhile, the proportion of livestock businesses outside Java that used credit was 1,660 out of 22,324. With this, 20,664 livestock businesses outside Java have yet to use credit. Thus there is a difference where livestock businesses in Java use credit more than those outside Java. The results of this study are related to credit accessibility in Java which is higher than outside Java. Although most livestock businesses are on the island of Java, this also does not rule out the possibility of increasing credit

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

development outside Java, which is still low (Achmad et al., 2012; OJK, 2015b; Mawesti et al., 2018; Aristanto, 2019).

Age of Breeder

Based on survey data, the average age of farmers in Indonesia is 49 years. The age of livestock breeders in Indonesia, based on household surveys of livestock businesses, is in the productive and non-productive ages, in the age range of 15-80 years. *Productive age* is the age at which citizens of the country have entered working age, which ranges from 15-64 years. Based on this classification, citizens under 15 years old were not classified as workers and citizens over 64 years old were classified as elderly.

Most of the Age of breeders, namely 89.13%, are in productive age, while the other 10.87% are in non-productive age (elderly). Based on the survey, the average age of farmers who use credit is 48 years, and those who do not use credit are 50 years. Thus this shows that the average age of farmers who use credit is younger than that of farmers who do not. The results of this study certainly have a link between younger farmers who tend to be more open to knowledge about sources of venture capital, thereby increasing decisions to use credit (Asih, 2007; Muhammamah, 2008; Haloho, 2010; Auditiya, 2011; Samiti, 2011; Abadi, 2014; Kusumaningtyas, 2017; Marantika & Sampurno, 2018).

Gender

Based on the overall survey results, breeders in Indonesia are dominated by men at 88.65% while the remaining 11.35 are female breeders. When viewed based on the use of credit, credit users are also more widely used by male breeders, namely as many as 3,528 compared to women who use credit, only 310 breeders. Meanwhile, 34,053 male breeders did not use credit or around 90.62% of the total male breeders. Meanwhile, 4,501 female farmers did not use credit or 93.56% of the total female farmers. Thus the use of credit is more dominated by male breeders than female breeders. The result was also related to higher credit accessibility for male business actors compared to women (Nkuah et al., 2013; Diana, 2019).

Level of Education

The average level of formal education attained by breeders in Indonesia is 11 years or classified as having not graduated from high school, meaning that the education of breeders is dominated by junior high school graduates, namely 20.39%. Based on the survey results, it is known that the level of education that breeders in Indonesia have attained is that they did not graduate from elementary school (13.25%), graduated from elementary school (38.35%), graduated from junior high school and the equivalent (20.39%), graduated from high school equal (21.44%), D1/D2 graduates (0.98%), D3 graduates (0.88%), D4/S1 graduates (4.48%), and Masters/S3 graduates (0.23%). Thus, most of the formal education of breeders in Indonesia consists mainly of elementary school graduates. When viewed based on the use of credit, breeders who use credit have an average higher education compared to breeders who do not use credit. Farmers who use credit have an average of 11-12 years of education, while those who do not have an average of 10-11 years of education. Thus, breeders who use credit have an average higher education than breeders who do not (Mandaka & Hutagaol,

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

2015; Firmansyah et al., 2017). This difference certainly impacts the farmer's level of knowledge about credit and the farmer's decision to use credit.

Types of Livestock

Based on the type of livestock cultivated, livestock businesses are categorized into ruminants and non-ruminants (poultry). Based on the results, the types of livestock cultivated by breeders in Indonesia are dominated by ruminants 87% or as many as 36,724 ruminant breeders, while the remaining 13% are non-ruminant livestock (poultry) or as many as 5,668 non-ruminant breeders (poultry). Several types of ruminants (large livestock) were cultivated beef cattle (39.28%), goats (19.58%), pigs (11.69%), sheep (10.08%), buffaloes (4%), dairy cows (1.82%), and rabbits (0.15%). While the types of non-ruminant livestock (poultry) cultivated are native chickens (9.58%), ducks (2.66%), manila ducks (0.76%), and laying hens (0.41%). When viewed based on the use of credit, the majority of breeders who use credit are ruminant breeders, namely 3,164 breeders, compared to non-ruminant breeders (poultry) who use credit for only 674 breeders. Meanwhile, breeders who do not use credit are also dominated by ruminant breeders, with 33,560 breeders and non-ruminant (poultry) breeders, with 4,994 breeders. Thus ruminant breeders are more dominant in using credit compared to non-ruminant breeders. The results of this study align with research by Mayangsari et al. (2014), which explains that providing beef cattle credit has a significant effect on increasing farmer income.

