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# Analysis of the Effect of Working Hours, Type of Vehicle, Age, and Education on Income for Formal and Informal Workers

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## Info

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# Abstract

The factors that influence the income of motorcycle taxi drivers in the formal and informal sectors are age, education level, working hours, and the type of vehicle used. This study aims to determine the factors that influence the income of motorcycle taxi workers in the formal sector and informal sector, and the influence of age, education, working hours and type of vehicle. on the income level of taxi drivers in the formal and informal sectors. This case study research was conducted in Semarang City. The method used in this study is primary data with quantitative methods. Data collection techniques through direct interviews with respondents. The samples taken were 80 respondents using the Simple Random Sampling technique. Based on the results of the study, it was stated that the variables of age and working hours had an effect on the income of conventional motorcycle taxi drivers and motorcycle taxi drivers in the city of Semarang. The education variable has an effect on the income earned by formal workers, but not so much for informal workers. On the other hand, the type of vehicle has a significant effect on the income of informal workers, but has no effect on formal workers.

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#### Introduction

According to the KBLI 2017, transportation and warehousing is a category that includes the transportation of passengers or goods, whether scheduled or not, using rail, pipeline, land, water or air and related activities such as terminal and parking facilities, cargo handling/loading and unloading of goods, warehousing and others (Indonesia, 2015). Included in this category is rental of transportation equipment with a driver or operator, as well as postal and courier activities. This includes motorcycle taxi transportation, which includes the business of

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transporting passengers with two-wheeled motorized vehicles such as motorcycle taxis (Statistik, 2018).

In this case, humans are social beings who have many needs that must be met for the welfare of their lives. This enormous human need is impossible to fulfill in one location and therefore, humans need a means of transportation to move or move people or goods from one place to another (Alamzah, 2022). The Indonesian economy is highly dependent on transportation. Population mobility is the main component in the dynamics of the economic development of a region because economic progress will not occur without population mobility and vice versa, population mobility will not occur without development.

Every year the mobility of the population is increasing. It is evident from the increase in transportation equipment and services (<u>Rachma</u> et al., 2020). One of the most popular forms of transportation, especially land transportation, is motorbikes (<u>Stini</u>, 2020). From year to year the number has increased in very large numbers. As contained in the data in the BPS table below:

Table 1.

Data on Number of Motorized Vehicles 2014-2018

Type of Motorized	Number of Motorized Vehicles (Units)				
Vehicle	2014	2015	2016	2017	2018
Passenger Cars	12599038	13480973	14580666	15423968	16440987
Bus Cars	2398846	2420917	2486898	2509258	2538182
Cars Items	6235136	6611028	7063433	7289910	7778544
Motorcycles	92976240	98881267	105150082	111988683	120101047
Total	114209260	121394185	129281079	137211818	146858759

Source: BPS

Based on table 1 above, in 2014 the number of motorcycles was recorded at 92,976,240 units and until 2018 it reached 120,101,047 units. The data shows that motorcycles are proven to be the motorized vehicles with the highest number compared to other motorized vehicles whose numbers are still below them. Motorcycles are a classification of types of private vehicles, but in Indonesia there are many motorbikes that are used as public transportation, namely transporting people or goods at a certain rate, commonly called ojek (Kurniawan & Sriharyani, 2019).

Ojek is public transportation in the form of motorbikes or bicycles that are rented by piggybacking passengers (<u>Hamsona & Susilowati</u>, 2019). With a price determined by bargaining with the driver and after that the driver will take you to the destination that the passenger wants. Initially, motorcycle taxis used bicycles, according to WJS Poerwadarminta, who said that motorcycle taxis were bicycles that were taxied (<u>Fikri & Susilowati</u>, 2019). However, over time, motorcycle taxi drivers have switched to using motorbikes.

So far, motorcycle taxis in Indonesia can be divided into two types, namely basic motorcycle taxis and online motorcycle taxis, or you can say motorcycle taxis in the formal sector and in the informal sector (Dian, 2018). Both online motorcycle taxis and base

motorcycle taxis, they basically provide services in the delivery service sector. However, online motorcycle taxis are one of the new breakthroughs that aim to make it easier for users to be faster and more efficient through an application via gadgets in the midst of increasingly rapid technological developments (Kartika, 2020). That's why online motorcycle taxis can also be said to be formal because those who become motorcycle taxi drivers are gathered in an official company that stands in the service sector.

