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Dear Authors,

We are pleased to inform you that after careful review and assessment, the members of the GEOMATE Technical Committee have accepted your full paper. Attached herewith, please see the accepted list of full papers (Group 1).

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GEOMATE INTERNATIONAL CONFERENCE - BANGKOK, NOVEMBER 22-24, 2022

Session: 12

Session Chair Certificate

to

Dr. Beti Nurbaiti

for

Successfully Chairing a Technical Session on 23–24 Nov. 2022

The Twelveth International Conference on Geotechnique, Construction Materials and Environment, Bangkok, Thailand 22-24 November, 2022

Prof. Dr. Suksun Horpibulsuk
Conference Chairman (Program)

Prof. Dr. Zakaria Hossain
Conference Chairman

GEOMATE 2022 Proceedings

November 22–24, 2022
Swissôtel Bangkok
Rachada, Thailand

Edited by
Zakaria Hossain
Suksun Horpibulsuk

GEOMATE 2022 BANGKOK, THAILAND 22-24 NOVEMBER, 2022
GEOTECHNIQUE, CONSTRUCTION MATERIALS AND ENVIRONMENT

Geotechnique, Construction Materials and Environment

Edited by

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Preface

On behalf of the GEOMATE 2022 Organizing Committee, we would like to welcome you in attending the Twelveth International Conference on Geotechnique, Construction Materials and Environment held at Swissôtel Bangkok Rachada, Thailand in conjunction with School of Civil Engineering, Suranaree University of Technology, The GEOMATE International Society, Useful Plant Spread Society, Glorious International, AOI Engineering, HOJUN, JCK, CosmoWinds and Beppu Construction, Japan.

On Friday 11 March 2011, at 14:46 Japan Standard Time, the northeast of Japan was struck and severely damaged by a series of powerful earthquakes which also caused a major tsunami. This conference was first dedicated to the tragic victims of the Tohoku-Kanto earthquake and tsunami disasters. The Geomate 2022 conference covers three major themes with 17 specific themes including:

- Advances in Composite Materials
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- Slope Stability
- Soil Dynamics
- Soil-Structure Interaction
- Pavement Technology
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- Water Resources Planning
- Environmental Management
- Public Health and Rehabilitation
- Earthquake and Tsunami Issues
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- Case History and Practical Experience

Even with the COVID-19, this year we have received many submissions from different countries. The participated countries are Bangladesh, Georgia, Germany, India, Indonesia, Japan, Morocco, Oman, Philippines, Romania, Saudi Arabia, Singapore, South Korea, Sudan, Thailand and United Arab Amirates. The technical papers were selected from the vast number of contributions submitted after a review of the abstracts. The final papers in the proceedings have been peer reviewed rigorously and revised as necessary by the authors. It relies on the solid cooperation of numerous people to organize a conference of this size. Hence, we appreciate everyone who supports as well as participate in this joint conference.

Last but not least, we would like to express our gratitude to all the authors, session chairs, reviewers, participants, institutions and companies for their contribution to GEOMATE 2022. We hope you enjoy the conference and find this experience inspiring and helpful in your professional field. We look forward to seeing you at our upcoming conference next year.

Best regards,

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DETERMINATION FACTORS FOR SELLING LOCATIONS, GENDER, AND MIGRATION STATUS OF STREET VENDORS IN EAST JAKARTA IN ACHIEVING ECONOMIC RESILIENCE DURING THE COVID-19 PANDEMIC

Beti Nurbaiti[1], Chotib[2], Kemas Ridwan K[3], Mia Siscawati[4] and Elisabeth Ratu Rante Allo[5]

[1,2,3,4,5] School of Strategic and Global Studies, University of Indonesia

ABSTRACT

The purpose of this study was to analyze the economic resilience of street vendors (street vendors) households in East Jakarta in terms of selling locations, gender, and migration status. The selling locations are divided into 4 categories, namely local government-assisted location, temporary location, base /fixed location, and hawkers for both female and male street vendors with the status of lifetime migrant and non-lifetime migrant. The research method used is a quantitative approach by processing primary data for 420 street vendors in East Jakarta using logistic regression. The results show that street vendors selling in local government Assisted locations, female street vendors, and non-lifetime migrant street vendors tend to have high economic resilience, while the other groups are in base / fixed locations, male street vendors, and lifetime migrants are in moderate economic resilience. For street vendors who sell in temporary locations and lifetime migrants, they are in low economic resilience.

