

# Analysis of Business Financing of Capture Fishermen from Non-Formal Sources in Kuala Indragiri Sub-District, Indragiri Hilir District, Riau Province

## *Analisis Pembiayaan Usaha Nelayan Tangkap dari Sumber Nonformal di Kecamatan Kuala Indragiri Kabupaten Indragiri Hilir*

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### Abstract

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Funding for fishermen's enterprises refers to the costs fishermen require to procure investment goods and operational costs for fishing activities. Funding for fishermen's enterprises is sourced from various channels. This research was conducted in May 2024 in Kuala Indragiri District, Indragiri Hilir Regency, Riau Province. The research has two objectives: first, to describe the procedures for funding fishermen's enterprises. The second objective is to determine the influence of funding procedures and the socio-economic conditions of fishermen on the decision to borrow from non-formal sources. The sample consisted of 79 fishermen from 3 villages selected using the purposive sampling. Data collection was done through interviews, documentation, and questionnaires. Data analysis was conducted using Descriptive Analysis and Multiple Linear Regression. The results of the descriptive analysis show that the procedures for funding fishermen's enterprises can be sourced from self-funding, family, and non-formal sources referred to as "container", with a value of 3.94 categorized as easy. The multiple linear regression analysis results yielded the equation  $\hat{Y} = 17.465 + 0.477X_1 - 0.306X_2$ . The research results indicate that funding procedures positively and significantly impact the decision to borrow from non-formal sources. Meanwhile, socio-economic conditions negatively and significantly affect the decision to borrow from non-formal sources. There is a positive and significant simultaneous influence between funding procedures and socio-economic conditions on borrowing from non-formal sources. The variable model can predict borrowing decisions from non-formal sources by 52.2%, with 47.8% influenced by other variables.

**Keywords:** Decision to Borrow, Socio-economic Conditions, Funding

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### Abstrak

Pembiayaan usaha nelayan merupakan besaran biaya yang dibutuhkan oleh nelayan untuk pengadaan barang investasi dan biaya operasional usaha penangkapan ikan. Pembiayaan usaha nelayan diterima dari berbagai sumber berbeda. Penelitian ini dilakukan pada bulan Mei 2024 di Kecamatan Kuala Indragiri, kabupaten Indragiri Hilir, Provinsi Riau. Penelitian ini memiliki dua tujuan, yaitu untuk mendeskripsikan prosedur pembiayaan usaha nelayan. Tujuan kedua untuk mengetahui pengaruh prosedur pembiayaan dan kondisi sosial ekonomi nelayan terhadap keputusan meminjam dari sumber nonformal. Sampel sebanyak 79 nelayan dari 3 desa berbeda yang diambil dengan teknik *Purposive Sampling*. Pengumpulan data menggunakan metode wawancara, dokumentasi, dan kuesioner. Analisis data dengan menggunakan Analisis Deskriptif dan Regresi Linear Berganda. Hasil analisis deskriptif diketahui

prosedur pembiayaan nelayan dapat bersumber dari biaya mandiri, keluarga, dan dari sumber nonformal yang disebut sebagai “penampung”, memiliki nilai 3,94 dengan kategori mudah. Hasil analisis regresi linear berganda diperoleh persamaan  $\hat{Y} = 17,465 + 0,477X_1 - 0,306X_2$ . Hasil penelitian menunjukkan bahwa Prosedur pembiayaan berpengaruh positif dan signifikan terhadap keputusan meminjam dari sumber nonformal. Sedangkan, kondisi sosial ekonomi berpengaruh negatif dan signifikan terhadap keputusan meminjam dari sumber nonformal. Ada pengaruh positif dan signifikan secara simultan, antara prosedur pembiayaan dan kondisi sosial ekonomi terhadap keputusan meminjam dari sumber nonformal. Model variabel yang digunakan dapat memprediksi keputusan meminjam dari sumber nonformal sebesar 52,2 % dan 47,8 % dipengaruhi oleh variabel lainnya.