When they want to become ojek drivers, they have to do an official registration with the company, in contrast to base ojeks, which can do whatever they want without being tied to a company. But basically both online motorcycle taxis and base motorcycle taxis both provide delivery services. The income of each motorcycle taxi driver, both formal and informal, certainly varies. Many factors can influence how much income an ojek will receive, whether it's gender, working hours, education level or other factors. That's why based on this background the author makes research in order to find out what can affect the income level of workers in the motorcycle taxi transportation sector, especially motorcycle taxis. Transportation is a vehicle that plays an important role in people's lives in Indonesia (Sulistyowati & Muazansyah, 2019).

The importance of this transportation is influenced by geographical conditions which consist of thousands of small and large islands as well as seas, rivers, lakes so that transportation is needed both land, sea, and air transportation to make it easier to reach all parts of Indonesia (Giri & Dewi, 2017). So a national transportation system must be organized in an integrated manner and able to realize the availability of transportation services that are orderly, comfortable, fast, smooth and low-cost. In general, there are three types of transportation in Indonesia, namely land transportation, sea transportation, and air transportation. According to the 2015 Indonesian Standard Classification of Business Fields (KBLI), other land transportation sectors for passengers are divided into sub-sectors of taxi transportation, rental transportation, non-motorized transportation for passengers, motorcycle taxi transportation, tourist land transportation, and other land transportation for passengers (Airlangga & Suharni, 2015).

One of the things that we raise in this research is that land transportation such as motorbikes is the most frequently used medium by passengers when compared to other forms of transportation. Motorcycles are a classification of types of private vehicles, but in Indonesia there are many motorbikes that use the function of public transportation, namely transporting people or goods at a certain rate (Nanda, 2015). Now this transportation service is very popular with passengers because of its agility, more efficient and effective, it can also take passengers to densely populated areas with complicated locations. In Indonesia, there are several types of objects that operate, for example Ojek Online.

Base motorcycle taxis are motorcycle taxi transportation workers who usually gather or settle on a road that if there are a lot of passengers there will be a lot of passengers (Kalukubula, 2020). Usually these basic motorcycle taxis are located in front of the complex, or in front of alleys, markets and others. Meanwhile, online motorcycle taxis are motorcycle taxis that are ordered online or using an application. The difference between online motorcycle taxis and regular motorcycle taxis is that online motorcycle taxis usually don't have a place to gather or stay in a place, but they will come if there are passengers who want to use them.

So far, the existence of online motorcycle taxis is quite helpful for the community because it is not only easy to reach, the cost is also not as expensive as regular motorcycle taxis, because everything is regulated by the system. In addition, in this online motorcycle taxi, users usually get masks and headgear which will be given by the rider (ojek driver) when picking up passengers. There are several factors that affect the income *drivers*, namely working hours, age, education level, type of motorcycle or experience of *drivers* already working as *drivers*. Motor vehicles have the highest number, this is supported by data from BPS regarding the number of motorized vehicles in Central Java in 2018 consisting of 1,032,864 passenger cars, 86,675 bus cars, 707,085 freight cars, and motorcycles. 13,244,195 units, and 4,057 special vehicles.

#### **Methods**

This research uses descriptive analysis method from primary data and secondary data. Researchers collect primary data through direct interviews with motorcycle taxi drivers and collect secondary data through previous research documentation by looking at journal references and related articles. Researchers also use qualitative data in the form of articles and journals about the factors that affect motorcycle taxi income. In addition, the researchers also used quantitative data in the form of how much income and expenditure of motorcycle taxi drivers. The research variables used in this study consisted of the dependent variable (income) and the independent variable (age, education, working hours, type of vehicle). The population in this study were online motorcycle taxi drivers and motorcycle taxi drivers in Semarang, and the samples used were 47 online motorcycle taxi drivers (from the formal sector) and 33 basic motorcycle taxi drivers (from the informal sector). The data collection technique in this study used a questionnaire/questionnaire.

#### **Results and Discussion**

Table 2.

Age Distribution of Respondents in the Formal Sector motorcycle taxi transportation

•	Age	Total	%
1.	20-24	11	23.4%
2.	25-29	12	25.5%
3.	30-34	8	17%
4.	35-39	10	21.2%
5.	40-44	3	6.3 %
6.	45-49	2	4.2%
7.	50-54	0	0%
8.	55-59	1	2.4%
9.	> 60	0	0%
	Total	47	100%

Based on table 2 the results of interviews with forty seven respondents In the formal sector, data shows that 11 workers are in the 20-24 year age range, 12 workers are in the 25-29

year age range, 8 workers are in the 30-34 year age range, 10 workers are 35-39 years old, 3 workers aged in the range of 40-44 years, 2 workers aged in the range of 45-49 years and 1 worker aged in the range of 55-59 years.