Keywords: Street Vendors; Economic Resilience; Covid-19 pandemic; East Jakarta

I.   INTRODUCTION

The COVID-19 pandemic has had a tremendous impact on all aspects of life, including social and health aspects, but the hardest hit is the economic aspect of all levels of world society (Safitri et.al, 2021). The impact of this pandemic is also felt by street vendors who work in the urban informal sector with a drastic decline in trade turnover. The decrease in street vendors' income has an impact on their ability to fulfill the basic aspects of daily life, health, and education. Most of the street vendors are migrants or newcomers who have lived and settled in Jakarta for a long time. The flow of rural-urban migration is unstoppable, especially with advances in transportation, technology, and community services in urban areas. These migrants argue that the city can provide a better life than when living in the village (Nurbaiti, 2017) and (Horiuchi and Takahashi, 2016). Migrants who are not ready with knowledge and capital will enter the informal sector, one of which is street vendors (Nurbaiti, 2016).

The informal sector has advantages in adapting flexibility and reducing poverty even though the income is uncertain (ILO, 2020) and (Priyono, 2015). Social capital often helps street vendors struggling and make a living in the city based on family and kinship relationships. Social capital also often helps market access, trading methods, to the ease of street vendors getting business capital without going through financial institutions (Nurbaiti and Chotib, 2020). Based on the phenomena mentioned above, the authors would like to examine the extent to which: (1) the correlation between trading locations and economic resilience; (2) gender with economic resilience street vendors;

and (3) recent migration status with economic resilience street vendors.

II.   LITERATURE REVIEW

Each individual has their reasons for being a migrant, moving from one place to another, between villages and cities to between countries. The biggest factor causing someone to become a migrant is to improve their standard of living (Nurbaiti, 2017). To become a migrant requires sacrifice to bear the risks of uncertainty and pressures of city life, being far away from family and relatives, especially in a metropolitan city like Jakarta (Chotib and Nurbaiti, 2018). The definition of migrant when referring to the explanation from the Central Statistics Agency (BPS, 2000) administratively can be divided into three, namely: (1) *lifetime migration,* where the current place of residence is different from the place of birth, has settled in the current place for more than five years. year; (2) *total migration*, where the current residence is different from the previous place of residence; and (3) recent migrants (*recent migration)*, if a person.

The rural-urban wage gap is the main cause of the rapid flow of rural-urban migration and will continue to grow as long as migrants feel a positive impact (increased utility) in a new place. The main driving factor is the scarcity of jobs in the area of origin, but migration often occurs as a result of natural disasters, wars, conflicts, and the need for a better life. The attractiveness factor can also be the reason people migrate, including complete educational, health, and entertainment facilities (Todaro, 2000). Referring to the results of Nurbaiti and Chotib's research (2020), the informal sector develops because of financial and non-financial

benefits. In addition, the need for employment opportunities to generate income and reduce poverty by absorbing migrant workers is the main reason for entering the urban sector. Thus, it can be understood why the population continues to increase in cities, especially in DKI Jakarta as a result of urban-rural migration from year to year.

The existence of street vendors often uses space that is not intended to sell officially, most of which are in public spaces such as road shoulders, sidewalks, and even green open spaces. Street vendors produce urban social spaces that were originally abstract into real ones, which cannot be separated from social reality based on the control and domination of the parties involved (Lefebvre, 1991). The construction of entertainment facilities, as well as factories or offices, will produce a new social space, namely the rampant presence of street vendors around it. The phenomenon of street vendors refers to concrete spatial practices because in it there is a network of interaction and communication between individual street vendors daily. Space is formed by individuals with all their activities, and vice versa, humans act because they are formed by that space. street vendors, through buying and selling activities, form space according to their wishes.

As time goes by, the process of socialization and interaction occurs between street vendors, thus forming a space zone. The socialization lasted a long time intensively so that a strong interaction was formed between street vendors. As a result, the previous street vendors' space zone was getting stronger, thus forming its *power or power*. Even though it looks abstract, the power of spatial domination by street vendors is real, and it can be seen that the local government/Satpol PP is making efforts to control street vendors. This can be understood as the abstract space of street vendors. The space production process by street vendors can also have obstacles such as permits for trading places, a small number of visitors, small capital, and competition between street vendors. The positive impact of street vendors from a social and economic point of view can be seen in terms of overcoming unemployment and poverty. On the other hand, it can be negative, are the city's social problems such as environmental cleanliness, conversion of public land, and congestion. However, the arrangement and empowerment of street vendors have been regulated in Governor Regulation No. 10 of 2015 where street vendors are divided into 4 selling locations, namely: (1) Local Government Assisted Locations; (2) Temporary Locations; (3) Base / Fixed Location; and (4) Hawkers.