**Kata kunci:** Keputusan Meminjam, Kondisi Sosial Ekonomi, Pembiayaan

## 1. Introduction

Financing is an essential factor in the business world, including capturing fisheries, which needs to be considered by stakeholders (Gherghina et al., 2020; Leach & Melicher, 2021; Varga, 2021). The existence of financing or capital is one of the determining aspects of business success. The scale of the business is determined not only by market value but also by the scale of production, which is motivated by the amount of cost or capital. The business carried out by fishermen is a capital-intensive business. However, in general, fishermen in Indonesia do not have access and find it challenging to request capital assistance from financial institutions due to the uncertainty of the feasibility of the business being run and the low assessment of financial institutions against fishermen's businesses, which are considered high risk (Bathara et al., 2021).

The fishing business is one of the fisheries and marine subsectors, requiring relatively large capital or funds. For example, boats, fishing gear, and all operational costs must be procured when conducting fishing business. Most fishing businesses carried out by fishermen are included in the capital-intensive Micro, Small and Medium Enterprises (MSMEs) group. However, fishermen in Indonesia still have minimal access to credit financing from formal financial institutions. This is shown by one of the indicators of fisheries sector lending. Based on data from the Financial Services Authority (OJK) in 2019, credit to the fisheries business sector only reached 0.23% of the total national MSME lending of 12.2 trillion. Capture fishermen are more likely to use non-formal sources of financing to finance their fishing business, even though non-formal funding is known to impose high loan interest rates. Non-formal sources of financing used by fishermen can be tauke, juragan, moneylenders, and other money lenders (Hamdani et al., 2020).

Low access to financing from formal institutions and the high interest of fishermen in using non-formal sources can be caused by several factors. Internal causal factors may include a lack of knowledge of market access and information on financing sources. Fishermen's businesses are seasonal, high-risk, traditional in management, and minor in scale. External factors include low business credibility from a banking perspective, complicated loan procedures, and limited service coverage. Non-formal source financing is considered not to impose such conditions (Yulinda et al., 2015). Its existence is close to the fishermen's environment; no loan terms and procedures make it difficult for fishermen, and the implementation is carried out conditionally. Factors supporting the success of the business run by the moneylenders depend on the financing procedures and the socio-economic conditions of the fishermen (Nadjib, 2013).

The impact of fishermen's financing pattern can cause complex problems. The relationship between fishermen and non-formal credit providers is a patron-client relationship. The relationship has a great potential to become exploitative due to the monopsony market system, which was initially a functional and mutualistic relationship. This was stated by Mita & Rahaju (2023) through their analysis. The relationship between fishermen and non-formal loan providers makes it difficult for fishermen to receive a healthy price, resulting in stagnant income and vulnerability to debt. This condition will make it difficult for fishermen to develop their businesses to continue to compete with larger-scale businesses. Furthermore, fishermen will remain low-income and be considered poor (Suleman et al., 2019).

The same thing is thought to have happened in Kuala Indragiri Sub-district, Indragiri Hilir Regency, Riau Province. The area has a community dominated by fishermen because of its geographical location along the Indragiri River and the Malacca Strait. Its existence far from urban areas makes community access and mobility quite difficult. Likewise, the existence of public facilities and financial institutions. This is suspected to make many fishermen dependent on non-formal loan service providers.

The background that has been described encourages this research to achieve two objectives. The first objective is to tell the financing procedures received by fishermen through non-formal sources, the socio-economic

conditions of fishermen, and the level of borrowing of fishermen with non-formal financing in Kuala Indragiri District. The second objective is to see the influence of financing procedures and fishermen's socio-economic conditions on the decision to borrow from non-formal sources. Through these objectives, these factors are used as a variable to be studied so that to prove it, a research hypothesis is formed. Among others, financing procedures and socio-economic conditions have a real positive and significant influence on fishermen's decisions from non-formal sources, both partially and significantly. The research objectives to be achieved use several indicators to obtain valid results based on existing literature and theories. Non-formal fishermen financing procedures are measured with an assessment approach to lending procedures or credit applications to financial institutions. According to [Kuncoro \(2002\)](#), loan procedure indicators consist of 1. credit realization, 2. repayment duration, 3. speed of implementation, and 4. requirements. The socio-economic conditions of fishermen are assessed and measured using a socio-economic status level approach.