Number of Dependents in the Family

Based on a livestock business household survey, a family's average number of dependents is four. The number of dependents in the families of breeders who use credit tends to be more than those of breeders who do not use credit. On average, breeders who use credit have a family of 7 dependents with 3,838 breeders. The result means that all breeders who use credit have dependents in the family of 7 people. Meanwhile, farmers who do not use credit have a family of 1-10 dependents with an average family of 4 dependents. The total number of farmers who do not use credit is 38,554 people. Thus the number of dependents in the livestock business family that uses credit tends to be higher than that of farmers who do not use credit. This result was related to the involvement of the workforce in the family, which can increase labour input (Firmansyah et al., 2017).

Breeding Experience

Breeding experience is the length of time farmers have been running their business, with an average total of 4 years. When viewed based on the use of credit, farmers who use credit have an average longer business experience than those who do not. Farmers who use credit have an average of 4-5 years of business experience, while those who do not use credit only have four years. Based on the results of data processing, the business experience of breeders using credit is 0-1 year (292 breeders), 1-5 years (1,701 breeders), 5-10 years (808 breeders), and business experience over ten years for 1,037 breeders. At the same time, the business experience of breeders who do not use credit is 0-1 year (2,927 breeders), 1-5 years (17,908 breeders), 5-10 years (8,159 breeders), and business experience over ten years for 9,560 breeders. Thus, breeders who use credit have more experience than farmers who do not. The result was related to the higher the experience of raising livestock, the

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

higher the success of the business, thereby increasing the return on credit used (Triwibowo, 2009; Samiti, 2011; Widayanthi, 2012; Abadi, 2014; Arinda, 2015; Hermawan & Wiagustini, 2016; Kiswati & Rahmawaty, 2016; Oktapiani, 2018; Wulandari et al., 2021).

Land Ownership

Land ownership is one of the factors that can support farmers in taking credit. Land ownership can be used as collateral for credit. Based on the survey results, the majority of breeders, namely 92.70% of breeders, have ownership of their land, as many as 39,300 farmers, while the remaining 7.30% or as many as 3,092 farmers, have ownership status of leased land or belonging to other people. The result means that most breeders have farmland for running their businesses. When viewed based on the use of credit, most of the farmers who use credit have their land ownership, namely 92.15% or as many as 3,537 farmers.

Meanwhile, breeders who use credit but do not have their land or use land leases amounting to 7.85% or as many as 301 breeders. In addition, breeders who do not use credit are still dominated by breeders who own their land, namely 92.76% or as many as 35,763 breeders, while the remaining 7.24% or as many as 2,791 breeders do not own land or use leased land or other people's land. Thus breeders who use dominant credit have their land compared to breeders who do not use credit. The result was in line with the research by Wati et al. (2014), Dahri et al. (2015), and Triyono et al. (2016) that breeders with their land have a greater chance of accessing microcredit compared to breeders with leased land.

Ownership of Livestock Business Facilities

Ownership of livestock business facilities aims to support and facilitate production activities. Based on the survey results, most breeders already have their livestock business facilities, namely 89.9% or as many as 38,112 breeders. The remaining 10.1%, or as many as 4,280 breeders, still need their livestock business facilities or come from renting equipment or property. When viewed based on the use of credit, most of the farmers who use credit already have their livestock business facilities compared to those who do not. Meanwhile, breeders who do not use credit are dominated by breeders who use their livestock business facilities. Thus, more breeders who use credit have their livestock business facilities compared to other people's ownership or rent. The result was related to allocating credit to improve livestock input facilities to increase business capacity (Ogwuike et al., 2022).

Cooperative Membership

Based on the survey results, most breeders are not cooperative members, namely 92.9% or 39,382 breeders, and the remaining 3,010 breeders or 7.1% of breeders, have joined the cooperative members. Based on the use of credit, the majority of breeders who use credit are those not affiliated with cooperatives, namely 80.82% of breeders or as many as 3,102 breeders. The remaining 19.18%, or as many as 736 breeders who use credit, have joined the cooperative. Meanwhile, most breeders who do not use credit are also not affiliated with cooperatives, amounting to 94.1% or as many as 36,280 breeders. The remaining 2,274 breeders, or 5.9% of breeders, have joined cooperative members. Thus breeders who use less credit are members of cooperatives compared to breeders who do not use credit. Nevertheless, farmers who use credit and are members of cooperatives have higher

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

credit accessibility than those not affiliated with cooperatives (Mandaka & Hutagaol, 2015; Winarso, 2015; Firmansyah et al., 2017; Atmakusuma et al., 2019; Wulandari et al., 2021).

