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The Impact of MSMEs Financing in Islamic Bank on Unemployment in Indonesia

Pengaruh Pembiayaan UMKM pada Bank Syariah terhadap Pengangguran di Indonesia

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ABSTRACT

One of the contributions of the Islamic banking sector to Indonesia's economy is channeling funds to MSMEs in the form of financing since a number of them could not access financial services. Interestingly, the MSMEs grew as the Islamic Banking sector rose. However, no single study analyzes such an impact on unemployment in both rural and urban areas. This paper aimed to reveal the effect of MSMEs financing in Islamic banks on unemployment in Indonesia. It further aimed to discover such an effect on unemployment in Indonesia's urban and rural areas separately. Dynamic panel GMM two-step analysis is used in this research to estimate cross-province data in Indonesia between 2010 and 2019. The results of the study reveal that MSMEs financing in Islamic Banks contributed significantly to the reduction of unemployment in Indonesia as a whole. It is also found that the unemployment in urban areas is reduced by MSMEs financing in Islamic Banks. On the other hand, there is no significant relationship between MSMEs financing in Islamic Banks and unemployment in rural areas. These findings can be the basis for Islamic banks to increase MSMEs financing and for the government to expand Islamic banks' role in every part of Indonesia to reduce unemployment, especially in rural areas.

Keywords: MSMEs Financing, Islamic Bank, Unemployment, Urban, Rural.

ABSTRAK

Salah satu kontribusi sektor perbankan syariah dalam perekonomian Indonesia adalah penyaluran dana kepada UMKM dalam bentuk pembiayaan, karena beberapa dari mereka tidak dapat mengakses layanan keuangan. Menariknya, UMKM tumbuh seiring dengan bangkitnya sektor Perbankan Syariah. Namun, tidak ada satu studi pun yang menganalisis dampak tersebut terhadap pengangguran di pedesaan dan perkotaan. Penelitian ini bertujuan untuk mengungkap pengaruh pembiayaan UMKM di bank syariah terhadap pengangguran di Indonesia. Hal ini bertujuan untuk mengetahui lebih jauh pengaruh tersebut terhadap pengangguran di daerah perkotaan dan pedesaan secara terpisah di Indonesia. Analisis dua langkah GMM panel dinamis digunakan untuk mengestimasi data lintas provinsi di Indonesia antara tahun 2010 dan 2019. Hasilnya mengungkapkan bahwa pembiayaan UMKM di Bank Syariah berkontribusi signifikan terhadap pengurangan pengangguran di Indonesia secara keseluruhan. Ditemukan juga bahwa pengangguran di perkotaan berkurang dengan pembiayaan UMKM di Bank Syariah. Di sisi lain, tidak ada hubungan yang signifikan antara pembiayaan UMKM di bank syariah dengan pengangguran di pedesaan. Hasil penelitian ini dapat menjadi dasar bagi bank-bank syariah dalam meningkatkan porsi pembiayaan UMKM dan dasar bagi pemerintah untuk memperluas peran perbankan syariah di seluruh bagian Indonesia untuk mengurangi pengangguran, khususnya di area pedesaan.

Kata Kunci: Pembiayaan UMKM, Bank Syariah, Pengangguran, Perkotaan, Pedesaan.

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I. INTRODUCTION

Unemployment is one of the most popular issues in economic development, where every country in this world has made several attempts to address this issue. A remarkable population growth is recognized as one of the main causes of such an unemployment problem, which makes developing countries with huge population vulnerable to this problem (Singh, 2018). The more the population they have, the more job opportunities are needed to keep the unemployment cases at a minimum level. Many attempts have been made by their government to keep their number as low as possible, either by developing human capital, providing an education system through market demand, or increasing economic growth (Sherif, 2013). Apart from the government's role, the contribution of the private sector is also essential in supporting the programs so that unemployment can be successfully reduced.

