

## Research Paper

# Immediate Economic Effects of Pandemic on Inclusive Growth and Underground Economics: A Case Study Indonesia

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**Abstract.**

The informal sector had become an essential pillar that takes over the economy of Indonesia. While the pandemic is dragging the economy to a low level, the informal sector needs more attention from the government. Bad governance of the informal sector will lead to the creation of an underground economy that impedes economic potential. In contrast, good governance will create more massive economic growth, which will lead to the development of the formal sector. The informal sector supports the economy of low and middle-income countries than the high-income country. That statement is also shown by the data that the informal sector support 8.33% of Indonesian gross domestic product (GDP). This research aims to measure the impact of the pandemic on the inclusive and underground economy from two different perspectives, owners and workers in the underground economy system. This research was conducted by using descriptive and quantitative analysis involving a dummy variable to capture the difference between before and during the pandemic. Using time-series data, this research shows that there are significant effects of the pandemic on the changing of income, consumption, and saving for both owners and workers. Moreover, some informal activists shift to different jobs to keep the proper way of living during the pandemic. The changing of four different aspects, certainly brings society's prosperousness to a low level.

**Keywords:** inclusive growth, pandemic era, underground economy

## 1. Introduction

The number of the underground economy in Indonesia is increasing every year. Nearly 20% of Indonesia's economy is the underground economy [1][2]. In the 2001-2013 period, Indonesia's underground economy had an average size of 8.33% of the Gross Domestic Product (GDP). As a result, the average size of potential tax losses is IDR 11,172.86 billion

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or about 1% of GDP. The causes of the underground economy are poor governance and a lack of inclusive growth. The underground economy is categorized as the informal economy. It will undoubtedly limit the state's capacity when it is in large numbers, which will hinder institutional development. It would constrain formal sector expansion and limit the formal economy's benefits to relatively few participants, hindering potential economic growth and broader economic opportunities [3].

The underground economy has a definition of all economic activities that include the production of market-based legal goods and services hidden from public authorities to avoid paying income, added value, or other taxes, to avoid paying social security contributions. Its characteristic is avoiding specific legal labor market standards, such as wages as well. They have no minimum, maximum working hours, and safety standards, and adhering to specific administrative procedures [2]. On the plus side, however, the large informal sector can be seen as the nursery for future economic growth in the formal economy. Then it is crucial when viewed from a development perspective because emerging countries have a much enormous share of informal activities than rich countries.

The links under development with significant institutional weakness, namely that most of the potential productive capital in developing countries is outside formal tenure systems [4]. In emerging countries, it is often difficult to establish clear property rights, for example. Moreover, enjoying the benefits such as the capacity to increase and the protection provided by the formal property rights system. The economic production capacity is limited due to fundamental institutional weaknesses so that many people choose to carry out economic activities that are not detected by the system. Many economists have tried to measure how big the underground economy is through indirect means, but not many have used survey techniques to answer questions about who is involved in the underground economy or how and why they operate.

Underground economics is a complex economic phenomenon with many causes and consequences for policymakers and economists. From the perspective of policymakers, the side consequences of lost taxes, lack of quality and quantity of public goods, distorted market competition, and erosion of social and economic institutions are feared to have an impact on the decline of economic growth. However, the underground economy also has socio-economic benefits, especially for the lower class [5]. Seeing how complicated this problem is, this research wants to see the direct impact of the underground economy involving the lower class in the nightlife sector in Malang during the pandemic.

This research will focus on the impact of the Covid-19 pandemic, which began in January 2020, on the underground economy sector. If we see broadly, it affects all activities, even economic activities in all countries, including Indonesia. When the government policy did large scale social restrictions, the first sector affected was the entertainment sector, where all entertainment sectors were closed until they did not know [5]. In the city of Malang, as we know, the entertainment sector is relatively large and has become one of the variables that support the increase of Malang City's Local Revenue. Then, with a large-scale social restriction policy imposed by the government, the behavior and conditions of economic activity in the entertainment sector will be affected.

