DETERMINANTS OF TRADITIONAL MARKET TRADER'S INCOME IN BINTORO MARKET

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ABSTRACT

This research examines the factors that influence the income of traders in the Bintoro traditional market, which is located in Demak Regency. This research aims to analyze the influence of capital, working hours, business location, and market conditions on the income of traditional market traders in the Bintoro market. This research used primary data obtained from interviews and the dissemination of questionnaires. The population in this research were traders of vegetables, fruit, fish, chicken, snacks, clothes, shoes, and furniture totaling 304 traders, the sample in this research were 92 with 13 vegetable traders, 13 fruit traders, 12 fish traders, 12 chicken traders, 12 snack traders, 13 clothes traders, 12 shoe traders, and 5 furniture traders. The technique used is proportional stratified random sampling where respondents are randomly selected from each heterogeneous sub population. This research was analyzed using multiple linear regression with natural logarithm transformation. The estimation results using multiple linear regression indicate that the variable capital, working hours, and business location has a positive and significant effect on trader income. Market conditions has a negative and insignificant effect on trader income. The implication of the above conclusion is that related to capital, there needs to be support from the government and banks to help increase the capital of traders. Working hours at Bintoro Demak market are already long, so traders are advised to use technology for their online market. The location of the business should be able to choose a strategic business location and can be reached by consumers, such as not choosing a location far from the main market road, maintaining good service quality with consumers, and maintaining the cleanliness of the location of the trading place.

Keywords: Capital; Working Hours; Business Location; Market Conditions; Income

1. Introduction

As a developing nation, Indonesia is working to encourage growth. The improvement includes different areas like economy, legislative issues, and socio-social angles. According to Wahyono (2017), this development aims to enhance Indonesia's economy and standard of living. Economic development, which focuses on policies that create employment opportunities and ensure sustainable economic growth, particularly through trade activities, is one of the current government's initiatives. Job seekers have turned to the informal economy as a means of subsistence due to the lack of formal employment opportunities. As per BPS (2022), most of the Indonesian populace, around 59.31 percent, is taken part in casual area work. Demak Regency and Central Java Province also show this trend. The informal sector employs 60.16 percent of the population in Central Java Province, while it employs 66.97

percent in Demak Regency. Within the informal economy, trade is a significant sector that employs a significant number of people.

Market traders are considered to be part of the informal economy because they provide an appealing alternative for people who are unable to find work in the formal economy. The informal sector is easy to access because it doesn't require a lot of education and need a lot of money to start as well as it gives more freedom with working hours. However, in order to draw customers to their stalls, vendors must place a high value on providing excellent customer service. While formal schooling may not be an essential, dealers ought to have abilities and information, especially in choosing reasonable business areas, deciding ideal exchanging times, and picking the kinds of products to exchange.

Capital is a crucial determining factor for businesses, both in the formal and informal sectors. Various studies have shown that the level of capital in the informal sector is relatively low. The limited capital available to traders hinders their rapid growth and leads to lower levels of income. This has been identified as a significant challenge for traders, as highlighted by Sukirno (2013). Increasing the amount of capital invested by traders can positively impact their business income. When traders allocate more capital to their businesses, it allows them to expand their inventory, attracting more buyers and generating higher income. This finding aligns with the research conducted by Nurfiana (2018), which demonstrates that capital has a significant influence on traders' income.

However, as modern markets have developed and become competitors in attracting consumers, the existence of traditional markets has raised concerns. High-income consumers with modern lifestyles now prefer to shop in modern markets rather than traditional markets. Traditional markets will experience a decline in income and face tough competition from new markets if they do not innovate. For the majority of lower-middle-class communities, traditional markets are their source of livelihood. Therefore, this situation is deeply concerning for traders in traditional markets. To ensure that the trading sector remains accessible for the lower-middle-income group to sell their goods, the existence of traditional markets must be taken into consideration. Thus, efforts should be made to maintain the quantity of traditional markets in each region.

2. Literature Review

Examining the issue concerning the growth of the informal sector is closely linked to the limitations faced by the formal sector in terms of workforce absorption and economic fulfillment. Traders play a significant role within the informal sector as they engage in the selling of goods and services. Traditional markets distinguish between two types of traders: kiosk traders who operate from dedicated kiosk buildings, and non-kiosk traders who conduct their sales activities outside the kiosks, utilizing spaces like stalls, open areas, and floors (Herman, 2021).