As one of the developing countries, Indonesia, through its statistical agency (BPS, 2021) , recorded that the number of unemployed people in the country reached 9.76 million people as of August 2020, accounting for 7.01 percent of the total labor force in Indonesia. Among this group, 70 percent of them live in urban areas while the rest live in rural areas. This happened due to the massive migration from rural to urban areas in response to the gap in economic opportunities between the two areas, despite the low level of skills and social networks of the migrants (Lyu et al., 2019). In general, however, the unemployment rate is relatively moderate compared to other developing countries. This percentage can be maintained at this level due to the abundance of micro, small and medium enterprises (MSMEs) in Indonesia. As shown in Table 1, the number of MSMEs has consistently increased every year from 52.7 million units in 2010 to 65 million units in 2022. According to CNN Indonesia, based on the data released by the Ministry of MSMEs, MSMEs play an important role in strengthening the economy as they absorbed 97 percent of the total workforce and contributed to 60.5 percent of GDP in 2019. This phenomenon needs to be proven through research whether the effect is significant.

Table 1. Number of MSMEs in Indonesia (2010-2021)

Year	Number of MSMEs (million units)
2010	52.7
2011	54.1
2012	55.2
2013	56.5
2014	57.8
2015	59.2
2016	61.6
2017	62.9
2018	64.1
2019	65.4
2020	64
2021	64.2
2022	65

Source: Ministry of MSMEs

Based on this example, unemployment in developing countries can be minimized by strengthening MSMEs due to their role in creating employment opportunities as well as absorbing labor (Nasr & Rostom, 2013). Such a role has also been recognized by several developed countries as it has become a key to rapid economic growth in China (Kongolo, 2019). Despite the potential of MSMEs, there are several constraints that MSMEs face in developing their businesses, including the lack of an integrated accounting system, lack of trained human resources, limited marketing and administrative issues, and most importantly, limited funds (Mumani, 2014). These limited funds are confronted with the existence of conventional loans with interest rates and the difficulty of accessing these loans (Elasrag, 2016). This capital constraint becomes the main problem in the development of MSMEs, as they have limited access to financial services compared to large companies (Benbekhti et al., 2021).

Here is a huge gap in financial access between large and small enterprises in developing countries, as about 41% of MSMEs could not afford their financial needs. This financial constraint may threaten the existence of MSMEs and hinder their development, leading to less labor absorption and increasing unemployment. In response to this problem, Islamic Finance (IF) is expected to be the alternative solution to the problem of financial accessibility in MSMEs. The nature of IF, which is based on partnership, provides access to finance for small businesses and the poor (Elasrag, 2016). In addition, the profit and loss sharing system in IF allows MSMEs to

survive the loss compared to the conventional loan which puts all the loss on the entrepreneurs (Kayed & Hassan, 2011). Such a pro-poor system in the IF may contribute to the development of MSMEs, thus increasing labor absorption and reducing unemployment.

In Indonesia, the growth of IF is relatively slow compared to other Muslim countries in the world, although the trend is upward. Nevertheless, the IF industry shows a positive role in supporting MSMEs as it can be seen from the data released by the Financial Services Authority (OJK) in 2019 that approximately Rp 51.86 trillion was channeled by the Islamic banking industry to MSMEs in Indonesia as of December 2019. In addition, it can be seen from Table 2 that in the period 2010-2019, the total financing of MSMEs by Islamic banks in Indonesia shows an upward trend from IDR 52,565 billion in 2010 to IDR 66,333 billion in 2019. Conversely, the trend of the number of unemployed people is downward, starting from 8,319,779 people in 2010 and then ending at 7,045,761 people in 2019. Moreover, when the total MSME financing reached a peak of IDR 110,027 billion in 2013, the number of unemployed people decreased to 7,338,737 people and then increased again to 7,560,822 people when the MSME financing decreased to IDR 50,146 billion in 2015. And in the Covid-19 period 2020-2022, an increase in MSMEs financing was associated with a decrease in the number of unemployed people from 9,767,754 people in 2020 to 8,425,931 people in 2022. These movements raise the question of whether there is a relationship between the two variables.

