

Quantitative Analysis of the Relationship between Income and Welfare of Tuna Fishermen from the Perspective of Sharia Finance

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Abstract

This study aims to investigate the correlation between income levels and the welfare of fishermen operating in Waitomu Hamlet, Leihitu Subdistrict, Central Maluku Regency; and the relationship between the application of Sharia financial management principles with the income and welfare of tuna fishermen in that area. The research method applied is associative research, with research participants being actively operating fishermen in Waitomu Hamlet. The research approach involves the use of various techniques, including observation, distribution of questionnaires, and document analysis, with data analysis conducted using moment product correlation calculations. The results of the study revealed two main findings. First, the moment product correlation analysis showed a significant positive correlation between fishermen's income and the level of welfare, indicating that increasing income tends to have a positive impact on their welfare. Second, from a financial perspective, the practice of Sharia financial management applied by tuna fishermen in Waitomu Hamlet is considered successful.

Keywords: Management, Income, Welfare, Sharia Finance

INTRODUCTION

According to the National Spatial Data Reference of the Republic of Indonesia compiled by the Geospatial Information Agency and the Hydrology and Oceanography Center of the Indonesian Navy in 2018, Indonesia's maritime territory spans 6.4 million km², while its land area, as per Minister of Home Affairs Regulation No. 72 of 2019, covers 1,916,906.77 km². Indonesia demonstrates remarkable potential in terms of marine resources, often referred to as a nation rich in maritime identity. Fisheries production in Indonesia from 2017 to 2019 continued to increase, with successive amounts of 23,007,000 tons, 23,050,000 tons, and 26,586,000 tons per year (Wahyuni, Abubakar & Nur'azkiya, 2022).

Amidst the wealth of Indonesia's marine natural resources, fishing communities play a crucial role in managing these fisheries potentials. Residing in coastal areas, fishing communities possess distinct social characteristics, different from inland communities. Coastal areas experiencing rapid growth tend to have diverse social structures, characterized by high work ethic, strong solidarity, openness to change, and deep social interactions. The role of fishermen, constantly facing oceanic challenges, is crucial in conservation efforts and empowerment of marine resources (Muhammad, 2023). However, a common challenge they face is the low income earned, a problem that remains unresolved to date (Istiana & Utami, 2023).

Indonesia, as an archipelagic nation rich in natural resources, has

significant potential in the maritime and fisheries sectors. Proper and consistent management of coastal, marine, and small island resources can have a positive impact on the social welfare of communities, especially those living in coastal areas. Ideally, coastal communities should be able to improve their quality of life as fishermen do. Geographically, fishing communities are part of the living, growing, and evolving communities along the coast. However, the real challenge they face is the lack of equipment and capital for fishing activities in the ocean. As a result, many fishermen are trapped in a cycle of poverty due to insufficient income to meet their living needs (Aristi, 2018).

The Islamic perspective encourages humans to utilize natural potentials, both on land and at sea, including in the fisheries sector. Humans are given the freedom to extract as much benefit as possible from Allah's creation, provided that such utilization is aimed at achieving social justice and collective well-being. Allah's decree in the Quran, Surah An-Nahl, verse 14, emphasizes that the ocean is a gift from Allah to be utilized wisely. This is in line with the human responsibility as stewards on earth, who have the duty to manage natural resources wisely.

Initial observations in Waitomu Hamlet, Leihitu District, Central Maluku Regency, show that the area is predominantly inhabited by traditional fishermen, who engage in marine fishing activities using engines. These fishermen greatly require capital to purchase equipment and boat fuel. However, the income derived from their catch often fluctuates, especially for fishermen pursuing tuna, as this activity requires

high operational costs. Therefore, the income issue faced by fishermen in Waitomu Hamlet is an interesting topic for research. This study aims to explore the relationship between income and the well-being of tuna fishermen and review aspects of Sharia financial management in relation to the income and well-being of tuna fishermen in Central Maluku Regency.

METHODS

The research conducted in this writing utilizes an associative research method, aimed at identifying the relationship or influence between one or more independent variables with one or more dependent variables. This research method involves the use of a specific research object, where the results obtained only apply to the respective research object. The study focuses on the relationship between the income of fishermen and the welfare of tuna fishermen in the Waitomu hamlet, Leihitu District, Central Maluku Regency, using a Sharia financial perspective. In acquiring research data, this study adopts two different types and sources of data, namely primary data and secondary data. Primary data refers to information obtained directly from the core or original source obtained directly from the respondents, who in this case are the fishermen who catch tuna in the Waitomu hamlet. Secondary data refers to information obtained through reference to other literature or library materials. These secondary data will be obtained from various sources such as articles, scientific journals, internet blog posts, important documents, reports of previous research results, papers, and other reliable sources.