Economic resilience is measured through 4 aspects, namely: (1) the condition of the family's place of residence; (2) family income (husband and/or wife have a fixed income, primary needs are met such as clothing, food, and housing); (3) financing of children's education; and (4) family financial security. Resilience or family resilience must be considered as a concept that is 'created together' by all actors to be able to get through difficult times, especially when the Covid-19 pandemic hits parts of the world in various walks of life and increases the number of poverty rates (Lopez and Castro, 2021). Family resilience will be created if the family which generally consists of a husband, wife, and children carries out the eight family functions in a harmonious, harmonious, and balanced manner (REACH, 2021).

The eight functions of the family in question include: (1) the function of religion, where the family is a forum for introducing, teaching, and practicing religious values; (2) the function of affection, where affection is given from the time the child is born until an indefinite period of time; (3) protection function; (4) socio-cultural functions; (5) reproductive function; (6) socialization and education functions; (7) economic function; and (8) the function of environmental development. Therefore, family economic resilience is directly proportional to gender equality and justice applied in the family, where both husband and wife work hand in hand in domestic affairs and meet the needs of the family together (Aziz and Solikha, 2018).

III. METHODS, HYPOTHESIS, AND RESEARCH RESULTS

Early research was conducted for 6 (six) months starting from November 30, 2021, to the end of May 27, 2022, using a questionnaire instrument for 420 street vendors in East Jakarta. The approach used is quantitative which includes: (1) descriptive analysis; (2) *bivariate* analysis; and (3) inferential analysis of logistic multinomial regression results to test the research hypothesis. Quantitative data analysis was performed using a multinomial logistic regression function with the following equation:

$$ln\left(\frac{y=1}{y=0}\right) = \beta_0 + \beta_1 * KL04 + \beta_2 * KR08 + \beta_3 * KR12 + e \quad (1)$$

$$ln\left(\frac{y=2}{y=0}\right) = \beta_0 + \beta_1 * KL04 + \beta_2 * KR08 + \beta_3 * KR12 + e \quad (2)$$

Where :

y　　　　= street vendors' economic resilience, which are :

$ln\left(\frac{y=1}{y=0}\right)$ is the probability of street vendors to have moderate economic resilience against street vendors who have low economic resilience

$ln \left(\frac{y=2}{y=0} \right)$ is the probability of street vendors to have high economic resilience against street vendors who have low economic resilience

KL04 = types of street vendors at 4 locations

KR 08 = gender

KR12 = lifetime migration status

There are 3 research hypotheses, namely:

Hypothesis 1 (H1): street vendors who trade in local government-assisted locations have higher economic resilience than other selling locations;

Hypothesis 2 (H2): male street vendors have higher economic resilience than female street vendors;

Hypothesis 3 (H3): street vendors with lifetime migrant status have higher economic resilience than street vendors with non-lifetime migrants.

IV. DISCUSSION

The public space used by street vendors in trading and daily activities is 68% using pedestrians/sidewalks. There are 2 (two) types of sidewalks that are used, namely sidewalks with pedestrian, bicycle, or disabled lanes, as well as sidewalks specifically for pedestrians. As many as 28% of street vendors use the road area for selling, followed by the use of crossroads as much as 3%. There are as many as 1% of street vendors using green open spaces such as parks and or urban forests. For the respondents surveyed in this study, none of them sold using riverbanks, crossing bridges, and over waterways.

Table 4.1 Analysis of Economic Resilience by Selling Location

Variable	Group	Low (N %)	Moderate (N %)	High (N %)	Total (N %)
Selling Location	1. Local Government Assisted Location	9.3%	25.6%	65.1%	100.0%
	2. Temporary Location	41.1%	30.1%	28.8%	100.0%
	3. Base/Fixed Location	26.0%	57.7%	16.3%	100.0%
	4. Hawkers	27.8%	55.6%	16.7%	100.0%
Total		30.2%	43.6%	26.2%	100.0%

Source: processed by the author (2022)

Referring to Table 4.1 regarding the results of the cross-tabulation analysis of the category of economic resilience on the type of street vendors trading locations, it can be seen that low economic resilience tends to be in street vendors who trade in Temporary Locations. Moderate economic resilience tends to be in Base/Fixed Locations and Hawkers, while high economic resilience is found in street vendors located in Local Government Assisted Locations.