Breeder Groups

Based on the survey results, most breeders those not affiliated with the breeder group, namely 95.57% or as many as 40,514 breeders. The remaining 4.43 or 1,878 breeders have joined the breeder group. Based on credit use, most breeders who use credit those not affiliated with the breeder group, 82.8% or as many as 3,178 breeders. The remaining 17.20%, or as many as 660 farmers who used credit, had joined the farmer group. Meanwhile, 96.84% or 37,336 breeders, did not use credit and were not affiliated with breeder groups, while those who did not use credit but joined breeder groups accounted for 3.16% or 1,218 breeders. Thus fewer breeders use credit who are members of the farmer group compared to breeders who do not use credit. However, the research by Wibowo and Haryadi (2006), Supriatna (2008), Dahri et al. (2015), Widodo (2016), Santoso and Fathiah (2017), Ashari (2019), and Putri et al. (2021) explained that breeders who are members of farmer groups have higher accessibility to micro-credit compared to breeders those not affiliated with breeder groups.

Association Membership

Based on the survey results, most breeders have not affiliated with breeder associations 99.6%. Meanwhile, 0.4% of breeders have joined a breeder association. Based on the use of credit, most breeders who use credit those not affiliated with associations and breeders who do not use credit. Only 1.82% of farmers use credit and join associations, and only 0.25% of farmers do not use credit. Thus there are more breeders using credit who are members of associations than breeders who do not use credit. The result was related to the research by Widyani (2013), Anzory (2018), Diana (2019), and Colin and Kacaribu (2021), which explains that association membership is a supporting factor in credit accessibility.

Counselling

Counselling is one of the factors that can influence farmers in using credit. Based on the survey results, most breeders did not receive counselling, namely 92.7%, while the remaining 7.3% of farmers had received counselling. When viewed based on the use of credit, most of the farmers who used credit did not receive counselling at 79.45%, while the remaining 20.55% of farmers who used credit received counselling. Meanwhile, most breeders who did not use credit did not receive counselling 94.02%, while the remaining 5.98% received counselling. Thus, there are more breeders who use credit and receive counselling than those who do not. The result was related to research by Karsidi (2007), Wibowo (2013), Asiati and Nawawi (2017), Yuniarti (2018), Abubakar et al. (2019), Diana (2019), Descartes et al. (2021), and Fitra (2022) which explain that credit success is inseparable from credit counselling as one of the sources of business capital.

Partnership

The partnership is a form of cooperation that can be a factor for breeders in using credit. Based on the survey results, most farmers do not have partners or cooperation with other people or parties. 99.27%, or 42,086 breeders, are not partnered, while the remaining 0.73, or 306 breeders, have

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

partnered with other parties. If viewed based on the use of credit, most of the farmers who use credit have not partnered with other parties, namely 96.43%, while the remaining 3.57% have partnered. Meanwhile, breeders who do not use credit are dominant by breeders who do not partner by 99.56%, and the remaining 0.44% of breeders cooperate with other parties or partners. Thus, there are more breeders who use credit and have partnerships than breeders who do not. The result was related to the research of Ardiyanto and Setiawan (2013), Wibowo (2013), Widyani (2013), Santoso et al. (2015), Fitria and Jurana (2016), Asiati and Nawawi (2017), Saputra et al. (2017), and Diana (2019) that partnership is a factor that has a significant influence on credit accessibility.

Number of Livestock

Based on survey results, the number of livestock owned by livestock businesses has an average of 35-36 head of cattle. When compared, breeders who use credit have more livestock than breeders who do not use credit. Farmers who use credit have an average of 131-132 head of livestock, while farmers who do not have an average of 25-26 head of livestock. The result shows that the credit used by breeders tends to increase the number of livestock owned to increase sales turnover (Mayangsari et al., 2014; Waqid, 2014). Thus breeders who use credit have an average number of livestock that is higher than breeders who do not use credit. The result was related to research by Mayangsari et al. (2014), Waqid (2014), Dahri et al. (2015), and Utomo 2019), which explains that credit distribution has a significant effect on increasing the number of livestock.

Sales Turnover

Sales turnover is the result of sales obtained by the livestock business from selling livestock products. Based on the survey, the average turnover earned by breeders is Rp. 11,600,000. When viewed based on the use of credit, farmers who use credit have a higher sales turnover compared to breeders who do not use credit. Farmers who use credit have an average sales turnover of Rp. 23,300,000, while farmers who do not have an average sales turnover of Rp. 10,500,000. The result was related to the number of livestock owned by the livestock business, which also influences the sales turnover of farmers. Thus, farmers who use credit have an average sales turnover that is higher than those who do not. The result is in line with research by Pratama (2014), Arinda (2015), Muharastri et al. (2015), Nasution (2016), and Zulhatasmi (2016), which explain that the provision of credit has a significant effect on increasing the turnover of livestock business sales.