Validity testing is a process that evaluates the extent to which the data collected by researchers reflect the actual condition of the object under study. Validity testing is carried out on respondents who are fishermen in the Waitomu hamlet. The validity testing process is conducted using SPSS software. Through the use of SPSS, the collected data will be statistically analyzed to evaluate the extent to which the data is consistent with the research objectives and measurement tools used. Thus, validity testing becomes an important step in ensuring the accuracy and validity of the data collected in this research.

RESULTS AND DISCUSSION

Various sources such as sales, service provision, interest, and various other types of income, are generally known as "income." This term encompasses all forms of earnings obtained outside the normal operations of a company (Luthfiansyah et al., 2018). On the other hand, the term "revenue" refers to income derived from the sale of products, goods, services, and all transactions that occur (Ardiansyah, 2018).

The definition of income according to the Kamus Besar Bahasa Indonesia is the amount of money received by individuals, companies, or organizations in various forms such as wages, salaries, rent, interest, commissions, and profits, along with allowances, pensions, and other facilities (Sari, 2023). Sukirno states that personal income includes all types of income received without engaging in any activity, received by individuals or the state. In an economic context, income is interpreted as the maximum amount that can be consumed by an individual

in one period, assuming that the conditions at the beginning and end of the period remain the same. This approach emphasizes the total expenditure that can be used for consumption during that period. In other words, income includes all initial wealth at the beginning of the period, plus all income earned during that period, not just what is consumed (Tuara & Idris, 2022).

Fishery resources have great potential to improve the welfare of fishermen, but in reality, many fishermen still cannot increase their catch, so their income does not increase. Fishing communities live, grow, and develop in coastal areas, which are transition zones between land and sea. As a social system, fishing communities consist of various social categories that form social unity. They also have cultural values and symbols that influence their daily behavior. These cultural factors distinguish fishing communities from other social groups. Coastal communities often face complex problems such as poverty, social inequality, economic pressure, limited access to capital, technology, and markets, weaknesses in socio-economic institutions, low quality of human resources, environmental degradation, and inadequate maritime policies (Salatan, Manoppo & Darwisito, 2018). In this context, income plays a significant role in shaping the consumption behavior of society. Changes in consumption patterns often occur alongside changes in income levels. Therefore, it is important to consider how consumption patterns change with different income levels.

There are several types of income that can be identified as follows:

- a. Personal income refers to all forms of income received by individuals without involving any activity, which is the income received by the residents of a country.
- b. Disposable income is personal income after being reduced by taxes that must be paid by the income recipient. The remaining income after tax deduction is called disposable income. Sukirno defines disposable income as income that is ready to be consumed or spent. The amount of disposable income is the income received minus direct taxes such as income tax.
- c. National income is the total value of all goods and services produced by a country in one year.

Personal income refers to individual earnings not tied to specific activities but rather income received by citizens of a country (Yundari, 2023). Disposable income is personal income reduced by taxes that must be paid by the income recipient (Hanum & Sarlia, 2019). The remaining income can be used for spending or consumption. Disposable income is known by subtracting direct taxes, such as income tax, from the income received. Meanwhile, national income is the aggregate value of all goods and services produced in a country in one year.

Personal income represents various sources of income received by individuals without involvement in specific activities but rather as income received by citizens. Disposable income, in this context, is personal income adjusted for the deduction of taxes that must be paid by the income recipient. The remaining income is ready to be used for consumption or spending. Disposable income is calculated by subtracting direct taxes, such as income tax, from the income received. Meanwhile, national income

includes the total value of goods and services produced within a country in one year. In the income structure of society, there are two main classifications: permanent income and temporary income (Hanum, 2018).

Income levels can be understood in several forms, either as effective income received by producers based on the quantity of goods sold at set prices, or as collective income levels generated from the purchase of the same goods by a group of people in the market. Additionally, there are several factors influencing these income levels, including:

1. Unemployed individuals within the family significantly impact income. Low income is often caused by the presence of individuals within the family who do not participate in economic activities, which can hinder family economic growth.
2. Individual involvement in work but unsatisfactory results also affects income. Although all family members are involved in economic activities, the results obtained may be inadequate. This could be due to production limitations resulting in insufficient income or because the income earned is spent on daily needs.
3. Capital is an important factor in increasing income. Capital is a resource that supports business activities, both in the form of wealth used for production and in the form of investment required to develop businesses.
4. The price of goods also affects fishermen's income from fish sales. Understanding price as an indicator can help understand the value of a good or service. Price is the compensation required to obtain a

certain amount of goods or services and often serves as an important communication signal in the market.