Table 3. Age distribution of respondents using motorcycle taxis in the informal sector

no.	Age	Total	%
1.	20-24	0	0%
2.	25-29	0	0%
3.	30-34	0	0%
4.	35-39	1	3%
5.	40-44	1	3%
6.	45-49	5	15 ,2%
7.	50-54	5	15.2%
8.	55-59	6	18.2%
9.	> 60	15	45.4%
	Total	33	100%

From the results of interviews with thirty-three respondents in the informal sector, data obtained that 1 worker aged in the range of 35-39 years, 1 worker aged in the range of 40-44 years, 5 workers aged in the range of 45-49 years, 5 workers aged in the range of 50-54 years, 6 workers aged in the range 55-59 years, and 15 workers aged in the range > 60 years.

Table 4.

Distribution Education Level of Respondents for motorbike taxis in the Formal Sector

No.	<b>Education Level</b>	Total	%
1.	0 years	0	0%
2.	6 years	1	2.1%
3.	9 years	7	14.8%
4.	12 years	29	61.7%
5.	15-16 years	10	21.4%
	Total	47	100%

From the results of interviews with forty-seven formal sector respondents, data obtained that 1 worker with the last education of elementary school, 7 workers with the last education of junior high school/equivalent, 29 workers with the last education of high school/equivalent, and 10 workers with the last education of D3/ S1.

Table 5.

Distribution of Education Levels of Respondents for motorbike taxis in the Informal Sector

No.	Years of	Total	%

	School		
1.	0 years	4	12.1%
2.	6 years	15	45.4%
3.	9 years	6	18.3%
4.	12 years	7	21.2%
5.	15-16 years	1	3%
	Total	33	100%

From the results of interviews with thirty-three respondents in the informal sector, data was obtained that 4 workers did not attend school. 15 workers with the last education of elementary school, 6 workers with the last education of junior high school/equivalent, 7 workers with the last education of high school/equivalent, and 1 worker with the last education of D3/S1.

Table 6.

Distribution of Respondents Working Hours of
Motorcycle taxis in the Formal Sector

No.	Working	Total	%
	Hours		
1.	2-5 hours	4	8.6%
2.	6-9 hours	13	27.6%
3.	10-14 hours	30	63.8%
	Total	47	100%

From the results of interviews with forty-seven sector respondents formally, data obtained that there are 4 workers who work for 2-5 hours per day, there are 13 workers who work for 6-9 hours per day, and there are 30 workers who work for 10-14 hours per day.

Table 7.

Distribution of Working Hours of Respondents in the Informal Sector Bread and Cake Processing Industry

No.	<b>Working Hours</b>	Total	%
1.	2-5 hours	7	21.2%
2.	6-9 hours	14	42.4%
3.	10-14 hours	12	36.4%
	Total	33	100%

From interviews with thirty three sector respondents informally, data obtained that there are 7 workers who work for 2-5 hours per day, there are 14 workers who work for 6-9 hours per day, and there are 12 workers who work for 10-14 hours per day.

Table 8.
Distribution of Respondents' Vehicle Types

#### for motorbike taxis in the Formal Sector

No.	<b>Education Level</b>	Total	%
1.	Matic	45	95.7%
2.	Manual	2	4.3%
	Total	47	100%

From interviews with forty-seven formal sector respondents, data obtained that 45 workers use automatic motorbikes and 2 workers use manual motorbikes.

Table 9.

Distribution of Types of Vehicles Respondents using motorcycle taxis in the Informal Sector

No	<b>Education Level</b>	Total	%
1.	Matic	11	33.3%
2.	Manual	22	66.7%
	Total	33	100%

From interviews with thirty-three respondents in the informal sector, data were obtained that 11 workers use automatic motors and 22 workers use manual motors.

Table 10.