Income is a vital component in the growth of any business. It refers to the earnings obtained by entrepreneurs through the sale of their products and services (Mardiasmo, 2019). Gross income for traders is the total value of commodities sold multiplied by the unit price. The amount of income received by traders is influenced by various factors such as capital, working hours, business location, and market conditions.

Capital is the primary factor in both the formal and informal sectors of business. Various studies have shown that the level of capital in the informal sector is relatively low. The limited capital currently available to traders hinders their ability to grow rapidly and results in low levels of income, which becomes their barrier (Sukirno, 2013). Increasing the capital invested in their businesses will enhance their business income. When they increase their capital, it allows them to increase the quantity of their merchandise, which can attract buyers and ultimately increase their income. This aligns with research conducted by Nurfiana (2018), which demonstrates that capital significantly affects their income.

Working hours ,furthermore, refer to the percentage of total work time spent by the workforce on their jobs (both within and outside the trading sector). The amount of time spent working depends on the nature of the job, with some occupations requiring long and continuous hours, while others only require specific time periods (Thasya and Muhammad, 2017). Increasing the operating hours undertaken by traders opens up opportunities for increased revenue from sales. The variable of working hours has a significant impact on the income, in line with the research conducted by Husaini and Fadhlani (2017). The more time each of them spends working, the higher their potential income. Each extension of operating hours creates further opportunities for increased revenue from their sales.

The business location serves as the operating site for a company to produce goods and services related to its financial characteristics. The business location impacts customers' desire to visit and shop at the establishment (Narendra, 2018). Selecting the right business location is a crucial factor in achieving success efficiently and generating revenue (Agustina and Kartika, 2017). The business area significantly affects pay on the grounds that a more essential area can draw in a bigger client base, consequently expanding the merchant's income, as demonstrated by research discoveries (Husaini and Fadhlani, 2017). In addition to strategies and proximity to the target market, providing superior customer service is crucial when choosing a business location. (Tarigan, 2005:146) If the trading location is far from customers, the traders must provide superior customer service.

Market conditions (Rasaili, 2020) are dealing with the state of the market, its types, buyers in the market, trading location, their frequency, and their preferences in the market. This implies that a clean, organized, and comfortable market condition will make buyers feel comfortable and inclined to shop. In line with research findings (Puspita, 2019), market conditions significantly impact income. A clean and well-equipped market environment encourages customers to visit and make purchases, thereby affects the revenue of market traders.

The formulation of hypotheses in this research is based on the result considering capital, working hours, business location, and market conditions influence the income of traders in Pasar Bintoro Demak.

3. Methodology

This research is a survey conducted among the traders of Bintoro Market, Demak. The data collection techniques involve interviews and questionnaires (Kristanto, 2018). The sampling method used in this study is Proportional Stratified Random Sampling, which takes into account strata because the population consists of diverse and heterogeneous types of traders (Gujarati, 2012). The determination of the sample size was based on the estimated sample table for heterogeneous and homogeneous populations according to Sutja (2017) as follows:

Table 1. Estimation of Samples in Homogeneous and Heterogeneous Populations

No.	Total Population	Population Characteristics			
		Heterogeneous		Homogeneous	
		%	N	%	N
1.	0 - 40	100 %	40	90 %	36
2.	41 - 47	95 - 79 %	39 – 55	89 - 75 %	37 – 53
3.	71 - 120	78 - 60 %	55 – 72	74.9 - 55 %	53 – 66
4.	121 - 280	59.5 - 30 %	72 – 84	54.9 - 25 %	66 -70
5.	**281 - 600**	**29.9 - 20 %**	**84 – 120**	**24.9 - 15 %**	**70 – 90**
6.	601 - 1200	19.9 – 12.5 %	120 – 150	14.9 - 10 %	90 – 120
7.	> 1200	> 12.5 %	> 150	> 10 %	> 120

Source : Sutja, 2017

With a population size of 304 individuals and a range of heterogeneous population characteristics between 281 and 600, the representative sample for the research is 29.9% to 20% of the total population. The formula and calculations provided below can be used to determine the required sample size:

% the largest $-$ $\dfrac{\text{\% large} - \text{\% small}}{\text{large population} - \text{small population}}$ x {n $-$ small population}…………………...(1)

$29.9 - \left\{\dfrac{29.9 - 20}{600 - 281}\right\}$ x $\{304 - 281\}$

$29.9 - \left\{\dfrac{9.9}{319}\right\}$ x $\{23\}$

$29.9 - \{0.0310\}$ x $\{23\}$

$29.9 - 0.713$

29.187%

30%

Based on the calculation results, it has been known that the representative sample for this study was 30% of the total population. Therefore, by multiplying 30% by the population size of 304, we obtained a result of 92 traders as the representative sample.