5. Sales volume is an important factor in assessing sales performance, but in some cases, relying solely on sales volume is not enough. Several factors need to be considered, such as the cost and effort required to increase sales, the influence of competitor actions, and the marketing strategies applied.
6. Marketing plays a key role in managing production and increasing income. This involves social and managerial processes to understand consumer needs and desires and to create and exchange value with others. Marketing is not only about selling products but also about understanding the market and meeting consumer needs and desires effectively and efficiently.

Well-being in the context of the modern world is a condition in which an individual can meet basic needs such as food, clothing, shelter, clean water, and have opportunities to access education and employment that are adequate to improve their quality of life (Saifudin, 2019). Well-being also includes having social status equal to other fellow citizens. According to Human Rights (HR), well-being encompasses the rights of every individual, both men and women, youth, and children, to have a decent life in terms of health, nutrition, housing, and social services. If these rights are not fulfilled, it is considered a violation of HR.

Ultimately, well-being is the result of both physical and spiritual conditions. Islam, as given by Allah, guides humans towards true well-being. This religion encourages its followers to work hard and earnestly

in their professions and to practice worship sincerely. Working for worldly life involves various aspects such as economic and political, while working for the afterlife involves spiritual aspects such as worship.

Well-being in economic development is not only related to material aspects but also encompasses human and spiritual goals. Therefore, the concept of well-being is not only about fulfilling material needs but also about fulfilling spiritual and moral needs. Stephen T. Nith suggests that efforts to achieve societal well-being, both materially and spiritually, can be done by paying attention to three basic aspects:

1. Meeting basic needs such as food, housing, health, and protection, by enhancing capacity and ensuring equitable distribution.
2. Improving the quality of life, including increasing income, better education, and spiritual well-being.
3. Expanding economic scale both at the individual and national levels, by providing better job options and improving family welfare.

According to Sadono Sukirno, well-being is an aspect that considers not only consumption patterns but also the development of potential or capabilities of each individual as assets to achieve a prosperous life. Therefore, Sadono Sukirno divides well-being into three groups:

- a. The group that attempts to compare the level of well-being between two countries by improving the method of calculating national income.
- b. The group that seeks to adjust the income distribution of society by considering differences in the level of well-being of citizens.

- c. The group that endeavors to compare the level of well-being between countries based on non-monetary data.

The level of human well-being can be measured using both physical and non-physical calculations, such as per capita consumption levels, labor force participation, economic conditions, and access to mass media. Additionally, community well-being can also be measured using the Human Development Index (HDI), which encompasses three main dimensions: age dimension, human education, and decent living standards. According to the Central Statistics Agency (BPS), well-being refers to a condition where the physical and spiritual needs of individuals and households are fulfilled according to their standard of living (Febrianti, 2021). To measure the level of human well-being, BPS has several indicators that can be used:

- a. Income: Income is an indicator that reflects the welfare of society. It includes the total cash receipts received by individuals or households during a certain period (usually one year). Income comprises earnings from labor, income from ownership (such as rent, interest, and dividends), and allowances from the government. The higher the income earned, the greater the ability to finance expenditures and other activities, thus improving the standard of living of society.
- b. Housing and Settlement: Besides being a basic need, housing and settlement play a strategic role in family education and improving the quality of future generations. Healthy and comfortable homes are also determinants of public health, as good

housing conditions can support the health of its occupants.

- c. Education: Education is a human right, and every citizen has the right to develop their potential through the learning process. Education also has a positive impact on economic growth, as higher education levels can produce skilled and educated workers, which are essential for sustainable economic development.
- d. Health: Health is an important indicator of population well-being and the success of development programs. Healthy communities will be more able to achieve prosperity, so development efforts and health services must be equitable and non-discriminatory. Health indicators include nutritional status, disease status, availability of health services, and the use of these health services.