Profit

Profit is the result of subtracting revenue minus production costs. Based on the survey data, the average profit for a livestock business is Rp. 11,400,000. When viewed based on the use of credit, breeders who use credit have higher profits compared to breeders who do not use credit. Breeders who use credit have an average profit of Rp. 23,000,000, while those who do not earn an average profit of Rp. 10,300,000. The profit received by the livestock business was influenced by the number of sales made by the farmer. Thus, the more significant number of livestock owned by breeders will also increase the sales turnover of breeders, which can also increase the profits received by breeders. Thus, breeders who use credit have a higher average profit than breeders who do not. These results are in line with Pratama's research (2014), Muharastri et al. (2015), Nasution (2016), and Zulhatasmi

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

(2016), which explain that granting credit allocated to increase production inputs such as increasing the number of livestock can affect increased profits.

Factors Affecting Livestock Business Decisions Using Credit

Based on Table 2, the estimation results using the logit model for all livestock businesses obtained twelve variables that are predicted to affect livestock business using credit, namely the location of the livestock business, the age of the breeder, gender, type of livestock, number of dependents in the family, cooperative membership, livestock group, extension and partnership which are statistically significant at the level of significance α=1% on the decision to use livestock credit. Meanwhile, the variables of husbandry experience, land ownership, and association membership were statistically significant at the significance level α= 5%. Finally, the variables of education level and ownership of livestock business facilities are not statistically significant.

Table 2. Factors Influencing Farmers to Use Credit.

Variable	Odds ratio	Std. Err.	z	P>|z|
Farm business household location (dummy)	2.896	0.136	22.60	0.000***
Age (years)	0.977	0.002	-10.81	0.000***
Gender (dummy)	1.430	0.114	4.48	0.000***
Education level (years of school)	1.007	0.005	1.37	0.171
Type of livestock (dummy)	0.629	0.038	-7.49	0.000***
Number of dependents in the family (person)	3.772	0.073	68.18	0.000***
Farming experience (years)	1.013	0.005	2.32	0.019**
Land ownership (dummy)	0.811	0.066	-2.53	0.011**
Ownership of livestock business facilities (dummy)	0.904	0.068	-1.33	0.184
Cooperative membership (dummy)	2.587	0.170	14.46	0.000***
Farmer group (dummy)	3.482	0.295	14.71	0.000***
Association membership (dummy)	1.772	0.447	2.27	0.023**
Counseling (dummy)	1.588	0.119	6.16	0.000***
Partnership (dummy)	2.536	0.456	5.17	0.000***

Notes: ** significant at the level of significance α=5%,
*** significant at the level of significance α=1%

The variable location of the livestock business has a significant influence on the decision of the farmer to use credit at a significant level of α=1%, indicated by the p-value obtained for the location of the livestock business of 0.000. The odds ratio value of the livestock business location variable is 2.980, with a positive z-value explaining that farmers in Java have a 2,980 times greater chance of using credit than farmers outside Java. This result is in line with the limited credit distribution data and is focused on several provinces, especially in Java (around more than 50%), because it has a positive impact on the manufacturing sector and affects regional economic growth in the province (Mawesti et al., 2018; OJK, 2015). In addition, according to several studies, granting credit for investment in Java has shown significant results in the technical efficiency of farmers, thereby improving the performance of their agricultural businesses and reducing unemployment and poverty at the farmer level (Abubakar et al., 2019; Muljarijadi, 2018; World Bank, 2011). However,

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

according to research by Achmad et al., (2012) it is necessary to review the credit distribution policy in Java, considering that the efficiency of farming in Java is quite high, so it would be better if credit distribution were directed outside Java in order to increase the distribution of credit accessibility. To accelerate the equitable distribution of credit, local governments can provide support through APBD allocations focused on productive micro-enterprises, which can be useful for increasing access to capital for micro-enterprises (Aristanto, 2019).

The age of the breeder on the logit test results has a significant effect on the real level α= 1%, as indicated by the *p-value* obtained for the age of the breeder of 0.000. The *odds ratio* and the *z-value* of the breeder's age variable, which is negative at 0.977, mean that the older the breeder's age, the less the desire of the farmer to use credit will be 0.977 or the smaller the desire. The results of this study are in line with several previous studies, such as Abadi (2014), Kusumaningtyas (2017), Marantika & Sampurno (2018) which show that the age variable has a significant negative effect on decisions to use credit. The age of the breeder has a close relationship with the older the breeder, and the tendency to use additional capital from outside will decrease. The lack of willingness to use credit for older breeders is due to farmers' lack of knowledge about sources of business capital. In addition, young breeders tend to have higher productivity compared to older breeders. Therefore, business capital financing in lending is currently focused on young farmers (millennial farmers) who want to develop their businesses (Rachmawati & Gunawan, 2020; Susilowati, 2016b, 2016a).