## 2. Material and Method

### 2.1. Time and Place

This research was conducted in May 2024 in Kuala Indragiri District, Indragiri Hilir Regency, Riau Province.

### 2.2. Methods

The research method used is a quantitative survey. This research assesses fishermen's perceptions of the variables formed by distributing questionnaires. The data obtained were analyzed to describe the fishermen's assessment of the variables formed and see the influence of the research variables on the decision to borrow from non-formal sources. This research is limited to describing financing procedures from non-formal sources, the socio-economic conditions of fishermen who borrow from non-formal sources, the level of fishermen's borrowing, and their influence on fishermen's borrowing decisions.

### 2.3. Procedures

The sample determination in this study was made up of Kuala Indragiri District fishermen. The number of samples was determined using the Slovin formula with an error rate of 10%. The number of samples used was 79 out of 366 fishermen population ([BPS, 2022](#)). Based on the number of distribution of fishing fleets. Sampling in the field using a purposive sampling technique. The purposive sampling technique is a sampling method where the researcher ensures the quotation of illustrations by determining the unique identity that matches the research objectives so that it is expected to respond to the research case ([Sugiyono, 2013](#)). The considerations determined as sample selection are: 1) The research sample consists of people who work as fishermen scattered in Kuala Indragiri District, Indragiri Hilir Regency. 2) Samples are fishers who have received or are currently receiving financing from tauke and other non-formal sources.

Data was collected using interviews, documentation, and questionnaire distribution methods. The questionnaire distributed to fishermen was used to obtain information on fishermen's business financing. The questionnaire was also used to assess fishermen's perceptions of financing procedures, fishermen's socio-economic conditions, and the decision to borrow from non-formal sources. The evaluation of fishermen's perceptions was measured using a Likert Scale consisting of 5 answer intervals, starting from the answer strongly agree (SS) given a value of 5, Agree (S) given a value of 4, Neutral (N) given a value of 3, Disagree (TS) given a value of 2, Strongly Disagree (STS) given a value of 1. Likert scale is a research measuring tool that contains a numerical scale used by respondents as an answer to statements or questions of attitudes, opinions, and perceptions of a person or group of people about social phenomena ([Sugiyono, 2013](#))

### 2.4. Data Analysis

Data analysis systematically searches and compiles data from interviews, field notes, and documentation by grouping data into several categories to answer research objectives ([Sugiyono, 2013](#)). To answer the first objective, namely describing the non-formal financing procedures of fishermen, the socio-economic conditions, and the level of borrowing of fishermen from non-formal sources in Kuala Indragiri District. The analysis used is descriptive. Descriptive analysis is commonly used to answer exploratory problems ([Salsabilla et al., 2023](#)). Each research variable is described based on the respondents' assessment through measurement with a Likert Scale. Respondents' assessment criteria for variables are based on the following Table 1.

Table 1. Guidelines for categorizing average respondent ratings

Average Score	Criteria
1,00-1,80	Very Difficult/Very Poor/Very Low
1,81-2,60	Difficult/Poor/Low
2,61-3,40	Fair/Medium
3,41-4,20	Easy/Good/High
4,21-5,00	Very easy/very good/very high

This analysis is used to answer the second objective, namely, analyzing the effect of financing procedures, and the socio-economic conditions of fishermen on the decision to borrow from non-formal sources. The mathematical function used is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

Description:

Y	= Borrowing Decision	$\alpha$	= Constant
X1	= Financing Procedures	e	= Error Terms
X2	= Socio-economic Conditions		
$\beta$	= Regression Coefficient		

Multiple linear regression analyses that measure respondents' perceptions must fulfil several conditions. Among other things, the questionnaire instrument used must go through validity and reliability tests. This aims to determine whether the indicators can measure the research variables (Ghozali, 2018). Data acquisition using a Likert scale is ordinal scale data to be tested using parametric statistics; the data must be on an interval or ratio scale. In this study, data transformation was carried out using the interval Successive Method by determining the value of the data transformation interval (Ningsih & Dukalang, 2019).