The description provided by the respondents regarding the Fishermen's Income variable (X) consists of statement items covering aspects such as Price, Capital, Marketing, and Sales Volume. Meanwhile, the questionnaire items for the well-being variable (Y) include Income, Housing and Settlement, Education, and Health. Validity testing is used to assess whether a questionnaire has an adequate level of validity. The questionnaire's validity can be said to be fulfilled if the calculated r-value exceeds the set r-table value. Based on the data analysis results, it is known that the variables show Validity. The instrument's reliability coefficient for fishermen's income is 0.700, while for fishermen's well-being, it is 7.873. After conducting the reliability test, both variables in this study showed Alpha Cronbach values exceeding 0.600. This indicates that both

research variables can be relied upon or are reliable.

Based on the Linear Calculation using the SPSS program, a Deviation from Linearity sig value of 0.832 was obtained, which exceeds the significance value of 0.05. From these results, it can be concluded that there is a significant linear relationship between the Income variable (X) and well-being (Y).

The results of the Moment Product calculation using the SPSS program to evaluate the relationship between the fishermen's income variable (X) and the fishermen's well-being (Y) can be studied through the table next to it. Based on the correlation calculation results (r) between the income variable (X) and the fishermen's well-being (Y) using the SPSS program, a value of r of 0.628 was obtained as stated in Table 4.15. If compared to the r-table value, which is 0.339 (with degrees of freedom $df = n-2$), it can be concluded that: First, the calculated r-value (0.628) exceeds the r-table value (0.339), indicating the acceptance of the alternative hypothesis (H_a) that there is a relationship between income and the well-being of tuna fishermen in Waitomu Hamlet, Leihitu District, Central Maluku Regency. Moreover, the significance value (sig) in Table 4.15 shows a figure of 0.000, which is smaller than the value of α (0.05), confirming that the relationship between income and fishermen's well-being is statistically significant. Second, with a calculated r-value of 0.628, if referred to the relationship assessment criteria in Table 4.14, the relationship between income and fishermen's well-being can be categorized as strong or high.

From the correlation analysis results, it was found that there is a

significant relationship between income and the well-being of tuna fishermen in Waitomu Hamlet, Leihitu District, Central Maluku Regency. In the context of this research, it can be concluded that income has a strong or high influence on the well-being of these fishermen. The research findings indicate that tuna fishermen in Waitomu Hamlet, Leihitu District, Central Maluku Regency, overall meet the criteria as prosperous communities, as stipulated by the Central Statistics Agency (BPS). This finding is consistent with previous research results, such as that conducted by Lian Fitriani Abdullah in his study titled "Analysis of Income and Well-being Levels of Fishermen Communities in Bonepantai District, Bone Bolango Regency." The findings confirm that fishermen's well-being is significantly influenced by income. Thus, fishermen communities in Bonepantai District, Bone Bolango Regency, are also included in the category of "prosperous" communities.

The principles of household finance in Islam consist of three important foundations: a) The effort to seek halal and thayyib sustenance is highly emphasized. Research shows that the community increasing their income by fishing in Waitomu Hamlet, Leihutu District, Central Maluku Regency, is in line with Islamic teachings. The efforts made by the local community adhere to the principles of Islamic economics, without violating rules and without causing environmental harm. The income obtained from fishing is considered lawful, without any elements of riba in the business process; b) The principle of thrift and economical management of finances is also important. Research results

indicate that the tuna fishermen community in Waitomu Hamlet has managed household finances well. This is reflected in the dominant responses of the respondents to the well-being variable, indicating that they are able to meet household needs well, ensuring the sustainability of family welfare; c) Saving for the hereafter is also an emphasized principle. Research shows that the tuna fishermen community in Waitomu Hamlet has managed finances well by setting aside a portion of their income for savings. Additionally, they also allocate a portion of their income for charity and to meet daily needs, demonstrating their commitment to Islamic financial principles that encompass both spiritual and worldly aspects.

CONCLUSION

Based on the results and discussion regarding the relationship between income and welfare of tuna fishermen in Waitomu Hamlet, Leihitu District, Central Maluku Regency, several significant conclusions can be drawn from the perspective of Sharia finance. The moment product correlation analysis conducted using SPSS software shows a correlation value of 0.628 between fishermen's income (X) and fishermen's welfare (Y). This indicates a strong or high relationship between income and welfare of fishermen, in line with the empirical findings of the study. In the context of Islamic household finance management, the tuna fishermen community in Waitomu Hamlet has demonstrated maturity in managing their income. They have practiced Islamic financial management principles, such as seeking halal and thayyib sustenance, being thrifty, and saving for the hereafter. In this regard, Islam encourages its

followers to work diligently, such as fishing, and to pursue their professions with dedication, so that the results obtained can have a maximum positive impact on family and community welfare.

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