Income Distribution of Respondents for motorcycle taxi transportation in the Formal Sector

No.	Income	Total	%
1.	0 - 1000.000	0	0%
2.	1000001 - 200.000	1	2.3%
3.	2.000.001 - 300.000	18	38.2%
4.	3.000.001 - 400.000	13	27.6%
	> 4.000.001	15	31.9%
	Total	47	100%

Of the forty-seven formal sector respondents we interviewed, data obtained that there is 1 worker who earns in the range of Rp. 1,000,001 - 2,000,000, 18 workers who earn in the range of Rp. 2,000,001 - 3,000,001 - 3,000,000 and 15 workers who earn >4,000,001.

Table 11.

Income Distribution of Respondents who use motorcycle taxis in the Informal Sector

No.	Income	Total	%
1.	0 - 1000.000	12	36.3%
2.	1000.001 - 200.000	18	54.5%
3.	2.000.001 - 300.000	3	9.2%
4.	3.000.001 - 400.000	0	0%

5.	> 4.000.001	0	0%
	Total	33	100%

Of the thirty-three informal sector respondents we interviewed, data were obtained that there were 12 workers who earned incomes in the range of Rp. 0-1,000,000, 18 workers who earned incomes in the range of Rp. 1,000,001-2,000,000, and 3 workers who earn in the range of Rp. 2,000,000-3,000,000.

Table 12.

Analysis of the Effect of Age on Income in the Formal Sector

	- 24th	25th - 29th	30th - 34th	35th - 39th	40th - 44th	45th - 49th	50th- 54th	55th - 59th
	Rp. 4,000,000	Rp. 4,000,000	Rp. 3,000,000	Rp. 3,500 .000	Rp. 3,000,000			Rp. 3,900,000
	Rp. 2,500,000	Rp. 3,000,000	Rp. 3,000,000	Rp. 3,000,000	Rp. 4,500,000	•		
	Rp. 3,000,000	Rp. 4,800,000	Rp. 4,800,000	Rp. 3,000,000	Rp. 3,000,000	•		
	Rp. 1,500,000	Rp. 3,500,000	Rp. 4,800,000	Rp. 4,500,000				_
	Rp. 4,000,000	Rp. 3,900,000	Rp. 3,000,000	Rp. 4,800,000		none none		
20th	Rp. 3,000,000	Rp. 500,000	Rp. 2,700,000	Rp. 4,500,000			_	
	Rp. 3,000,000	Rp. 4,800,000	Rp. 3,000,000	Rp. 6,000,000			none	
	Rp. 2,000,000	Rp. 4,500,000	Rp. 3,000,000	Rp. 3,000,000		-		
	Rp. 3,000,000	Rp. 4,500,000	Rp. 6,000,000	Rp. 3,000,000				
	Rp. 3,000 .000	Rp. 9,000,000		Rp. 4,500,000		•		
-	Rp. 3,000,000	Rp. 6,000,000				-		
	Rp. 3,000,000	Rp. 6,000,000				-		
Total	Rp. 35,000,000	Rp. 54,500,000	Rp. 33,300,000	Rp. 39,800,000	Rp 10,500,000	-		Rp. 3,900.000

Effect of age on income in the formal sector:

$$20^{\text{years}} - 24^{\text{years}} = \underline{\text{Rp. } 35,000,000} = \text{IDR } 2,916,666$$

$$12$$

$$25^{\text{years}} - 29^{\text{years}} = \underline{\text{Rp } 54,500.00} = \text{Rp } 4,541,666$$

$$12$$

$$30^{\text{years}} - 34^{\text{years}} = \underline{\text{Rp } 33,300.00} = \text{Rp } 3,700,000$$

$$9$$

$$35^{\text{years}} - 39^{\text{years}} = \underline{\text{Rp } 39,800.00} = \text{Rp } 3,980,000$$

$$10$$

$$40^{\text{years}} - 44^{\text{years}} = \frac{\text{Rp. } 10,500,0000}{3} = \text{Rp. } 3,500,000$$

$$3$$

$$55^{\text{years}} \text{old } -59^{\text{years}} = \frac{\text{Rp. } 3,900,000}{1} = \text{Rp. } 3,900,000$$

In table 12 it can be seen that the 25-29 year age level has the highest level of income in the formal sector when compared to other age levels. Where the age of 25-29 years is the age level that can be classified as productive age. For the average income in the formal sector with age 20-59 years is Rp. 3,000,000.

Table 13.