## 2. Methods

Structured questionnaires were distributed to 100 people involved in the underground economy, especially those in the nightlife sector. Respondents in this study were lady escorts, pimps and nightlife owners who were not legally registered in Malang City. The method used in this research is to use the quantitative description method and use the logit test. The logit model is a non-linear regression model that produces an equation where the dependent variable is categorical. The most basic categories of the model produce binary values such as numbers 0 and 1 with the dummy variable. The resulting numbers represent a particular category that results from calculating the probability of occurrence of that category. The use of the logit model is often used in classification data [6] [7]. This test uses the Stata test with primary data. The model of this research is:

$$1. Li = \ln \ln \left( \frac{Pi}{1-Pi} \right) = Zi = \beta_1 + \beta_2 X_1 + \beta_3 X_2 + \beta_4 X_3 + ei$$

### Equation 1 -- Logit Model

Explanations:

Li = Log of the odds ratio (0, 1)

$\beta_1, \beta_2, \beta_3, \beta_4$  = Intercept

$X_1, X_2, X_3, X_4$  = Income, Consumption, Saving, Job Shifting

ei = error term

### 3. Result and Discussion

The results are of the four variables, namely the Y (income), C (consumption), S (saving), and J (job shifting) variables all have a significant effect due to the existence of COVID-19. The level of significance of these four variables can be seen in the table below:

TABLE 1: Logit Test Result

Variable	P> z
Y	0,052
C	0,090
S	0,045
J	0,094
E	0,778

Prob>chi2 = 0,0001, Pseudo R2 = 0,8014

Before the Covid-19, the entertainment sector in Malang was one of the most significant forces contributing to its revenue in Regional Original Income. It is undeniable that Malang City has many entertainment venues that are of great interest. The need and existence that drove the underground economy development in Malang’s entertainment sector increased before the pandemic. The underground economy sector actors can be seen from three objects, namely Owner, Worker, and Customer. Workers in the entertainment sector are divided into two major parts: the first is a bartender who also works as an operator employee, and the second is a lady escort. As for the connoisseur side, on average, various people are connoisseurs of this entertainment sector. From the owner’s point of view, the average owner is based on reaping massive profits.

Moreover, in terms of actors such as bartenders and lady escort, it is based on the same factor, namely the factor of fulfilling economic needs because, on average, they have a low educational background and have problems in the household. Due to those circumstances, the economic factor is the main trigger for them to become actors in the underground economy. Meanwhile, from the viewpoint of the audience, it is known that they enjoy the entertainment sector tonight intending to entertain themselves from the saturation of work.

It is undeniable that before the Covid-19 pandemic, they all got the motive, desire, and existence they wanted. However, after the pandemic disaster, the impact was tremendous for the life of the underground economy. The first is from the owner’s side. During the Covid-19, with the government’s existence, their businesses are closed for an indefinite time starting March 27, 2020. As an owner, the impact that occurs is a dramatically decreased income up to 100%. With a decrease in income that occurs, the

level of consumption and saving is also affected by a decline [8]. Apart from primary and secondary needs, consumption in terms of vacation trips abroad as transaction costs is also mostly done by owners to develop their business places of entertainment. With the existence of Covid-19, this transaction fee is transparent.

In this case, the owner manages the strategy to survive in such difficult conditions. Due to the operational cost are still on their liabilities [9]. The owners still provide salaries even it is only namely the basic salary. Therefore, the owner takes action to sell some of the assets they have and spend their savings to stay afloat. Owners cannot just wait for a government policy to open their place of business and continuously sell assets [10]. As a result, several entertainment venue owners in Malang choose to sell cheap groceries and herbal herbs. Because during a pandemic, the only things that are still needed are necessities and health for immunity against the Covid-19 virus. What this means is that a job change is taking place. Initially, the owner was only the supervisor and owner of entertainment venues but had to change to become a seller of groceries and herbal medicine with the friendship links they had. Furthermore, this job change has been able to sustain the economic difficulties experienced by entertainment venue owners.

From the bartenders' point of view, the existence of Covid-19 is shrinking half of their revenue. The greatly diminish due to no bonus from selling alcoholic drinks to entertainment lovers. Not only that, bonuses or tips that are obtained also come from guests who enjoy the world of entertainment which comes to their place. Guests issued these tips because they were satisfied with the service provided.

Mostly this bartender is a breadwinner in their family. Then, the revenue fall of impacted consumption and saving. During the pandemic, the bartender has to work extra in order to keep their family. They work as couriers to deliver goods and sell ready-to-eat food included in online-based applications such as Gojek or Grab food. It seems that the existence of COVID-19 makes bartenders have to work harder to earn income. Furthermore, nearly 90% of bartenders make job changes to keep up with their daily needs.