To test the hypothesis, multiple linear regression analysis is conducted as follows: (Ghozali, 2016:154)

$$\ln P_i = \beta_1 \ln M_i + \beta_2 \ln JM_i + \beta_3 \ln LU_i + \beta_4 DKP_i + e \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(2)$$

P = Income (Rp/month)
$\beta_{1,2,3,4}$ = Multiple linear coefficient
M = Capital, measured in Indonesian rupiah (Rp)
JK = Working hours, measured in hours/day
LU = Business location, measured in meters
DKP = Market conditions (D = 1: Good and D = 0: Not good)
e = Disturbance variable

To test the accuracy of the analytical formula, classical assumption tests are conducted, which consist of tests for normality, multicollinearity, and heteroskedasticity. Hypothesis

testing in the research can be done through F-test and t-test with a significance level (α) of 0.05 or a confidence level of 95%, and degrees of freedom (k); (n-k-1). The hypothesis can be accepted if F count is greater than F table dan t count is greater than t table.

4. Results and Discussions

A total of 92 traders from Bintoro Market in Demak were sampled, with an average age of 47 years. The educational level of the respondents varied, ranging from elementary school to university. Looking at the educational level, the majority of respondents, 35 individuals (38%), had finished high school education.

The highest business capital among the respondents was Rp50,000,000, while the lowest was Rp10,000,000. The majority of respondents, 57 individuals (62%), had a business capital in the range of Rp10,000,000 to Rp15,000,000. Typically, the capital was used to purchase goods, employee expenses, kiosk rent, cleanliness services, and loading/unloading costs.

The working hours of the respondents refer to the time they dedicate to trading. On average, the respondents spent 8 hours per day for trading. The majority of respondents, 66 individuals (72%), allocated 9 to 10 hours for trading at Bintoro Market in Demak, starting from 5:30 AM. Therefore, the working hours at Bintoro Market in Demak were relatively long, exceeding 8 hours per day.

As far as business location or area, the respondents' businesses were found in view of the separation from the principal street of Bintoro Market in Demak. The location that was farthest away was 89 meters from the market's main road, while the location that was closest was only 10 meters away. Because the business locations at Bintoro Market in Demak were close to the main road, vehicles frequently passed them. The traders at Bintoro Market in Demak greatly benefited from this advantageous location.

The market conditions of the respondents were categorized into two groups: good market conditions and poor market conditions. A total of 74 respondents (80%) stated that the market conditions at Bintoro Market in Demak were good, while only 18 respondents (20%) stated that the market conditions were not good. The market conditions at Bintoro Market in Demak were relatively good, as evident from factors such as cleanliness, tidiness, comfort, and safety.

The income distribution of the respondents ranged from Rp3,000,000 to Rp20,000,000. The majority of traders (65%) had incomes ranging from Rp3,000,000 to Rp5,000,000, while one trader (1%) had an income ranging from Rp18,000,000 to Rp20,000,000.

Analysis Results

The results of the multiple linear regression analysis are as follows:

$$\ln Y = \ln \beta_0 + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \beta_3 \ln X_3 + \beta_4 DX_4 + \varepsilon$$
$$\ln Y = 0.746 + 0.468\ \ln X_1 + 0.727\ \ln X_2 + 0.506\ \ln X_3 + 0.175\ DX_4$$

Based on these results, in order to use regression for predicting outcomes effectively, it must pass the classical assumption tests, including tests for normality, multicollinearity, and heteroscedasticity.

The normality test results, based on the Jarque-Bera statistic of 0.720 and a probability of 0.697, indicate that the data is normally distributed because the probability is higher than the significance level of 0.05. The multicollinearity test shows that there is no multicollinearity issue since the Variance Inflation Factor (VIF) values are above 1 or less than 10. The heteroscedasticity test, using the White test, yields a probability (Chi-Square) of 0.6758, indicating that it is greater than the absolute residual value of 0.05, suggesting the absence of heteroscedasticity. Therefore, the regression results can be used effectively to predict the influence of the variables under study on income.