The gender variable has a significant positive effect at the significance level of α=1%, indicated by the *p-value* obtained for the gender variable of 0.000. The odds ratio value of the breeder's gender variable is 1.430, with a positive *z-value* which explains that male breeders are 1.430 times more likely to use credit than female breeders. This result is also in line with research (Diana, 2019; Nkuah et al., 2013) which shows that male business actors have greater opportunities in the accessibility of business loans. This is because women may face greater constraints in credit markets due to land tenure systems and other cultural practices that prohibit women from acquiring property in some traditional societies. This causes the inability of women to access bank credit due to traditional practices that hinder women's empowerment in society. However, most financial institutions prefer to provide loans to women who form groups because the groups serve as a form of collateral. It can also be seen that economic activities in metropolitan cities are dominated by men. Therefore, male entrepreneurs are more favored in the credit market than women.

A high level of education can help farmers better master efficient production methods so that they become guidelines in dealing with various existing problems and become provisions in making business decisions. The level of education has a significant positive effect at the significance level α=10%, indicated by the p-value obtained for the level of education of 0.171. The odds ratio value of the education level variable is 1.007, with a positive z-value indicating that farmers with higher levels of education are 1.007 times more likely to use credit than farmers with lower levels of education. These results are also in line with the research of Mandaka & Hutagaol (2015) and Firmansyah et al., (2017) that the high and low level of education is related to the ability of farmers to adopt farming techniques.

The number of dependents in the family has a significant effect at the level of significance α=1%, indicated by the p-value obtained for the number of dependents in the family of 0.000. The odds ratio value of the variable number of dependents in the family is 3.772, with a positive z-value

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

which explains that the higher the number of dependents owned by the farmer will increase the desire to use credit 3.772 times compared to farmers with fewer dependents in the family. These results align with the research of Mayangsari et al. (2014) explained that the presence of many members in the family is expected to support the business's success. In the research of Firmansyah et al. (2017), this is related to the involvement of workers in the family, thereby reducing expenses for the business.

The type of livestock variable has a significant effect at the level of significance =1%, indicated by the p-value obtained for the type of livestock, which is 0.000. The odds ratio and the z value of the livestock type variable, which is negative at 0.629, indicate that farmers who cultivate small ruminants have a 0.629 times greater chance of using credit than farmers who cultivate large ruminants. This is in line with the research results of Fauzan (2017) and Putri et al. (2021), which show that the provision of credit to laying hens and broiler breeders can increase the production of livestock businesses and have an impact on increasing the income of farmers when compared to before the provision of credit.

The experience of raising livestock has a significant effect at the significance level =5%, indicated by the p-value obtained for the experience of raising livestock of 0.019. The odds ratio value of the farming experience variable is 1.013, with a positive z-value which explains that the longer the breeder's experience of raising livestock owned will increase the desire to use credit 1.013 times compared to farmers who have less experience in raising livestock. These results are in line with several previous research results which show that business experience positively influences credit returns (Abadi, 2014; Arinda, 2015; Hermawan & Wiagustini, 2016; Kiswati & Rahmawaty, 2016; Oktapiani, 2018; Wulandari et al., 2021). The experience of raising livestock is related to the ability to manage funding sources so that it allows debtors to make decisions by learning from past mistakes and reducing the risk of business failures such as the occurrence of bad loans to increase the rate of loan repayment smoothly (Abadi, 2014; Arinda, 2015; Pradifta & Erdiana, 2014). 2015; Wulandari et al., 2021).

The variable of land ownership has a significant effect on the level of significance = 5%, indicated by the p-value obtained for land ownership which is 0.011. The odds ratio and the z-value of the negative land ownership variable of 0.811 indicate that farmers with their land are 0.811 times less likely to use credit than farmers who use land owned by others or from leases. This study's results align with Monsaputra et al. (2022), which explain that several factors cause farmers to be reluctant to use credit. Lack of insight of farmers regarding opportunities from land ownership that can be used to obtain additional business capital. The customs or culture of the community views mortgaging or making land ownership as collateral as a shameful thing and is only done if the worst conditions are, such as being in debt and not being used to increase business capital.

Ownership of livestock business facilities has a significant effect at the level of significance =10%, indicated by the p-value obtained for ownership of livestock business facilities which is 0.184. The value of the odds ratio and the z-value of the variable ownership of livestock business facilities, which has a negative value of 0.904, indicates that farmers who own livestock business facilities themselves have a 0.904 times less chance of using credit than farmers with livestock business facilities owned by rent or owned by others. These results are in line with the research by Abubakar et al. (2019), which explains that agricultural facilities still dominate the majority of bank credit to reduce production costs. Contrary to the research results of Fauzan (2017), Atmakusuma et al. (2019),

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

and Ogwuike et al. (2022), which explain that the distribution of credit used for facilities and infrastructure can have a positive impact on increasing the production capacity of livestock businesses.