Multiple linear regression analysis is also required to fulfil the classical assumption test. The data must be normally distributed, there is no multicollinearity between independent variables, and it must be free of heteroscedasticity symptoms. The normality test was carried out using the Kolmogorov-Smirnov test method. The multicollinearity test is obtained if  $VIF < 10$  and tolerance value  $> 0.1$ . The heteroscedasticity test is carried out with the Glejser Test, with the acceptance criteria if the coefficient value (b) is smaller than  $\alpha$  (0.05).

Hypothesis testing was carried out using the Statistical t-test method to test partial influence, the Statistical F-test to test simultaneous influence, and the Coefficient of Determination ( $R^2$ ) to see the percentage of influence of the research model formed. The existence of influence is seen through the value of t count and F count, which is more significant than the distribution value of t table and F table. The existence of influence is also indicated by the variable's significance value, which is smaller than the  $\alpha$  (0.05) value.

### 3. Result and Discussion

#### 3.1. General Description of Kuala Indragiri Sub-District

Kuala Indragiri sub-district is one of 20 in Indragiri Hilir Regency, Riau Province. It consists of seven villages and one sub-district, among others, Sapat Village as the administrative centre of the sub-district, Sungai Buluh Village, Sungai Bela Village, Tanjung Lajau Village, Teluk Dalam Village, Perigi Raja Village, Tanjung Melayu Village, and Sungai Piyai Village. Kuala Indragiri sub-district has a geographical condition with a typology of lowland areas, namely river deposits, swamp areas with peat soil (Peat), brackish forest areas (mangroves) and consists of large and small islands. The location is traversed by many rivers that empty into the Berhala and Malacca Strait. Among others, the most significant rivers are the Indragiri River, Batang Tuaka River, Enok River, Batang Tuaka River, and the mainland river of the settlement island, which is at an altitude of 0-3 mdpl.

Kuala Indragiri sub-district is one of the areas producing capture fisheries. The area produced 7,341 tons of capture fisheries production from marine waters. The area's marine waters have utilized 40.26% of the potential of 109,212 tons of existing fisheries. Fishermen in Kuala Indragiri District generally conduct fishing activities along the Indragiri River and the sea waters of the Malacca Strait. The fishing gear is operated as kurau nets, togok, gillnet, sondong, and rawai. The types of marine fisheries commodities that are often found are ketak shrimp (*Thenus orientalis*), tongkol (*Euthynnus affinis*), mackerel (*Scomberomorini*), layur (*Trichiurus lepturus*), clams (*Tegillarca granosa*), black snapper (*Macolor niger*), white snapper (*Lates calcarifer*), stingray (*Batoidea*), white pomfret (*Pampus argenteus*), and black pomfret (*Parastromateus niger*).

#### 3.2. Analysis of Variables

The Financing for Kuala Indragiri Sub-district fishermen procures business investment goods and fishing operational needs. Fishermen's investment for business can be in the form of procuring a fleet of boats, boat engines, fishing gear, and other fishing equipment. Fishing operational costs include fuel, fresh water, provisions, and bait. The total costs incurred by fishermen with various fishing gear are listed in Table 2.

Table 2. Business costs of capturing fishermen by fishing gear

No.	Fishing Gear	Investment x 1000				Operations x 1000			
		ship	API	Machine	More	BBM	feed	water	Bekal
1	Jrg. shrimp	4.000	350	7500	1.000	200	-	30	30
2	Mini trawl	13.000	700	17000	1.000	600	-	50	30
3	Togok	9.000	500	9000	1.000	500	-	30	30
4	Rawai	4.000	350	7500	1.000	200	80	30	30
5	Sondong	8.500	700	9000	1.000	500	-	30	30

The operational cost of fishing can be sourced from individual fishermen, family/relatives who have the same business, and loans from fish collectors referred to as "collectors" by the local community. Self-financed and family-sourced fishermen can engage in direct fishing activities and sell their catches to appropriate collectors. In some practices in the field, the cost from the family will still be counted as the fisher's debt. Fishermen who do not have the operational costs of fishing will look for sources of financing that can be borrowed. The primary choice for local fishermen who do not have the capital to go to sea is the fish collectors who act as non-formal loan providers. The results of descriptive analysis of respondents' assessments of each variable are in Table 3.