To determine whether the hypothesis stating that capital, working hours, business location, and market conditions have an impact on traders' income at Bintoro Market in Demak is accepted or not, both the overall (F-test) and partial (t-test) tests are conducted. The F-test result of 7.949895 is greater than the critical F-value of 2.447, indicating that the variables of capital, working hours, business location, and market conditions together have a significant impact on income, and thus the hypothesis can be accepted.

The partial results with a tabulated t-value of 1.6625, and the computed t-values for the variables shown in Table 4.1, indicate that only capital, working hours, and business location have a partial influence on the income of traders at Bintoro Market in Demak. This is because the computed t-values are higher than the tabulated t-value, while the variable of market conditions does not have a significant impact.

Table 2. Partial Detection Results (t-test)

Variable	Coefficient	t-Statistic	Probabillity
Constant (c)	0.746254	0.158433	0.2005
Capital (M)	0.468031	4.664397	0.0000
Working Hours (JK)	0.727737	2.201562	0.0303
Business Location (LU)	0.506645	5.104111	0.0383
Market Conditions (DKP)	0.175407	1.553953	0.1238

Source : Primary data processing, 2023

Discussion of Results

The variable "capital" has a positive and significant effect on traders' income, with a regression coefficient of 0.468. It means that the increase in capital will rise the income by 4.68 percent. This can be attributed to the fact that having capital enables traders to provide various alternatives for consumer needs in terms of quality and quantity. This phenomenon can be observed in both traditional and modern markets. This research aligns with the studies conducted by Nurfiana (2018), Shinta (2021), and Jowa et al., (2021) which also found that capital has an impact on traders' income. The more capital invested, the higher the income obtained by the traders.

The variable "working hours" has a positive and significant effect on income, with a coefficient of 0.727. This means that an increase in working hours will uplift the income by 7.27 percent. This is likely because longer working hours provide more opportunities for customers to come and make purchases. This finding is consistent with the studies conducted

by Husaini and Fadhlani (2017) and Sari and Andika (2020), which confirmed that working hours significantly affect their income. The more time someone spends on trading, the more time they have to interact with customers, ultimately leading to higher income.

The variable "business location" has a positive and significant effect on income, with a coefficient of 0.506. It can be decided that an increase in the business location will rise the income by 5.06 percent. This can be attributed to the fact that the choice of business location is not only based on strategic considerations and proximity to the market, but also on providing better and crucial services(Tarigan, 2005:146).

The variable "market conditions" does not have a significant effect on income, as the coefficient values indicate that there is no variation in traders' income due to whether the market conditions are good or not. This implies that having a clean, tidy, and comfortable market does not guarantee that buyers will feel inclined to shop. The "market conditions" variable uses a dummy variable, where the value 1 represents good market conditions and the value 0 represents poor market conditions.

5. Conclusion

The variables collectively influencing the income of traders at Bintoro Market in Demak are capital, working hours, business location, and market conditions. However, out of these four variables, only capital, working hours, and business location have a positive and significant impact, while market conditions do not significantly affect income.

6. Implication

In order to increase the income of traders at Bintoro Market in Demak, the following measures are needed: 1. Efforts and struggles should be made to increase the traders' capital through specialized credit facilities from banks for traders. 2. Since the working hours of traders at Bintoro Market in Demak are already relatively high, it is not recommended to extend the working hours. Instead, they can leverage technology in their sales, such as promoting their products through social media platforms like WhatsApp or Facebook. This can help increase their income at Bintoro Market in Demak. 3. The traders should be able to choose strategic business locations that are easily accessible to consumers, avoiding locations far from the main market road. It is also important for them to maintain cleanliness at their business locations, as this can attract customers and encourage them to become loyal customers, ultimately increasing their income at Bintoro Market in Demak.

Reference

Agustina, I. M., & Kartika, I. N. (2017). Pengaruh Tenaga Kerja, Modal dan Bahan Baku terhadap Produksi Industri Kerajinan Patung Kayu di Kecamatan Tegallalang. *E-Jurnal Ep Unud, Issn*, 178–230.