Table 2. Comparison between the Number of Unemployed and MSMEs Financing of Islamic Banks in Indonesia (2010-2019)

Year	Number of Unemployed	Total MSME Financing (in IDR billion)
2010	8,319,779	52,565
2011	7,700,086	71,810
2012	7,244,956	90,856
2013	7,388,737	110,027
2014	7,244,906	59,699
2015	7,560,822	50,146
2016	7,031,775	54,411
2017	7,040,323	58,980
2018	7,000,691	62,231
2019	7,045,761	66,333
2020	9,767,754	57,318
2021	9,102,052	76,009
2022	8,425,931	87,140

Source: BPS and OJK

Most of the existing literature investigated the impact of credit in the banking sector on unemployment. Shabbir et al. (2011) revealed that a rise in credit volume in the banking sector reduced unemployment in Pakistan. This finding is strengthened by Pagano & Pica (2011), Feldmann (2012), and Göçer, (2013) who respectively unraveled a similar impact during the investigation on 63 countries, 53 countries of the world, and 14 countries under the European Union. Azolibe et al. (2022) found further the ability of banking system credit to control the unemployment rate in South Africa and Nigeria. At the same time, several studies have found the role of SMEs in creating employment, especially in developing countries (Abisuga-Oyekunle et al., 2020; Oyelana & Adu, 2015; Syed et al., 2012).

According to Hassanein & Mostafa (2023) through their bibliometric analysis, in the last 30 years, the discussion of MSMEs in Islamic banking research is quite limited because the popular discussion is on the performance, efficiency and consumer behavior of Islamic bank. To the best of the author's knowledge, there is only limited study conducted to reveal the effect of Islamic banking on unemployment through financing MSMEs. Khairina et al., (2020) analyzed the relationship between Islamic bank financing and labor absorption in the real sector in Indonesia and found that the allocation of third-party funds through profit and loss sharing financing has a significant positive impact on labor absorption in the real sector. Unfortunately, their findings stop at labor absorption without further analyzing the impact on unemployment. In Turkey, Benbekhti et al., (2021) discovered that SMEs financing in Islamic banks is proven to reduce unemployment as a result of an increase in productivity. These findings did not cover the empirical impact of MSMEs financing on unemployment in urban and rural areas. Such an investigation is urgently needed since there is a gap between the urban and rural areas in terms of financial access and unemployment reduction programs.

This paper was the first to discuss one of the supporting attempts at unemployment reduction through financial access provided by Islamic Banks for MSMEs in Indonesia as one of the developing countries by decomposition of the impact in urban and rural areas since both areas are important for human development programs. This study aimed to reveal the effect of Islamic financing on MSMEs on unemployment in Indonesia. Furthermore, it aimed to discover further the effect of Islamic financing on MSMEs on unemployment in urban and rural areas.

II. LITERATURE REVIEW

Entrepreneurship-Unemployment Theory

The link between entrepreneurship and unemployment can be examined through two-way communication. One of the relevant theories in this regard is Schumpeter's entrepreneurial effect, which states that a high unemployment rate in a country will lead to an increase in entrepreneurial activities, including start-ups and small businesses, due to the decreasing opportunities to start new businesses (Blanchflower & Meyer, 1994). At the same time, this theory states that the rise in entrepreneurship activities can reduce unemployment as they create jobs (Manser & Picot, 1999). According to Thurik et al., (2008) start-ups and small businesses contribute to job creation better than their counterparts since they contribute to greater entrepreneurial activity which then leads to unemployment reduction. They also asserted that the entrepreneurial activity is related to the Schumpeterian process where the old product will be replaced by the new products created from those entrepreneurial activities.

Based on the concept of the unemployment push effect, a person is pushed into entrepreneurial activity because the chances of getting a decent job and thus a sufficient wage from the job are reduced by unemployment (Startiene & Remeikiene, 2009). Ritsilä & Tervo (2002) viewed that the person is not satisfied with such a situation because it is not his true dream. Meanwhile, According to the prosperity-pull concept at a time of low unemployment level, people most likely become self-employed due to the high possibility of earning a labor wage (Muhelberger, 2007). Conversely, during high unemployment levels, the demand for products or services falls which may lead to the bankruptcy of companies as their revenues are reduced. As a consequence, many workers will be laid off and they cannot start entrepreneurship since their expertise in start-ups is inadequate.

Islamic Finance, MSMEs and Unemployment

Islamic finance brings a religious value to the financial system as well as in its contribution to social issues in supporting social justice among people (Dusuki, 2008). Islamic banks are business entities that are governed by the Shariah board of directors. This allows them to operate consistently according to Islamic principles with the expectation of preventing the concentration of wealth among a few groups without harming people who have acquired it legitimately (Ibn, 2006). Therefore, it is only natural for Islamic Banks to promote financing schemes for the MSMEs which is nowadays known as microfinance.