Table 3. Variable descriptive statistics

No.	Variables	n	Score	Mean	Criteria
1	X1	79	2803	4,02	Easy
2	X2	79	1433	2,27	Bad
3	Y	79	2942	3,94	High

Respondents' assessment of the variable financing procedures received by fishermen or applied by the container falls into the easy category. The credit realization indicator has a value of 4.02 with an easy category, and the ease of submission has a value of 3.97 with an easy category. The speed of implementation has a value of 3.90 with an easy or fast category, and the loan requirements have a value of 3.79 with an easy category. Respondents' assessment criteria for the socio-economic conditions of fishermen show poor criteria. The indicator of income conditions of fishermen respondents has a value of 2.81 with a moderate category, the indicator of organizational participation has a value of 2.69 with a moderate category, the indicator of access to education and health has a value of 1.98 with poor criteria, the indicator of asset availability has a value of 2.10 with a poor category.

Meanwhile, the decision to borrow fishermen from non-formal sources is included in the high category. The indicator of recognition of non-formal financing needs has a value of 3.89 with a high category, the information search indicator has a value of 4.06 with a high category, the evaluation of alternatives has a value of 4.02 high, the decision to borrow has a value of 3.80 with a high category, the behaviour after borrowing fishermen to use and recommend loans has a value of 3.98 with a high category.

The results of the validity test of the variable indicators in this study show several invalid statements that should be used as measuring instruments on the instrument. There is one invalid statement in variable X1 with a calculated r value of -0.7. One invalid statement on the X2 condition variable has a calculated r value of 0.117. There are two invalid statements in variable Y with a calculated r-value of -0.015 and -0.641. All invalid statements are then eliminated before conducting the following analysis. The variable reliability test results show that each variable used in this study has a Cronbach's Alpha value that is more significant than the significance level used (0.6). Each variable's Cronbach Alpha value includes X1 (0.774), X2 (0.786), and Y (0.620).

Table 4. Transformation scale of successive interval method

Choice	$f_i$	Proportion	Cumulative Proportion	$Z_i$	Density	Scale Value (SV)	Transform
1	123	0,062	0,062	-1,536	0,122	-1,957	1,000
2	294	0,149	0,211	-0,802	0,290	-1,127	1,830
3	313	0,158	0,370	-0,333	0,378	-0,556	2,401
4	1066	0,540	0,909	1,337	0,163	0,399	3,356
5	179	0,091	1,000	8,210	0,000	1,794	4,751
	1975					-1,957	

The results of the classic assumption test for data normality obtained the value of Asymp. Sig. (2-tailed) value of all data is 0.200. This value is greater than the specified  $\alpha$  value (0.05). This means that the data analyzed is usually distributed. The multicollinearity test results show that the VIF value on both independent variables is 1.261, greater than 10. Both variables' tolerance value (Sig.) is smaller than 0.1. This means that there is no multicollinearity between the independent variables. The results of the data heteroscedasticity test using the Glejser Test show the Sig value. X variable<sub>1</sub> is 0.542, and X variable<sub>2</sub> is 0.83. Both variables have a significance value greater than 0.05 ( $\alpha$ ). It can be concluded that there are no symptoms of heteroscedasticity in the regression model used. The results of multiple linear regression analysis between the variables of financing procedures and socio-economic conditions on the decision to borrow from non-formal sources obtained the estimation equation in Table 4.