Analysis of the Effect of Age on Income in the Non-Formal Sector

	20th - 24th	25th - 29th	30th - 34th	35th - 39th	40th - 44th	45th - 49th	50th - 54th	55th - 59th	>60th
				Rp 2,500,000	Rp. 1,200,000	Rp. 1,300,000	Rp. 2,500,000	Rp. 1,200,000	RP. 2,500,000
						Rp. 1,500,000	Rp. 1,500,000	Rp. 1,500,000	Rp. 1.350.000
						Rp. 1,800,000	Rp. 1,500,000	Rp. 750,000	Rp. 1,400,000
						Rp. 1,800,000	Rp. 2,500,000	Rp. 1,800,000	Rp. 2,000,000
						Rp. 800,000		Rp. 1,500,000	Rp. 1,500,000
								Rp. 1,200,000	Rp. 800,000
NT									Rp. 1,000,000
Non	none	none	none						Rp. 1,200,000
									Rp. 1,200,000
									Rp. 1,500,000
									Rp. 1,000,000
									Rp. 1,000,000
									Rp. 1,000,000
									RP. 1,200,000
									Rp. 1,200,000
Total	_			Rp. 2,500,000	Rp. 1,200,000	Rp 7.200.000	Rp. 8,000,000	Rp. 7,950,000	Rp. 20,450,000

Effect of age on income in the non-formal sector:

$$35^{years}-39^{years} = \underline{Rp.\ 2500000} = Rp.2,500,000$$

$$1$$

$$40^{years}-44^{years} = \underline{Rp.\ 1200000} = Rp.1,200,000$$

$$1$$

$$45^{years}-49^{=} = \underline{Rp.\ 7200000} = Rp.1,440,000$$

$$5$$

$$50^{\text{years}} = \frac{\text{Rp. } 8000000}{4} = \text{Rp. } 2,000,000$$

$$4$$

$$55^{\text{years}} - 59^{\text{years}} = \frac{\text{Rp. } 7950000}{6} = \text{Rp. } 1.325.000$$

$$6$$

$$>60^{\text{years}} = \text{Rp. } \frac{20450000}{1} = \text{Rp. } 1.278.125$$

In table 13 it can be seen that the age level >60 years has the highest level of income in the non-formal sector when compared to other age levels. For the average income in the formal sector with age >60 years is Rp. 1,200,000.

Table 14.

Analysis of the Effect of Education Level on Formal Sector

0 years	6 years	9 years	12 years	15-16 years
	Rp. 3,000,000	Rp. 3,500,000	Rp. 2,500,000	Rp. 1,500,000
		Rp. 4,800,000	Rp. 2,500,000	Rp. 2,750,000
		Rp. 4,800,000	Rp. 3,000,000	Rp. 3,900,000
		Rp. 4,500,000	Rp. 3,000,000	Rp. 9,000,000
		Rp. 3,000,000	Rp. 3,000,000	Rp. 3,000,000
		Rp. 3,000,000	Rp. 3,000,000	Rp. 6,000,000
		Rp. 6,000,000	Rp. 3,000,000	Rp. 3,000,000
		Rp. 3,000,000	Rp. 3,000,000	Rp. 6,000,000
			Rp. 3,000,000	
			Rp. 3,000,000	
			Rp. 3,000,000	
			Rp. 3,250,000	
			Rp. 3,500,000	
			Rp. 3,500,000	
			Rp. 3,900,000	
			Rp. 4,000,000	
			Rp. 4,500,000	
			Rp. 2,700,000	
			Rp. 6,000,000	
			Rp. 3,000,000	
			Rp. 4,500,000	
			Rp. 3,000,000	
			Rp. 4,800,000	
Total	<b>Rp. 3,000,000</b>	Rp. 32,600,000	Rp. 108.150.000	Rp. 35,150,000

Based on table 14 that the effect of education level on income in the formal sector has the following average:

6 years = 
$$\underline{Rp.\ 3,000,000} = Rp.\ 3,000,000$$

1

9 years = Rp. 32,600.000 = Rp. 4,075,000

8
$$12 \text{ years} = \frac{\text{Rp. } 108,150,000}{30} = \text{Rp. } 3,605,000$$

$$30$$

$$15\text{-}16 \text{ years} = \frac{\text{Rp. } 35,150.000}{8} = \text{Rp. } 4,393.750$$