IF is friendly to MSMEs as there is a profit and loss sharing (PLS) system which creates fairness for MSMEs as borrowers and Islamic Banks as lenders (Chapra, 2011). Although this system generates a small profit for the Islamic bank compared to the conventional one, it helps MSMEs a lot as their resilience to losses can be maintained (Fajri et al., 2022). Better development of MSMEs indirectly leads to better provision of employment opportunities, which can eventually contribute to the reduction of unemployment cases.

Based on the perspective of economic development, MSMEs are perceived to be able to create almost half of new job opportunities in the economy, whereby the job opportunities are considered good ones (Edmiston, 2007). Mostly, MSMEs have a better response to the cultural changes in society since they can easily adapt to the situation. Apart from being job creators and income generators, they are also considered the key drivers of innovation in the economy (Abisuga-Oyekunle et al., 2020). With the abundance of MSMEs, the poor will be helped a lot due to the provision of various job opportunities which lead them to have a better quality of life in society.

Neumark et al., (2011) then proved the theory through empirical research and found that small businesses with less than 20 workers in the United States played the biggest role in job creation. Meanwhile, in developing countries, businesses with 5 to 99 employees and businesses older than 10 years have the highest contribution to job creation (Ayyagari et al., 2011). The job creation role of MSMEs will lead to the decline of unemployment provided that the MSMEs can develop better. Therefore, it is important to create a conducive environment in which small businesses can operate,

innovate, and create the jobs needed. In this case, the International Labor Organization (ILO, 2015) asserted that SMEs' contribution to job creation and income generation is firmly crucial as two-thirds of the entire job opportunities worldwide are provided by SMEs.

The role of MSMEs in job creation as the product of entrepreneurship activity differs between urban and rural areas. Faggio & Silva (2014) stated that some characteristics are needed for MSMEs to be able to reduce unemployment namely innovation, job creation, and self-employment. He said that these elements can properly occur in the urban areas since the MSMEs in rural areas are mostly self-employed and are not innovative, producing replica products. Furthermore, (Baumol et al., 2011) added that there are more MSMEs in urban areas with their various kind of products leading to more consumer interest. In this case, there will be an increase in demand for the local products which possibly leads to more workers hired to increase production to fulfill the demand. In a nutshell, there will be minimum or even no effect of the existence of MSMEs on unemployment in the rural area. Meanwhile, the effect of MSMEs on unemployment can be seen in urban areas.

The Impact of MSMEs Financing in Islamic Banks on Unemployment

MSMEs financing in Islamic banks is essential to reduce unemployment in developing countries where the labor market is dominated by MSMEs. Through PLS-based financing, Islamic banks support the development of MSMEs better than their counterpart due to the fairness between the lenders and the borrowers (Chapra, 2011). The better development of MSMEs will create more new job opportunities in the market (Edmiston, 2007), leading to better labor absorption and thus reducing unemployment. Based on this assumption, the first hypothesis is developed as follows:

H1: MSMEs financing has a negative influence on unemployment

When applying the above assumption in different areas, namely urban and rural areas, there is a difference since each of them has its typical condition. This assumption can perfectly hold for MSMEs in urban areas due to the complete characteristics needed for unemployment reduction (Faggio & Silva, 2014) and the high demand for various products there (Baumol et al., 2011). The higher the product demand, the more workers will be hired to meet the consumer's demand. In addition, MSMEs in the Urban area have a high level of Islamic financial literacy and inclusion which allows them to get easy access to financial support and then increase their performance (Saifurrahman & Kassim, 2021).

H2: MSMEs financing has a negative impact on urban unemployment

In rural areas, the financing of MSMEs by Islamic banks does not affect unemployment. It can be explained by the domination of self-employed people in rural areas which is less innovative Faggio & Silva (2014) and the lack of Islamic financial literacy inclusion Saifurrahman & Kassim (2021) causing them to face difficulty in accessing financial services in Islamic banks. As a result, the growth of MSMEs in rural areas remains stable and thus unemployment is not affected by the financing.

H3: MSMEs financing has no significant influence on rural unemployment

III. RESEARCH METHODS

In this research, a quantitative approach was employed using the generalized method of moments (GMM) as a tool for dynamic panel data analysis. This method was chosen because the cross-sectional unit data *(N)* was larger than the period data *(T)* (Siddiqui & Ahmed, 2013). Moreover, this technique has advantages over the other dynamic panel analysis techniques when dealing with the problems of biasedness, heavy heteroskedasticity, measurement error, simultaneous reverse causality as well and unobserved individual heterogeneity (Apergis & Ozturk, 2015). Two-step GMM analysis is used instead of the counterpart to make sure that the estimation result is reliable and consistent (Roodman, 2009).