Table 4. Multiple linear regression analysis results

Model		Unstandardized Coefficients		t	Collinearity Statistics	
		B	Std. Error		Tolerance	VIF
1	(Constant)	17,465	3,742	4,667		
	X <sub>1</sub>	0,477	0,067	7,092	0,793	1,261
	X <sub>2</sub>	-0,306	0,140	-2,184	0,793	1,261

The regression results of each variable using *SPSS* can be written in the form of a mathematical function as follows:  $\hat{Y} = 17,465 + 0,477 X_1 - 0,306 X_2$

The t-statistic test results on the financing procedure variable obtained a significance value of 0.000, more diminutive than 0.05. So, it can be concluded that financing procedures influence fishermen's decision to borrow from non-formal sources in Kuala Indragiri District. The t-test results on the socio-economic condition variable obtained a significance value of 0.01, smaller than 0.05. So, it can be concluded that socio-economic conditions influence fishermen's decision to borrow from non-formal sources in Kuala Indragiri District. Calculate the t-test using *SPSS*, as follows (Table 5).

Table 5. Statistical t-test of variables

Model	t	Sig	Collinearity Statistics	
			Tolerance	VIF
1 (Constant)	3,742	0,000		
X1	0,067	0,000	0,793	1,261
X2	0,140	0,010	0,793	1,261

The results of the F-statistic test obtained the calculated F value of 43.607 with a significance value of 0.000. The significance value is smaller than 0.5, so it can be concluded that financing procedures and socio-economic conditions influence fishermen's decision to borrow from non-formal sources from Kuala Indragiri District. The results of hypothesis testing using the F test are in Table 6.

Table 6. F test of variable statistics

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	409,059	2	204,530	43,607	0,000 <sup>b</sup>
Residuals	356,498	76	4,691		
Total	765,557	78			

The magnitude of the contribution of the independent variable to the dependent variable is seen through the coefficient of determination ( $R^2$ ). The results of calculating the coefficient of determination of the variable model used can be seen in Table 7.

Table 7. Coefficient of determination of the research model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,731 <sup>a</sup>	0,534	0,522	2,16582

The  $R^2$  value obtained is 0.522. This means that the variable influence of financing procedures and socio-economic conditions on the decision to borrow from non-formal sources by fishermen of Kuala Indragiri District is 52.2%, while 47.8% is influenced by other variables not included in this study.

### 3.3. The Effect of Financing Procedures on the Decision to Borrow from Non-Formal Sources

Income Based on the regression equation above, the financing procedure variable partially contributes the most to the decision to borrow from non-formal sources by fishermen, which is 0.477. This means this variable positively and significantly influences the decision to borrow from non-formal sources. The financing procedure of fishermen in Kuala Indragiri Sub-district, in this case, the financing provided by the collector, plays a vital role in determining the decision to borrow. In providing loans, fishermen make applying for and getting loans easy. Collectors can always be found by fishermen in the neighbourhood where they live. The requirements given by the collectors are also relatively light for fishermen. Fishermen only need to sell their catch to the collector who provided the previous loan. Collectors do not burden fishermen by providing collateral, so fishermen do not need to have valuable assets in advance to be able to borrow from collectors.

This follows the opinion of [Isamuddin \(2014\)](#), who states that in obtaining fishing operational costs, the problem faced by fishermen is often not the application of interest rates or scheduled instalments. However, business actors are constrained by applying procedures that must be passed in the early stages of financing fisheries. In addition, this result is also in line with research conducted by [Cahyadi & Diatmika \(2021\)](#); the study states that there is a positive and significant relationship between credit procedures and the decision to borrow MSMEs from non-bank institutions. These results indicate that financing procedures can significantly influence fishermen's decisions to borrow from non-formal sources.

The descriptive analysis results show easy criteria for the financing procedure variable, with the indicators previously described. Social and business relationships between fishermen and collectors can ease the procedures the collectors apply. The relationship between fishermen and tauke is strengthened by horizontal relationships such as ethnic and religious similarities, location and community structure, and the power factor tauke possesses and is recognized by fishermen ([Mita & Rahaju, 2023](#)). Regarding business patterns, the relationship between fishermen and middlemen is a dependency relationship. The dependency relationship has a phase that starts from

a mutualistic (reciprocal) relationship towards an exploitative relationship. This is a concern for fishermen. According to the observation of [Nadjib & Thoha \(2023\)](#), many of the fishermen have difficulty getting the right price from the tauke or money lenders because they have been entangled with fishermen's debts.