Table 15.
Analysis of the Effect of Education Level on Non-Formal Sector

0 years	6 years	9 years	12 years	<b>15-16</b> years
Rp. 800,000	Rp. 900,000	Rp. 750,000	Rp. 200,000	Rp. 2,500,000
Rp. 1,000,000	Rp. 1,000,000	Rp. 1,400,000	Rp. 600,000	_
Rp. 1,000,000	Rp. 1,000,000	Rp. 1,500,000	Rp. 1,500,000	_
Rp. 1,500,000	Rp. 1,000,000	Rp. 1,500,000	Rp. 1,500,000	
	Rp. 1,000,000	Rp. 1,750,000	Rp. 1,800,000	
	Rp. 1,200,000	Rp. 2,000,000	Rp. 1,800,000	
	Rp. 1,200,000		Rp. 2,750,000	
	Rp. 1,300,000			
	Rp. 1,350,000			
	Rp. 1,750,000			
	Rp. 1,800,000			
	Rp. 2,500,000			
	Rp. 1,200,000			
	Rp. 1,200,000			
	Rp. 600,000			
Rp. 4,300,000	Rp. 19,000,000	Rp. 8,900,000	Rp. 10,150,000	Rp. 2,500,000

Based on table 15 that the effect of education level on income in the non-formal sector has the following average:

Table 16.

**Analysis of the Effect of Working Hours on Income in the Formal Sector** 

	Rp. 1,500,000	Rp. 3,000,000	<b>5 6</b> 000 000
		<b>Kp.</b> 3,000,000	Rp. 3,000,000
	Rp. 3,000,000	Rp. 4,800,000	Rp. 3,900,000
	Rp. 4,500,000	Rp. 4,800,000	Rp. 3,500,000
		Rp. 3,900,000	Rp. 3,000,000
		Rp. 2,500,000	Rp. 3,000,000
		Rp. 4,800,000	Rp. 3,000,000
		Rp. 4,800,000	Rp. 4,000,000
		Rp. 3,000,000	Rp. 4,800,000
		Rp. 2,000,000	Rp. 3,000,000
		Rp. 3,000,000	Rp. 3,500,000
		Rp. 3,000,000	Rp. 4,000,000
			Rp. 3,000,000
			Rp. 4,500,000
			Rp. 4,500,000
			Rp. 3,000,000
			Rp. 4,500,000
2-5			Rp. 4,000,000
			Rp. 4,500,000
			Rp. 2,700,000
			Rp. 4,500,000
			Rp. 3,000,000
			Rp. 9,000,000
			Rp. 6,000,000
			Rp. 3,000,000
			Rp. 6,000,000
			Rp. 3,000,000
			Rp. 3,000,000
			Rp. 3,000,000
			Rp. 6,000,000
			Rp. 4,500,000
			Rp. 6,000,000
			Rp. 3,000,000
Total	Rp. 9,000,000	Rp. 39,600,000	Rp. 129,400,000

Based on table 16 that the effect of working hours on income in the formal sector has the following average:

 $2-5 \text{ hours} = \frac{\text{Rp. } 9,000,000}{\text{Rp. } 3,000,000} = \text{Rp. } 3,000,000$ 

3
6-9 hours = 
$$\frac{\text{Rp. } 39,600,000}{11}$$
 = Rp. 3,600,000
11
10-14 hours =  $\frac{\text{Rp. } 129,400,000}{33}$  = Rp. 3,921,212

Table 17.

Analysis of the Effect of Working Hours on Income in the Non-Formal Sector

	2-	·5 hours	6-9 hours	10-14 hours
	Rp.	1,300,000	Rp. 1,200,000	Rp. 2,500,000
	Rp.	1,400,000	Rp. 1,800,000	Rp. 1.350.000
	Rp.	600,000	Rp. 1,500,000	Rp. 1,500,000
	Rp.	1,200,000	Rp. 1,500,000	Rp. 2,000,000
	Rp.	6,000,000	Rp. 1,500,000	Rp. 1,800,000
	Rp.	1,200,000	Rp. 1,500,000	Rp. 2,500,000
Non	Rp.	1,200,000	Rp. 800,000	Rp. 1,000,000
Formal			Rp. 750,000	Rp. 1,000,000
			Rp. 1,200,000	Rp. 1,500,000
			Rp. 1,200,000	Rp. 3,000,000
			Rp. 1,800,000	Rp. 1,500,000
			Rp. 1,500,000	Rp. 1,000,000
			Rp. 1,000,000	
			Rp. 1.000.000	
Total	R	5,700,000	Rp. 18,250,000	Rp. 20,650,000

Based on table 17 that the effect of working hours on income in the non-formal sector has the following average:

2-5 hours = 
$$\underline{\text{Rp.5,700,000}}$$
 = Rp.814,285  
7  
6-9 hours =  $\underline{\text{Rp.18,250,000}}$  = Rp.1,303,571  
14  
10-14 hours =  $\underline{\text{Rp. 20,650,000}}$  = Rp.1,720,833

Table 18.