Table 4.2 Analysis of Economic Resilience by Gender

Variable	Group	Low (N %)	Moderate (N %)	High (N %)	Total (N %)
Gender	1. Male	30.0%	50.2%	19.7%	100.0%
	2. Female	30.5%	35.3%	34.2%	100.0%
Total		30.2%	43.6%	26.2%	100.0%

Source: processed by the author (2022)

Based on the results of the cross-tabulation analysis of the categories of economic resilience in Table 4.2 associated with the sex of street vendors, it can be seen that low economic resilience can occur in male and female street vendors, there is no significant difference. Moderate economic resilience tends to be in male street vendors, while those with low and high economic resilience are found in female street vendors.

Table 4.3 Analysis of Economic Resilience by Migration Status

Variable	Group	Low (N %)	Moderate (N %)	High (N %)	Total (N %)
Migration Status	1. Non-Life Time Migrants	25.5%	41.3%	33.2%	100.0%
	2. Life Time Migrants	33.9%	45.3%	20.8%	100.0%
Total		30.2%	43.6%	26.2%	100.0%

Source: processed by the author (2022)

Refer to the results of the cross-tabulation analysis of the categories of economic resilience in Table 4.3, that street vendors with non-lifetime migrants migration status have high economic

resilience. On the other hand, street vendors with the status of lifetime migrants have low to moderate economic resilience.

Table 4.4 Logistic Regression Multinomial Test Results on Economic Resilience

Independent Variable	Medium to Low		High to Low	
	Odds Ratio	Std. Error	Odds Ratio	Std. Error
Intercept		.964		.014
[KL04. Selling location = 1. Local Government Assisted Location]	1.174	.823	6,901 **)	4.204
[KL04. Selling location = 2. Temporary Location]	.328 *)	.622	.695	.201
[KL04. Selling location = 3. Base / Fixed Location]	1.104	.584	.963	.002
[KL04. Selling location = 4. Hawkers	.	.	.	.
[KR08. 1=male]	1.009	.272	.591	2.877
[KR08. 3 = female]	.	.	.	.
[Non Life Time Migrant=.00]	1,810 **)	.266	1.96 3**)	5.122
[Migrant Life Time=1.00]	.	.	.	.

Note: *) Significant at = 10%; **) Significant at = 5%; Source: processed by author (2022)

Based on Table 4.4, it can be explained the level of economic resilience of street vendors in each profile which will help answer the research hypothesis. There are two conditions analyzed based on multinomial logistic regression data processing, namely: (1) moderate economic resilience compared to low economic resilience, and (2) high economic resilience compared to low economic resilience. For the first condition, namely calculating the probability of moderate economic resilience against low economic resilience, the significant independent variables include the type of selling location and non-lifetime migrant status. Meanwhile, for the second condition, calculating the probability of high economic resilience against low economic resilience, the independent variables are significantly the same, namely selling location and non-lifetime migrant status.

The opportunity for economic resilience to occur for street vendors in temporary locations is 0.328 times lower than for street vendors who do not have locations/hawkers. In other words, street vendors who do not have a fixed location are more likely to have moderate economic survival than street vendors in temporary locations. As for the chance of moderate economic resilience, street vendors' non-lifetime migrants are 1,810 times higher than street vendors' lifetime migrants. Opportunities for high economic resilience occur in local government-assisted locations 6,901 times higher than hawkers, or in other words, street vendors in local government-assisted locations have higher economic resilience than hawkers. It can also be said that street vendors in local government-assisted locations have the opportunity to have high economic resilience than street vendors hawkers.

The same thing happened to street vendors as non-lifetime migrants who had a 1,963 times higher chance than street vendors as lifetime migrants. In other words, street vendors and non-lifetime migrants are more likely to have high economic resilience than lifetime migrants. For gender, there is no significant difference between the economic resilience of male and female street vendors.

V. CONCLUSION

The first hypothesis states that street vendors who trade in local government-assisted locations have higher economic resilience than other selling locations, proven or accepted. This is because the street vendors at this location are more organized with trading facilities, as well as the availability of electricity, and clean water and are more comfortable with tables, chairs, and tents that have been arranged neatly as a contribution from the DKI Jakarta government to street vendors. Therefore, it is necessary to improve similar facilities for street vendors who sell in other locations so that they become organized/move to local government-assisted locations. It is hoped that later street vendors who do not stay and hawkers can be gradually facilitated to be able to sell in better locations.