The analysis was conducted using secondary data from 33 provinces in Indonesia from 2010 to 2019. The data was mainly obtained from two sources, the Center for Statistics Agency (BPS) and the Financial Services Authority (OJK). The dependent variables were *UNEM*, *URBAN*, and *RURAL*. *UNEM* represents the number of unemployed people as a whole, while *URBAN* and *RURAL* indicated respectively the number of unemployed people in urban areas and rural areas. The data of the dependent variables were obtained from BPS. The independent variables were *FINBUS*, *INF*, *FDI*, and *GDP*. *FINBUS* was the amount of MSMEs financing in Islamic banks

which was measured in billion rupiahs. The data of *FINBUS* was taken from OJK while the data of the other three variables were obtained from BPS. INF represented inflation measured by the consumer price index (INF). Meanwhile, *FDI* and *GDP*, which were measured in million rupiahs, denoted the amount of foreign direct investment and economic growth respectively.

The estimation started with a unit root test to check the stationarity of all variables. When all the variables were stationary at the level, estimation was conducted using Common Effect Model (CEM), Fixed Effect Model (FEM) and Random Effect Model (REM). Afterward, It was necessary to confirm the selection of FEM among the other static panel models using the Chow-test and Hausman-test. The Two-Step GMM estimation then can be applied once FEM is selected as the best model. Afterward, it was necessary to do post-estimation tests to check the validity of all the instruments and autocorrelation in the error terms (Alaabed et al., 2016). To check for validity, the Sargan test was employed. In this test, the null hypothesis states that all instruments are valid. Meanwhile, autocorrelation was checked by looking at the second-order correlation in difference (AR2) with a null hypothesis stating that there is no autocorrelation.

There were three models formulated that distinguish the analysis of unemployment as a whole and unemployment in rural and urban areas. These models were developed from the models used by Folawewo & Adeboje (2017) and Benbekhti et al., (2021). The models were as follows:

$$UNEM_{it} = FINBUS_{it} + INF_{it} + FDI_{it} + GDP_{it} + \mu_{it} \quad (1)$$
$$URBAN_{it} = FINBUS_{it} + INF_{it} + FDI_{it} + GDP_{it} + \mu_{it} \quad (2)$$
$$RURAL_{it} = FINBUS_{it} + INF_{it} + FDI_{it} + GDP_{it} + \mu_{it} \quad (3)$$

Variables definition:

UNEM	= Unemployment
URBAN	= Urban Unemployment
RURAL	= Rural Unemployment
FINBUS	= MSMEs financing in Islamic Bank
INF	= Inflation
FDI	= Foreign Direct Investment
GDP	= Economic growth
μ	= Error term

IV. RESULTS AND DISCUSSION

Result

Table 3 shows that the number of unemployed in Indonesia ranges from 11,979 persons to 1,951,391 persons in the provinces, with an average of 222,712 persons. In urban areas, the average number of unemployed is 136,854 with the number ranging between 2,881 persons and 1,462,663 persons. Meanwhile, in rural areas, the number of unemployed ranges from 3,095 persons to 824,784 persons with an average of 85,858 persons. The total amount of financing provided by Islamic banks to MSMEs ranges from Rs. 10 billion to Rs. 49,870 billion with an average of Rs. 2,051,691 billion. The average value of foreign direct investment is USD 801.6761 million, ranging from USD 0.2 million to USD 7124.9 million. Inflation ranges from 114.31 to 164.3167 with an average of 132.96.

Table 3. Descriptive Statistics

Variable	Mean	Std. Dev	Min	Max
UNEM	222712.6	363414.5	11979	1951391
URBAN	136854.3	245715.7	2881	1462663
RURAL	85858.31	131364	3095	824784
FINBUS	2051.691	4812.129	10	49870
FDI	801.6761	1245.474	0.2	7124.9
INF	132.9668	9.573448	114.31	164.3167

In this study, a unit root test was conducted to test for stationarity of the variables. Specifically, the Levin-Lin-Chen (LLC) test and the Im-Pesaran-Shin (IPS) test were used for this purpose. The result of the test can be seen in Table 4 which shows that all variables are stationary at level. This implies that there is no cointegration in the model and therefore pooling least square is more appropriate to be used for analysis.