Analysis of the Effect of Vehicle Type on Income in the Formal Sector

Formal	Matic	Manual
	Rp. 1,500,000	Rp. 3,000,000
	Rp. 2,500,000	Rp. 3,500,000
	Rp. 2,500,000	Rp. 2,700,000
	Rp. 2.750.000	

Formal	Matic	Manual
	Rp. 3,000,000	
	Rp. 3,250,000	
	Rp. 3,500,000	
	Rp. 3,500,000	
	Rp. 3,900,000	
	Rp. 3,900,000	
	Rp. 4,000,000	
	Rp. 4,500,000	
	Rp. 4,500,000	
	Rp. 4,500,000	
	Rp. 4,800,000	
	Rp. 4,800,000	
	Rp. 4,800,000	
	Rp. 4,500,000	
	Rp. 4,500,000	
	Rp. 4,500,000	
	Rp. 3,000,000	
	Rp. 3,000,000	
	Rp. 9,000,000	
	Rp. 6,000,000	
	Rp. 3,000,000	
	Rp. 6,000,000	
	Rp. 3,000,000	
	Rp. 3,000,000	
	Rp. 6,000,000	
	Rp. 4,500,000	
	Rp. 6,000,000	
	Rp. 3,000,000	
Total	<b>Rp. 168.200,000</b>	<b>Rp. 9.200.00</b>

Based on table 18 that the effect of vehicle type on income in the formal sector has the following average:

$$Matic = \frac{\text{Rp. } 168.200.000}{44} = \text{Rp. } 3.8212.727$$

$$44$$
 $Manual = \frac{\text{Rp. } 9.200.000}{3} = \text{Rp. } 3.066.666$ 

Table 19.

Analysis of the Effect of Vehicle Type on Income in the Non-Formal Sector

		Matic	Manual
	Rp.	1,000,000	Rp. 600,000
	Rp.	1,000,000	Rp. 750,000
	Rp.	1,200,000	Rp. 800,000
	Rp.	1,200,000	Rp. 900,000
	Rp.	1,500,000	Rp. 1,000,000
	Rp.	1.750.000	Rp. 1,000,000
	Rp.	1,800,000	Rp. 1,000,000
	Rp.	2,000,000	Rp. 1,000,000
г 1	Rp.	2,500,000	Rp. 1,200,000
Formal	Rp.	600,000	Rp. 1,300,000
	Rp.	1,200,000	Rp. 1.350.000
			Rp. 1,400,000
			Rp. 1,500,000
			Rp. 1.750.000
			Rp. 1,800,000
			Rp. 1,800,000
			Rp. 2,500,000
			Rp. 2.750.000
			Rp. 1.200.000
Total	Rp.	15,750,000	Rp. 30,100,000

Based on table 19 that the effect of vehicle type on income in the non-formal sector has the following average:

$$Matic = \frac{\text{Rp } 15.750.000}{11} = Rp1.431.818$$

$$Manual = \frac{\text{Rp } 30.100.000}{22} = Rp1.368.181$$

#### **Conclusion**

on the results of the study, it is stated that working hours have a positive and significant effect on income. This is because the longer the drivers spend their time working, the more orders or points the drivers can collect and thus the income of the drivers will increase. Meanwhile, conventional motorcycle taxis stated that working hours did not have much effect on income. This is evidenced that 60% of the research results of conventional motorcycle taxi drivers prefer their leisure time rather than increasing their working hours. Meanwhile, with the different types of vehicles, namely manual motorbikes and automatic motorbikes, there are differences in the amount of income. Where the income of motorcycle taxi drivers who use automatic motorcycles is greater than that of manual motorcycle taxi drivers.

This is due to the large number of passenger requests, especially women, who prefer to use motorcycle taxis with automatic motorbikes. Based on the results of the study, it was stated that age had an effect on the income of motorcycle taxi drivers and conventional motorcycle taxi drivers in the city of Semarang. At productive age, the older you get, the more experience you get and your income will increase, but if you are past your productive age, your physical condition will decrease so your productivity will also decrease, which will cause your income to decrease.