The cooperative membership variable has a significant positive effect on the significance level of =1%, as indicated by the p-value obtained for the membership variable of 0.000. The odds ratio value of the cooperative membership variable is 2.587, with a positive z value explaining that breeders who are members of cooperative memberships have a 2.587 times greater chance of using credit than farmers who are not members of cooperatives. These results are in line with several previous studies which showed that cooperatives were able to become the right forum for lending because they were proven to affect the success of business development (Atmakusuma et al., 2019; Firmansyah et al., 2017; Mandaka & Hutagaol, 2015; Winarso, 2015; Wulandari et al., 2021).

The breeder group variable has a significant positive effect at the significance level of =1%, indicated by the p-value obtained for the livestock group variable of 0.000. The odds ratio value of the cooperative membership variable is 3.482, with a positive z-value explaining that farmers who are members of the farmer group have a 3.482 times greater chance of using credit compared to farmers who are not. The results of this study are in line with the results of research by Dahri et al. (2015), Widodo (2016), Santoso and Fathiah (2017), Ashari (2019), and Putri et al. (2021) that the breeder group is proven to have higher accessibility to obtain capital in the form of credit compared to farmers who are not incorporated into the breeder group. Some supporting reasons are that it is easier for farmer groups to get a letter of recommendation from the local Animal Husbandry Office to obtain credit business capital from the banking sector. In addition, the group of farmers who received credit was also proven to affect increasing the number of livestock, income received by farmers, and profits so that they were able to provide positive benefits to the collectibility of farmer credit which was able to increase the trust of the banking sector to livestock groups.

Association membership has a significant effect at the significance level =5%, indicated by the p-value obtained for the experience of raising livestock of 0.023. The odds ratio value of the livestock experience variable is 1.772, with a positive z-value which explains that farmers who are members of the association have a 1.772 times greater chance of using credit compared to farmers who are not incorporated into the association. Membership in the association is also one of the factors that can facilitate access to bank credit. The results of this study are in line with the results of research by Anzory (2018), Diana (2019), Colin, and Kacaribu (2021) that farmers who are members of livestock groups, farmer associations, and cooperatives can get working capital loans more easily. Ease of access to sources of financing is stated in Financial Regulation No.10/PMK.05/2009 related to the people's business credit guarantee facility for associations as an effective form of cooperation because it has shown significant positive results on livestock business performance.

The extension variable has a significant positive effect at the significant level =1%, indicated by the p-value obtained for livestock extension of 0.000. The odds ratio value of the extension variable is 1.588, with a positive z-value explaining that farmers who receive counseling are 1.588 times more likely to use credit than farmers who do not. Therefore, the success of lending can not be separated from the existence of counseling related to the existence of capital assistance facilities as a tool to improve the performance of livestock business (Abubakar et al., 2019; Asiati & Nawawi, 2017; Descartes et al., 2021; Diana, 2019; Fitra, 2022; Yuniarti, 2018). Counseling is proven to provide

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

positive benefits for the formation of business development plans and business assistance as well as helping the problems faced by farmers in the field. Thus, extension is proven to be able to support all aspects of supporting the development of the livestock business.

The partnership variable has a significant positive effect at the level of significance =1%, indicated by the p-value obtained for livestock extension of 0.000. The odds ratio value of the partnership variable is 2.536, with a positive z value explaining that breeders with proven partners are 2.536 times more likely to use credit compared to farmers who do not have partners. Thus the results of the study show that partnerships have proven to affect credit accessibility which can help sources of business capital in line with research (Asiati & Nawawi, 2017; Diana, 2019; Maemunah & Isyanto, 2017; I. Santoso et al., 2015; Saputra et al., 2017). The partnership variable has many benefits, including increasing sales turnover, increasing the workforce, and increasing profits received after partnering. Thus, the partnership can positively impact the growth and development of the livestock business.

CONCLUSION AND SUGGESTION

Based on the results of research on farmers' decisions to take credit in Indonesia, it is concluded that the factors that influence livestock business decisions to use credit include twelve variables, namely: location of livestock business, breeder's age, gender, number of dependents in the family, experience raising livestock, land ownership, membership of cooperatives, farmer groups, membership of associations, extension, and partnerships have a statistically significant. Meanwhile, the variables of education level and ownership of livestock business facilities do not significantly influence the decision of farmers to use credit.

Some suggestions for consideration are for livestock businesses to be able to use credit for productive purposes and improve their business performance. Banking institutions and micro-finance institutions play a role as a source of inclusive agricultural financing to support the development of the livestock business through the provision of productive credit by continuously monitoring and evaluating the livestock business. For the government and the livestock service to support livestock businesses, they need to receive guidance through counseling, cooperative development, farmer groups, farmer association activities, and partnerships. The government and animal husbandry services can also liaise between farmer groups, breeder associations, farmer cooperatives, livestock businesses, and microfinance institutions and banks to obtain business capital.