Table 4. Unit Root Test

Variable	IPS		LLC	
	statistic value	p-value	statistic value	p-value
UNEM	-3.8452	0.0001***	-11.1332	0.0000***
URBAN	-3.1978	0.0007***	-10.1606	0.0000***
RURAL	-2.1565	0.0155**	-4.9925	0.0000***
BUS	-3.3649	0.0004***	-12.3046	0.0000***
FDI	-4.0843	0.0000***	-7.3584	0.0000***
INF	-2.261	0.0119**	-7.6846	0.0000***

*** and ** show that the variables are significant at 1% and 5% respectively

In this study, three models were to be selected, namely Pooled OLS, FEM and REM. To choose between Pooled OLS and FEM, the Chow test was performed. In this test, the null hypothesis indicates that Pooled OLS is appropriate. The results of the test, as shown in Table 5, show that the p-value of all equation models was 0.000, which is less than 0.05. This means that the null hypothesis is rejected and FEM is the appropriate model. Next, the Hausman test was used to select the best model between FEM and REM. In this test, the null hypothesis indicates that REM is the appropriate model. The results of the Hausman test show that the probability chi-squared values were 0.0004, 0.0003, and 0.000 for Model 1, Model 2, and Model 3, respectively. This means that the null hypothesis is rejected and therefore FEM is more appropriate than REM for data analysis. In this case, GMM analysis can be applied to this model.

Table 5. Chow-test and Hausman-test

Variable	Chow-test		Hausman-test	
	statistic value	p-value	Chi-squared value	p-value
Model 1	152.27	0.0000***	18.07	0.0004***
Model 2	99.69	0.0000***	18.98	0.0003***
Model 3	132.66	0.0000***	24.25	0.0000***

*** shows significance at 1%

The results of the estimation can be seen in Table 6. There were three different results from three different models consisting of model 1, model 2, and model 3 which indicate the effects of independent variables on unemployment in general, urban unemployment, and rural unemployment respectively.

In model 1, most of the independent variables were significant at 0,1% meaning that they have a significant impact on general unemployment in Indonesia. The lagged dependent variable ($UNEM_{it-1}$) and *GDP* showed a significant and positive influence on general unemployment. This implies that a 1 percent increase in lagged general unemployment and economic growth results in a rise in general unemployment by 0.21 percent and 0.003 percent respectively. Meanwhile, *FINBUS* and *INF* showed that they have a significantly negative impact on general unemployment. The coefficient values indicate that a 1 percent rise in financing to MSMEs in Islamic banks decreases general unemployment by 0.04 percent. Likewise, a 1 percent increase in inflation causes a reduction of general unemployment by 0.27 percent. However, *FDI* is not significant in this model implying that foreign investment does not affect general unemployment.

In model 2, lagged 1 dependent variable ($URBAN_{it-1}$) and GDP were significant at 1 percent while both lagged 3 dependent variables ($URBAN_{it-3}$) and *FINBUS* were significant at 0.1 percent. Furthermore, both lagged 2 dependent variables ($URBAN_{it-2}$) and FDI were significant at 5 percent. This shows that all lagged urban unemployment, financing to MSMEs in Islamic banks, economic growth, and foreign investment influence urban unemployment. It can be seen that *FINBUS* and all lagged dependent variables have a significantly negative relationship with urban unemployment. This implies that a 1 percent incline in financing to MSMEs in Islamic banks can decrease urban unemployment by 0.1 percent. Similarly, a 1 percent rise in lagged 1, lagged 2, and lagged 3 of urban unemployment reduced urban unemployment by 0.07 percent, 0.03 percent, and 0.01 percent respectively. On the other hand, *GDP* and *FDI* showed positive and significant effects on urban unemployment. This means that a 1 percent increase in both economic growth and foreign investment results in a hike in urban unemployment by 0.12 percent and 0.1 percent respectively. Meanwhile, INF was not significant implying that there is no relationship between inflation and urban unemployment.