The second hypothesis which states that male street vendors have higher economic resilience than women is not proven. Female street vendors have similar economic resilience to male street vendors, this shows that women can carry out their dual roles both in the domestic sphere (taking care of the household) and in the public domain (trading). Therefore, the empowerment program for street vendors, in general, has been carried out by the

relevant agencies, in this case, the Small and Medium Enterprises Cooperative Trade Industry Service (SME CTIS), so that it can be focused on female street vendors to maintain their economic resilience.

The third hypothesis which states that street vendors with the status of lifelong migrants have a higher economic resilience than non-migrant street vendors for life is not proven because the findings in the field are the opposite. This condition shows that non-migrants or local indigenous people already have sufficient capital accumulation, and a wider network than migrants/migrants, so they are better able to survive in difficult conditions such as during a pandemic like this.

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REFERENCES

[1] Aziz, F. A., & Sholikha, A. F. (2018). Pengaruh Wanita dalam Ketahanan Ekonomi Keluarga Studi Kasus Pada Wanita Pengrajin Tikar Pandan di Desa Pesahangan Cimanggu Cilacap. *Yin Yang*, *13*(1), 1–13.

[2] Badan Pusat Statistik (BPS). 2000. Jakarta Dalam Angka. Badan Pusat Statistik (BPS), Provinsi DKI Jakarta.

[3] Chotib & Nurbaiti, Beti. (2018). *Are Migrant Workers in DKI Jakarta More Welfare Than Non Migrants? A Data Analysis of SUSENAS 2013*. Journal of Strategic and Global Studies 1 (1), pp. 15-28.

[4] Horiuchi, S. & Takashi T. (2016). *Globalization and Regional Revitalization in A Local University of Japan. In : Globalization , Economic, Political and Social Issues*. Nova Publisher, pp. 149 – 159.

[5] International Labour Organization (ILO). (2020). *World Employment and Social Outlook-Trend 2020.* Geneva, International Labour Office.

[6] Lopez, L. J. R., & Castro, A. I. G. (2021). Sustainability and Resilience in Smart City Planning: A Review. *Sustainability (Switzerland)*, *13*(1), 1–25.

[7] Nurbaiti, Beti. (2016). Pengaruh Status Migrasi Melalui Karakteristik Sosiodemografi Terhadap Tingkat Kesejahteraan Pekerja di DKI Jakarta (Analisis Data Cross Sectional SUSENAS 2013). Disertasi. HAKI No : EC 00201816779, 3 Juli 2018.

[8] Nurbaiti, Beti. (2017). Pengaruh Status Migrasi Melalui Karakteristik Sosiodemografi Terhadap Tingkat Kesejahteraan Pekerja di DKI Jakarta (*The Influence of Migration Status through Sociodemographic Characteristics on the Welfare Level of Workers in DKI Jakarta*). *Jurnal Kajian Ilmiah Universitas Bhayangkara Jakarta Raya*, 17 (2).

[9] Nurbaiti and Chotib. (2020). *The Impact of Social Capital On Welfare : The Evidence From Urban Informal Sector In East Flood Canal (BKT), Jakarta*. IOP Conference Series : Earth and Environmental Science, 436012004.

[10] Priyono, Edi. (2015). Memahami Pasar Tenaga Kerja *(Understanding the Labor Market*). Pustaka Lentera, Jakarta.