Thus the policy of providing financing and capital facilities through credit distribution as a strategy for empowering farmers and micro business actors in the agricultural sector can be an incentive for farmers to increase their production and can continue to be an instrument of agricultural capital policy. Cooperation in the form of partnerships between livestock businesses, microfinance institutions or banks, the government, and the livestock service needs to be continuously supported because it affects the performance of livestock businesses. Credit success cannot be separated from the existence of credit counseling as one of the business capital facilities, so the increase in outreach is proven to affect credit success. Credit distribution can be focused on young farmers (millennial farmers) who want to focus on developing their business, considering their productivity is still relatively high by continuing to provide business assistance. Suggestions for further researchers can

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

analyze the decision of farmers to take credit by considering the type of livestock variable based on the scale of their business.

REFERENCES

[BBP2TP] Balai Besar Pengkajian Pengembangan Teknologi Pertanian. (2011). Petani Butuh Modal. Agro Inovasi.

Abadi, A. F. (2014). Analisis Pengaruh Karakteristik Peminjam, Besar Pinjaman, Jenis Usaha, dan Lama Usaha Terhadap Tingkat Kelancaran Pengembalian Kredit Usaha Rakyat (KUR) Mikro (Studi Kasus pada Debitur KUR Mikro BRI Unit Kendal Kota) [Universitas Diponegoro]. http://eprints.undip.ac.id/43426/

Abubakar, D., Anggraeni, L., & Fariyanti, A. (2019). Analisis Pengaruh Kredit terhadap Efisiensi Usahatani Padi di Pulau Jawa. Jurnal Ekonomi Dan Kebijakan Pembangunan, 8(2), 120–144. https://doi.org/10.29244/jekp.8.2.2019.120-144

Achmad, M., Hartoyo, S., Mangkuprawira, T. S., Kusnadi, N., Ekonomi, F., & Bogor, I. P. (2012). Pengaruh Aksesibilitas Penyuluhan dan Kredit terhadap Efisiensi Usahatani Padi di Jawa. Trikonomika, 11(1), 69–80.

Aristanto, E. (2019). Optimalisasi Peran Pemerintah Daerah dalam Mendukung Penyaluran Kredit Usaha Rakyat di Jawa Timur. Jurnal Manajemen Dan Kewirausahaan, 7(1). https://doi.org/10.26905/jmdk.v7i1.2841

Atmakusuma, J., Sinaga, B. M., Kusnadi, N., Kariyasa, I. K., Ekonomi, F., & Bogor, I. P. (2019). Dampak Pinjaman Sarana Produksi Ternak terhadap Kesejahteraan Rumah Tangga Peternak Sapi Perah di Lembang. Jurnal Agribisnis Indonesias, 7(1), 1–12.

BPS. (2015). Analisis Rumah Tangga Usaha Peternakan di Indonesia Hasil Survei Rumah Tangga Usaha Peternakan Tahun 2014. Badan Pusat Statistik.

Diana, R. (2019). Analisis Aksesibilitas Permodalan Usaha Mikro Kecil Di Provinsi Sumatera Barat. Jurnal Ekonomi Pembangunan, 27(1), 67–80. https://doi.org/10.14203/jep.27.1.2019.67-80

Ditjen PKH. (2021). Realisasi KUR Sektor Peternakan Tahun 2019 Mencapai 3,42 Triliun. http://ditjennak.pertanian.go.id/realisasi-kur-sektor-peternakan-tahun-2019-mencapai-3-42-triliun

Fauzan, A. (2017). Uji Beda Pendapatan Peternak Ayam Ras Petelur Dengan Pemberian Kredit Perbankan di Kabupaten Langkat. In Jurnal Pembangunan Wilayah & Kota (Vol. 1, Issue 3). Universitas Sumatera Utara.

Feryanto, & Rosiana, N. (2021). Penggunaan Telepon Seluler Untuk Pemasaran Serta Dampaknya Terhadap Kesejahteraan Petani. Jurnal Agrisep, 20(1), 25–40. https://doi.org/10.31186/jagrisep.20.1.25-40

Firmansyah, D., Arsyad, A., & Nahraeni, W. (2017). Pengaruh Pemberian Kredit Dan Faktor – Faktor Yang Mempengaruhi Produksi Usaha Sapi Perah. Jurnal Agribisains, 2(2), 1–10. https://doi.org/10.30997/jagi.v2i2.774

Hosmer, D. W., & Lemeshow, S. (2013). Applied Logistic RegressionThird Edition. In Biometrics (Vol. 47, Issue 4). John Wiley & Sons, Inc. https://doi.org/10.2307/2532419

Kusumaningtyas, I. (2017). Pengaruh Karakteristik Personal, Karakteristik Usaha, Karakteristik Kredit, dan Jaminan terhadap Tingkat Pengembalian Kredit Di BPR Nusamba Adiwerna Kabupaten Tegal Tahun 2016. Multiplier: Jurnal Magister Manajemen, 1(2), 1–20. https://doi.org/10.24905/mlt.v1i2.772

Mandaka, S., & Hutagaol, M. P. (2015). Analisis Fungsi Keuntungan, Efisiensi Ekonomi Dan Kemungkinan Skema Kredit Bagi Pengembangan Skala Usaha Peternakan Sapi Perah Rakyat

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 7 (1): 126-143, March 2023

Di Kelurahan Kebon Pedes, Kota Bogor. Jurnal Agro Ekonomi, 23(2), 191–209.