In model 3, lagged dependent variable ($RURAL_{it-1}$), *INF*, and GDP were significant at 1 percent, 0.1 percent, and 0.1 percent respectively. On the other hand, FINBUS and FDI were not significant.

This implies that lagged rural unemployment, inflation, and economic growth have a relationship with rural unemployment while financing to MSMEs in Islamic banks and foreign investment are vice versa. INF and GDP showed negative signs while lagged rural unemployment shows otherwise. This implies that when inflation rises by 1 percent, rural unemployment declines by 0.57 percent. In addition, rural unemployment decreases by 0.17 percent when economic growth rises by 1 percent. Meanwhile, a 1 percent increase in lagged rural unemployment leads to an increase in rural unemployment by 0.08 percent.

Table 6. Estimation Result of Two-Step Difference GMM

Variable / Test	Model 1		Model 2		Model 3	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
$UNEM_{it-1}$	0.2139489	0.000***				
$URBAN_{it-1}$			-0.071794	0.009**		
$URBAN_{it-2}$			-0.032209	0.039*		
$URBAN_{it-3}$			-0.105267	0.000***		
$RURAL_{it-1}$					0.08671141	0.003**
FINBUS	-0.049515	0.000***	-0.10016	0.000***	-0.0278187	0.075
FDI	0.0080586	0.458	0.0145148	0.035*	0.00892782	0.19
INF	-0.273621	0.000***	0.0595961	0.103	-0.5711774	0.000***
GDP	0.0038645	0.000***	0.1202016	0.007**	-0.1770949	0.000***
C	10.62268	0.000***	11.56549	0.000***	16.02469	0.000***
Arellano-Bond test for AR (1)	z = -3.7515	Pr > z = 0.0002	z = -2.9932	Pr > z = 0.0028	z = -3.6519	Pr > z = 0.0003
Arellano-Bond test for AR (2)	z = 0.77355	Pr > z = 0.4392	z = 1.0501	Pr > z = 0.2937	z = -0.3762	Pr > z = 0.7067
Sargan test	Chi-square = 30.52703	Prob > Chi2= 0.6839	Chi-square = 23.79651	Prob > Chi2= 0.7812	Prob > Chi2= 30.31919	Prob > Chi2= c

*** , ** and * show that the variables are significant at 0.1% , 1% and 5% respectively

Based on the result in table 6, it can be seen that the first-order serial correlation test for model 1, model 2, and model 3 showed that z = -3.7515 with Pr > z = 0.0002, z = -2.9932 with Pr > z = 0.0028 and z = -3.6519 with Pr > z = 0.0003. Since the p-value was below 0.05, the null hypothesis in all models is rejected. However, the second-order serial correlation test showed z = 0.77355 with Pr > z = 0.4392 in model 1, z = 1.0501 with Pr > z = 0.2937 in model 2, and z = -0.3762 with Pr > z = 0.7067 in model 3. In this case, the null hypothesis is accepted because the p-value was greater than 0.05. This means that there is no autocorrelation in these three models. Furthermore, the Sargan test showed Prob > Chi-squared = 0.6839 in model 1, Prob > Chi-squared = 0.7812 in model 2, and Prob > Chi-squared = 0.7812 in model 3. Since the p-value was greater than 0.05 in all models, the null hypothesis is accepted implying that overidentifying restrictions are valid or the models are not weakened while using numerous instruments.

Discussion

Based on the result, it can be inferred that MSMEs financing in Islamic Banks in Indonesia significantly reduces unemployment as a whole. This finding is consistent with Schumpeter's theory of entrepreneurship that entrepreneurship activities contribute to the reduction of unemployment through job creation (Manser & Picot, 1999) and with (Thurik et al., 2008) who believed that small business is the best job creator. In this case, entrepreneurship activities were increased as a result of MSMEs financing channeled by the Islamic banks which brings fairness for both lenders and borrowers (Chapra, 2011) leading to better development of MSMEs and thus creating more new job opportunities in the economy (Edmiston, 2007). In Indonesia, entrepreneurial activities have been created by MSMEs that dominate the labor absorption. Therefore, increasing financial support to MSMEs will support the growth of job creation and thus reduce unemployment. This finding reinforces the studies of Khairina et al. (2020), who unraveled the positive impact of Islamic bank financing on labor absorption of real sectors in Indonesia and Benbekhti et al. (2021), who found the negative impact of MSMEs financing in Islamic banks on unemployment in Turkey due to increase in productivity.