# **Bibliography**

- Airlangga, B., & Suharni, L. (2015). Klasifikasi Baku Lapangan Usaha Indonesia (KBLI). Jakarta.
- Alamzah, D. (2022). "Pangoje'Seko" (Studi Etnografi Tukang ojek di Kecamatan Seko, Kabupaten Luwu Utara)=" Pangoje'Seko" (Ethnographic Study of Motorcycle Taxi Drivers in Seko Subdistrict, North Luwu Regency). Universitas Hasanuddin.
- Dian, D. (2018). Rivalitas Angkutan Konvesional dan Angkutan Daring (Studi Terhadap Respon Pemerintah Mengatur Angkutan Daring di Kota Makassar tahun 2017). Universitas Islam Negeri Alauddin Makassar.
- Fikri, A., & Susilowati, D. (2019). *Analisis Faktor-Faktor yang Mempengaruhi Tingkat Pendapatan Ojek Pangkalan di Lokasi Pangkalan Ojek Taspen Kota Malang*. Jurnal Ilmu Ekonomi JIE, 3(2), 194–202. https://doi.org/10.22219/jie.v3i2.8239
- Giri, P. C., & Dewi, M. H. U. (2017). *Analisis faktor-faktor yang mempengaruhi pendapatan driver Go-jek di kota Denpasar, Bali*. E-Jurnal Ep Unud, 6(6), 948–975.
- Hamsona, D. A., & Susilowati, I. F. (2019). *Perlindungan Hukum Terhadap Keselamatan Penumpang Kendaraan Sepeda Motor Yang Digunakan Untuk Kepentingan Masyarakat*. Novum: Jurnal Hukum, 6(2). https://doi.org/10.2674/novum.v6i2.30141
- Indonesia, S. (2015). Result Report of Quarterly Survey of Business Activity Integrated, 2015. Statistics Indonesia.
- Kalukubula, W. S. (2020). Dampak Gojek Terhadap Ojek Pangkalan (Studi Kasus Gojek Kota Ambon dan Ojek Pangkalan Gadihu) Kebun Cengkeh Desa Batu Merah Kecamatan Sirimau Kota Ambon. IAIN Ambon.
- Kartika, N. E. (2020). *Fitur Aplikasi Gojek Favorit Konsumen Pada Saat Pandemi COVID-19 Di Kota Bandung*. Jurnal Communio: Jurnal Jurusan Ilmu Komunikasi, 9(2), 1680–1695. https://doi.org/10.35508/jikom.v9i2.2922
- Kurniawan, S., & Sriharyani, L. (2019). *Analisis Pengaruh Parkir Di Badan Jalan Terhadap Kinerja Jalan Jendral Ahmad Yani Kota Metro (Studi Kasus Depan Pusat Perbelanjaan Swalayan Putra Baru*). TAPAK (Teknologi Aplikasi Konstruksi): Jurnal Program Studi Teknik Sipil, 8(1), 9–19. http://dx.doi.org/10.24127/tp.v8i1.795
- Nanda, I. (2015). Analisis Faktor yang Mempengaruhi Keputusan Konsumen dalam Memilih Jasa Transportasi Taksi Roda Dua (Studi pada PT Sahabat Solusi Intermoda-Cak Transport, Surabaya). Jurnal Pendidikan Tata Niaga (JPTN), 3(2).
- Rachma, P., Bauw, S. A., & Rahayu, Y. P. (2020). Faktor Determinan Curahan Jam Kerja Tenaga Kerja 'Ojek' Sebagai Jasa Transportasi Kabupaten Manokwari. Lensa Ekonomi, 11(01), 75–95. https://doi.org/10.30862/lensa.v11i01.86
- Statistik, B. P. (2018). Produk Domestik Bruto Indonesia Triwulanan. Jakarta: BPS.

- Analysis of the Effect of Working Hours, Type of Vehicle, Age, and Education on Income for Formal and Informal Workers in Semarang City
- Stini, L. O. (2020). *Evaluasi Kondisi Angkutan Masal di Jabodetabek Akibat PSBB*. Journal of Civil Engineering and Planning, 1(2), 104–115. http://dx.doi.org/10.37253/jcep.v1i2.806
- Sulistyowati, A., & Muazansyah, I. (2019). *Optimalisasi Pengelolaan Dan Pelayanan Transportasi Umum (Studi Pada "Suroboyo Bus" Di Surabaya)*. Iapa Proceedings Conference, 152–165. https://doi.org/10.30589/proceedings.2018.189