Ghozali, I. (2016). Aplikasi Analisis Multivariete Dengan Program Ibm Spss 23 (Edisi 8). *Cetakan Ke Viii. Semarang: Badan Penerbit Universitas Diponegoro*, *96*.

Gujarati, dan Dawn C. Porter. 2012. *Dasar-Dasar Ekonometrika*.

Herman, H. (2021). *Pengaruh Modal, Lama Usaha, Dan Jam Kerja Terhadap Omzet Penjualan Pedagang Kios Di Pasar Tradisional Tarowang Kabupaten Jeneponto*. Universitas Negeri Makassar.

Husaini, H., & Fadhlani, A. (2017). Pengaruh Modal Kerja, Lama Usaha, Jam Kerja Dan Lokasi Usaha Terhadap Pendapatan Monza Di Pasar Simalingkar Medan. *Jurnal Visioner & Strategis*, *6*(2).

Jowa, S., Prihatminingtyas, B., & Susanti. (2021). *Pengaruh Modal, Lama Usaha, Jam Kerja, Lokasi Dan Kualitas Produk Usaha Terhadap Pendapatan Pedagang Pasar Dinoyo Kota Malang*. Fakultas Ekonomi Universitas Tribhuwana Tunggadewi.

Kristanto, V. H. (2018). *Metodologi Penelitian Pedoman Penulisan Karya Tulis Ilmiah:(Kti)*. Deepublish.

Mardiasmo. (2019). *Perpajakan Edisi Terbaru*. Cv Andi Offset.

Narendra, W. (2018). *Identifikasi Kebutuhan Sarana Dan Prasarana Wisata Berdasarkan Persepsi Pengunjung Di Pantai Sipelot Kabupaten Malang*. Institut Teknologi Nasional Malang.Nurfiana, I. W. (2018). Analisis Pengaruh Modal, Jam Kerja, Dan Lokasi Terhadap Tingkat Pendapatan Pedagang Pasar Mranggen. *Jurnal Ekonomi, Semarang: Universitas Islam Negeri Walisongo Semarang*.

Puspita, J. (2019). *Pengaruh Kemampuan Pedagang dan Kondisi Pasar terhadap Pendapatan Bersih Pedagang Kaki Lima di Pasar Induk Pagar Dewa kota Bengkulu*.

Rasaili, W. (2020). Kebijakan Larangan Pembangunan Ritel Modern dan Pemberdayaan. *Jurnal Inovasi Kebijakan Kemendagri, 4(2)*, 109-118.

Sari, N., & Andika, S. (2020). Pengaruh Modal, Lokasi Dan Jam Kerja Terhadap Tingkat Pendapatan Pedagang Di Wisata Pantai Selatbaru Kecamatan Bantan Dalam Perspektif Ekonomi Islam. *Bertuah: Journal Of Sharia And Islamic Economics*, *1*(2).

Shinta, O. (2021). *Pengaruh Modal Usaha, Jam Kerja, Lokasi Usaha, Terhadap Pendapatan Pedagang Kaki Lima Dalam Perspektif Ekonomi Islam (Studi Pada Pasar Natar Kecamatan Natar, Kab. Lampung Selatan)*. Uin Raden Intan LampungWahyono, A. A. (2017). Pengaruh Kualitas Layanan, Nilai Pelanggan Dan Relationship Marketing Dalam Membangun Kepuasan Pelanggan. *Management Analysis Journal 6*, *2*, 134–141.

Sukirno, S. (2013). *Mikroekonomi Teori Pengantar*.

Sutja, A. D. (2017). Penulisan Skripsi Untuk Prodi Bimbingan Konseling. *Yogyakarta: Writing Revolution*.

Tarigan, Robinson. (2005). *Ekonomi Regional:Teori dan Aplikasi*. Jakarta: PT Bumi Aksara.

Thasya, M., & Muhammad, S. (2017). Pengaruh Pendidikan, Umur Dan Curahan Jam Kerja Ibu Rumah Tangga Terhadap Pendapatan Keluarga (Studi Kasus: Ibu Rumah Tangga Yang Bekerja Di Industri Batu Bata Di Desa Kajhu Kecamatan Baitussalam). *Jurnal Ilmiah Mahasiswa Ekonomi Pembangunan*, *2*(1), 105–115.