Marantika, C. R., & Sampurno, R. D. (2018). Analisis Faktor-Faktor Yang Mempengaruhi Kelancaran Pengembalian Kredit Usaha Rakyat (KUR) Mikro. Dipenogoro Journal Of Management, 2(2), 1–14.

Mawarni, V. (2021). Faktor yang Memengaruhi Petani Kopi Bergabung pada Koperasi dan Dampaknya terhadap Kinerja Usahatani. IPB University.

Mawesti, D., Afrina, E., Lauranti, M., & Zunivar, A. Y. (2018). Inklusi Keuangan Bagi Perempuan: Akses dan Pemanfaatan Kredit Usaha Rakyat (Studi Kasus: Kabupaten Lombok tengah, Kabupaten Indramayu, dan Kotamadya Jakarta Selatan). In Perkumpulam PRAKARSA (Vol. 1, Issue 69).

Mayangsari, D., Prasetyo, E., & Mukson. (2014). Evaluasi Kredit Usaha Peternakan Sapi Potong Pada Kelompok Tani Ternak. JEJAK: Jurnal Ekonomi Dan Kebijakan, 7(1), 14–21. https://doi.org/10.15294/jejak.v7i1.3839

Muljarijadi, B. (2018). Perkembangan dan Prospek Investasi di Jawa Barat Peningkatan Peran dan Kualitas PMPTSP Dalam Mewujudkan Jabar Juara Lahir dan Batin Padalarang. November.

Nkuah, J. K., Paul, J., & Kala, T. (2013). Financing Small and Medium Enterprises (Smes) in Ghana : Challenges and Determinants in Accessing Bank Credit. International Journal of Research in Social Sciences, 2(3), 12–25.

Ogwuike, P. C. A., Ogwuike, C. O., & Arouna, A. (2022). Impact of the adoption of technological innovation on the credit acquisition of rice farmers in Senegal: A propensity score matching technique. African Journal of Science, Technology, Innovation and Development, 14(2), 478–488. https://doi.org/10.1080/20421338.2020.1855746

OJK. (2015). Tinjauan kebijakan OJK. Ojk, 45.

OJK. (2020). Salinan peraturan otoritas jasa keuangan republik indonesia, nomor 11/Pojk.03/2020. 2019, 1–23. https://peraturan.bpk.go.id/Home/Download/126415/Peraturan OJK Nomor 11 Tahun 2020.pdf

OJK. (2021). Laporan Profik Industri Perbankan Triwulan IV 2020.

Putri, A. A., Rachmina, D., & Fariyanti, A. (2021). Pengaruh Kredit Ketahanan Pangan dan Energi (KKPE) terhadap Produksi Ayam Ras Pedaging di Sumatera Barat. 9(1), 1–12.

Rachmawati, R. R., & Gunawan, E. (2020). Peranan Petani Milenial mendukung Ekspor Hasil Pertanian di Indonesia. Forum Penelitian Agro Ekonomi, 38(1), 67. https://doi.org/10.21082/fae.v38n1.2020.67-87

Sinaga, S. V., Harianto, H., & Suharno, S. (2019). The Analysis Of Propensity Score Matching On The Economic Effect Of C.A.F.E. Practices Certification Toward Lintong Coffee Farming In North Sumatra. Jurnal AGRISEP : Kajian Masalah Sosial Ekonomi Pertanian Dan Agribisnis, 18(1), 139–152. https://doi.org/10.31186/jagrisep.18.1.139-152

Susilowati, S. H. (2016a). Fenomena Penuaan Petani dan Berkurangnya Tenaga Kerja Muda Serta Implikasinya Bagi Kebijakan Pembangunan Pertanian. Forum Penelitian Agro Ekonomi, 34(1), 35–55.

Susilowati, S. H. (2016b). Kebijakan Insentif Untuk Petani Muda: Pembelajaran dari Berbagai Negara dan Implikasinya bagi Kebijakan di Indonesia. Forum Penelitian Agro Ekonomi, 34(2), 103. https://doi.org/10.21082/fae.v34n2.2016.103-123

Tampubolon, R. N., Mawesti, D., Rahayuningrum, D., & Lauranti, M. (2017). Peran Perbankan Menuju Keuangan Inklusif di Indonesia. Responsi Bank Indonesia, 1–76.

World Bank. (2011). Diagnosa Pertumbuhan Ekonomi Jawa Timur.