Another perspective is from the lady escort. During the Covid-19, they changed their life habits from being glamorous to hard workers due to the significant fall of revenue. They usually get high income from their job-desk. In a day, their average income can reach Rp. 500,000.00 when doing job-desk as ladies escort with 9 hours of working hours. In a month, they only take eight days off, namely on significant working days and Sundays. The total monthly income they get is Rp. 11,000,000.00. This situation was ultimately changing during the pandemic era. The system in lady escort management

is divided into two. The first is a contract work system with entertainment venues, and the second is a freelance system (not tied). Both did not get any income during this pandemic. The under-contract lady escort will not receive a basic salary, in contrast to bartender employees who still receive a basic salary. The reason is due to their custom. They can still have a job opportunity to become a Sales Promotion Girl (SPG), which is very flexible.

Mostly those girls have a glamorous lifestyle and high level of consumption. They even using credit to support their appearance and work. During this pandemic era, many of them shifted their job by selling clothes and food online, but some even go back to their hometowns. Nearly one-third asks help to their friends, colleagues, and loyal customers to meet their daily needs.

The absence of income has made them reduce the level of consumption, which has been a part of the high costs spent to support their work so far. Examples include buying clothes, perfume, underwear, bags, and shoes. Furthermore, the nightly lifestyle has to stop because there are no entertainment venues open during the pandemic. They do not have a permanent house, meaning that their houses are always moving. In the end, they had to go back to their hometowns because they could not afford to pay for the boarding house / rented house. For saving, most of them save in the form of land in their hometown

Additionally, the lady escorts also the only wage earner of the family. Hence, the income used for their consumption and to meet their family's needs. Next, none can save money because their income is spent on credit consumption, such as buying cars and consuming basic daily needs. For entertainment customers, the impact that occurs is that if the connoisseur works in the entrepreneurial sector, entertainment venues' closure will be affected. Because they enjoy many entertainment facilities to entertain their guests from among business people who are part of their work. The decrease in income experienced by connoisseurs of the entrepreneur sector category will also have a positive effect in terms of entertainment expenses.

Before Covid-19, they had to budget a portion of their income for entertainment, but because of the COVID-19 release, they could save it for other things. It means that consumption for entertainment decreases along with the decreasing level of income experienced by connoisseurs with the entrepreneurial work sector. Because since the existence of Covid-19, they have also experienced a drastic decrease in income. Therefore, it will reduce the level of consumption and saving too. The entertainment lovers from the business sector have to change their minds to survive in a pandemic era. Reducing excessive consumption levels and trying to develop new ideas to gain

income, such as becoming an online seller of goods. The job shifting carried out by consumer of the world of night entertainment from the entrepreneur sector also occurs. It means that Covid-19 has an impact on reducing levels of income, consumption, saving, and job shifting.

Looking further into the underground economy of the nightlife sector in Malang, the three main actors (lady escorts, pimps and bar owners) are the three subsectors that play an important role in this industry. Through its food services, bars and arts offerings, the nightlife sector is responsible for a direct economic impact on 2000 people with an estimated wage of 30 billion Rupiah and 100 billion Rupiah in economic output. Businesses in the nightlife sector provide additional benefits to Malang's economy which is an untaxed amount.

From the current results, it can be seen that the impact of Covid-19 affects all groups, especially for the underground economy sector, which impacts in addition to reducing income, consumption levels, and savings, it can also increase the unemployment rate [11] if actors in the underground economy sector cannot find work [12]. All sectors are affected by this pandemic—particularly large entrepreneurs who contribute many funds in Regional Original Income. Indonesia's recessionary economic condition is one of the effects caused by the decline in people's purchasing power due to the impact of a very drastic decrease in income. Furthermore, Indonesia's underground economy sector contributes more than 8% of the existing Gross Domestic Product (GDP). Therefore, the government must study its policies during this pandemic to increase economic growth through the real sector.

## 4. Conclusions

The Covid-19 pandemic impact that occurred from March 2020 until now has had many adverse effects for actors in the world of night entertainment, namely decreased income, decreased levels of consumption and savings, and significant job shifting. Meanwhile, local revenue is contributed a lot from taxes obtained from existing nightlife venues. It means that the impact that occurs extensively affects inclusive growth and actors in the underground economy sector, which so far have received the income they have, especially for entertainment owners and workers, who depend on the world of night entertainment. For actors, from the viewpoint of connoisseurs of the world of night entertainment, namely entrepreneurs or businessmen, the most affected is the loss of opportunities to get projects/jobs because there is no place for entertainment from the businessmen's guests. Entertainment consumers face income reduction because most

of their primary jobs are entrepreneurs, which will reduce their consumption level and savings. The suggestion that can be given by the author is that government policies must be immediately reviewed in order to stabilize the regional economy while maintaining strict health protocols. Moreover, actors from the entertainment sector can depend on income from entertainment venues, but there must also be a side job done to meet their daily needs.

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