In addition, MSME financing has a negative impact on urban unemployment. This finding also supports the Schumpeterian theory of entrepreneurship. In urban areas, more people have

been employed by MSMEs due to the high demand for various goods (Baumol et al., 2011), which leads to better growth of MSMEs that are innovative, self-employed, and job creators (Faggio & Silva, 2014). The growth of MSMEs in urban areas was also supported by a high level of Islamic financial inclusion which allows them to get better access to financial support to increase their performance (Saifurrahman, 2021). As MSMEs grew with good performance in urban areas, more people were hired, and therefore unemployment decreased.

Unfortunately, MSMEs financing in Islamic banks does not affect rural unemployment. This can be explained by (Faggio & Silva, 2014) view that most of the inhabitants in the rural areas are self-employed and Baumol et al. (2011) argued that the MSMEs grow mostly in urban area which has a high population as compared to the rural areas. Furthermore, MSMEs in rural areas have low levels of financial inclusion and literacy which allows them to get financial support for better growth (Saifurrahman & Kassim, 2021). Hence, as MSMEs financing in Islamic Bank increases, MSMEs in rural areas are more likely to remain unchanged because they have very limited access to financing. As a result, rural unemployment will also be unchanged.

FDI has no impact on general unemployment and rural unemployment. This is consistent with the findings of (Mucuk & Demirsel, 2013) who found no effect of FDI on unemployment in Chile, Colombia, and the Philippines. This can be explained by the abundance of MSMEs that dominated the labor market in Indonesia while FDI was not targeted for them. However, it is found that FDI significantly increases unemployment in urban areas. This result supports (Almula-Dhanoon et al., 2020) who discovered the same result in the MENA region and explained that it was caused by the mismatch between the available skills and the demanded skills.

Furthermore, it can be seen that there was a negative relationship between inflation and unemployment in Indonesia as a whole and unemployment in rural areas in particular. This finding strengthens the empirical study conducted by (Arslan & Zaman, 2014; Bayrak & Tatli, 2018). It is also supported by the Philip curve, which explains that inflation and unemployment affect each other inversely.

Last but not least, economic growth was found to increase unemployment as a whole and unemployment in urban areas. Meanwhile, economic growth reduced unemployment in rural areas of Indonesia. This finding is consistent with (Bayrak & Tatli, 2018) who found a reduction effect of economic growth on youth unemployment. This can be explained by the domination of youth unemployment in urban areas which provides better salaries as compared to rural areas, leaving the population in urban areas to increase. When economic growth increases, employment opportunities are expected to increase due to an increase in demand in urban areas. As a result, unemployment in rural areas decreases while unemployment in urban areas increases.

V. CONCLUSION

Unemployment is a pivotal issue faced by every country in the world. Several attempts have been made by the government to tackle this issue. Financial restrictions become the main problem for the business owner, especially for the small business. Islamic finance has been considered as an alternative to conventional finance which is unfriendly to the low-income group who run small businesses. It became an issue since labor absorption is dominated by the MSMEs in developing countries such as Indonesia where 97 percent of its total workers are from MSMEs. Hence, this study aims to reveal the effect of MSMEs financing in Islamic banks on unemployment in Indonesia while separating the case between urban and rural areas. Such an analysis of the impact of MSMEs on urban and rural unemployment has never been done before.

The finding shows that financing to MSMEs in Islamic Banks contributed to the reduction in unemployment in Indonesia as a whole. Unemployment in urban areas is also revealed to be reduced by MSMEs financing in Islamic Banks. On the other hand, there is no effect of MSMEs financing in Islamic Banks on unemployment in rural areas. FDI influences urban unemployment positively. Inflation reduces rural unemployment and unemployment in general. Meanwhile, economic growth has a positive effect on urban unemployment and unemployment in general, while it reduces rural unemployment. The implication of this finding for Islamic banks is to provide a basis for increasing the amount of financing channeled to MSMEs in Indonesia, as it is proven to be effective in reducing unemployment. The fund can be channeled to the food,

beverage and textile sectors as these are the largest MSME sectors in Indonesia. For the government, this study can be the basis for further expansion of Islamic banks and their role in every part of Indonesia to reduce unemployment, especially in rural areas.

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