Through this review, the financing system applied by the collectors takes advantage of the fishermen's limitations in obtaining formal financing by providing the most feasible procedures for the fishermen to fulfil. The absence of other financing alternatives is also an advantage for fishermen in monopolizing fish prices. Efforts to improve the fishermen's financing system, to increase healthy fishermen's business credit and be free from the debt trap of collectors or tauke, can be considered through the implementation of procedures. According to [\(Nadjib, 2013\)](#), agricultural and aquaculture businesses are more likely to access the formal business credit system offered to fishermen. The extractive, exploitative, explorative mechanism of fishermen's firms in the scope of common resources makes the capture fishermen's business different in financing and income compared with other agribusiness businesses. Therefore, the financing pattern of fishermen's businesses needs to be reconstructed through reflection on the system imposed by the collectors or tauke.

#### 3.4. *The Influence of Socio-economic Conditions on the Decision to Borrow from Non-Formal Sources*

Based on the regression equation obtained, the socio-economic condition variable partially contributes to the decision to borrow fishermen from non-formal sources, which is -0.306. This means this variable negatively and significantly influences the decision to borrow from non-formal sources. Socio-economic conditions play an important role in the capture fishing business. Fishermen's business needs are often constrained by the economic needs of fishermen, which must be met first. The partial t-test result has a t-statistic of -2.184 with a significance of  $0.010 < 0.05$ , which means that the hypothesis "socio-economic conditions affect fishermen's borrowing decisions" is accepted. This indicates that the socio-economic conditions of fishermen are also a consideration for fishermen when making loans to collectors and other non-formal sources. This follows research conducted by [Julita et al. \(2024\)](#); the study states a negative and significant relationship between economic conditions and the decision to borrow from the usury system in the South Bengkulu Regency. The test results showed that the lower the family's financial condition, the higher the decision to borrow with the interest system.

The existence of a negative and significant influence between socio-economic conditions on the decision to borrow fishermen from non-formal sources can be caused by several things. The business pattern of fishermen who do not have clarity on their income makes it difficult for them to manage their finances to meet the needs of fishing families. This supports research conducted by [Suleman et al. \(2019\)](#), which states that the uncertain income of fishermen will result in the search for alternative financing despite the high risk; the long-term impact is that fishermen will remain low-income and are considered poor.

The socio-economic condition of fishermen in the Kuala Indragiri Sub-district is shown by the indicators used. The condition of the area far from the city, the lack of access to health and education, the uncertain income of fishermen, and the minimal availability of assets make fishermen choose fish collectors as a source of credit, both to meet their daily needs and fishing business needs. According to [Nadjib & Thoha \(2023\)](#), the high cost of living for fishermen is influenced by geographical factors. Coastal areas are generally suburban areas that are considered underdeveloped. The existence of access to public facilities for fishermen's needs is often an obstacle due to the remoteness of coastal areas. This factor makes fishermen spend more life costs to fulfil their needs. Access to education and health is one of the primary sources of income for fishermen; the additional cost to reach these facilities makes business capital shift from the priority of fishermen's family income management.

Efforts to improve fishermen's living standards can be made by improving healthier financing patterns for fishermen's businesses. The expectation of upgrading the scale of fishermen's business, especially in terms of using more efficient technology, can be addressed through the fishermen's socio-economic approach. Fishermen can be provided with business management education, fulfilment of access to health and education facilities and more flexible business guarantees. Thus, it is expected to reduce the cost of living and be used to progress the fishermen's business.

## 4. Conclusions

Based on the results of this study, it can be concluded that the financing procedure received by fishermen is included in the easy category, due to the application carried out by fish collectors that does not technically burden fishermen. The socio-economic condition of fishermen is poor. This is due to uncertain income, access far from urban areas and lack of public facilities. The level of fishermen borrowing from non-formal sources is high. The existence of fish collectors or middlemen is still the primary choice of fishermen in financing fishing businesses.

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