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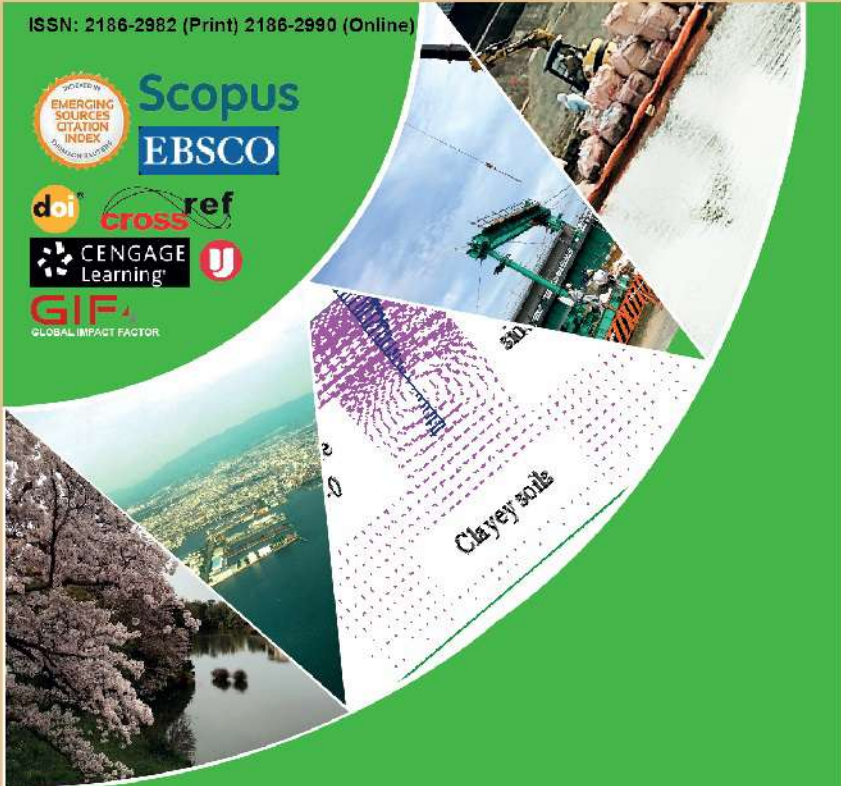
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by BETI NURBAITI

DETERMINATION FACTORS FOR SELLING LOCATIONS, GENDER, AND MIGRATION STATUS OF STREET VENDORS IN EAST JAKARTA IN ACHIEVING ECONOMIC RESILIENCE DURING THE COVID-19 PANDEMIC

Beti Nurbaiti[1], Chotib[2], Kemas Ridwan K[3], Mia Siscawati[4] and Elisabeth Ratu Rante Allo[5]

[1,2,3,4,5] School of Strategic and Global Studies, University of Indonesia

ABSTRACT

The purpose of this study was to analyze the economic resilience of street vendors (street vendors) households in East Jakarta in terms of selling locations, gender, and migration status. The selling locations are divided into 4 categories, namely local government-assisted location, temporary location, base /fixed location, and hawkers for both female and male street vendors with the status of lifetime migrant and non-lifetime migrant. The research method used is a quantitative approach by processing primary data for 420 street vendors in East Jakarta using logistic regression. The results show that street vendors selling in local government Assisted locations, female street vendors, and non-lifetime migrant street vendors tend to have high economic resilience, while the other groups are in base / fixed locations, male street vendors, and lifetime migrants are in moderate economic resilience. For street vendors who sell in temporary locations and lifetime migrants, they are in low economic resilience.

Keywords: Street Vendors; Economic Resilience; Covid-19 pandemic; East Jakarta

I. INTRODUCTION

The COVID-19 pandemic has had a tremendous impact on all aspects of life, including social and health aspects, but the hardest hit is the economic aspect of all levels of world society (Safitri et.al, 2021). The impact of this pandemic is also felt by street vendors who work in the urban informal sector with a drastic decline in trade turnover. The decrease in street vendors' income has an impact on their ability to fulfill the basic aspects of daily life, health, and education. Most of the street vendors are migrants or newcomers who have lived and settled in Jakarta for a long time. The flow of rural-urban migration is unstoppable, especially with advances in transportation, technology, and community services in urban areas. These migrants argue that the city can provide a better life than when living in the village (Nurbaiti, 2017) and (Horiuchi and Takahashi, 2016). Migrants who are not ready with knowledge and capital will enter the informal sector, one of which is street vendors (Nurbaiti, 2016).

The informal sector has advantages in adapting flexibility and reducing poverty even though the income is uncertain (ILO, 2020) and (Priyono, 2015). Social capital often helps street vendors struggling and make a living in the city based on family and kinship relationships. Social capital also often helps market access, trading methods, to the ease of street vendors getting business capital without going through financial institutions (Nurbaiti and Chotib, 2020). Based on the phenomena mentioned above, the authors would like to examine the extent to which: (1) the correlation between trading locations and economic resilience; (2) gender with economic resilience street vendors; and (3) recent migration status with economic resilience street vendors.

II. LITERATURE REVIEW

Each individual has their reasons for being a migrant, moving from one place to another, between villages and cities to between countries. The biggest factor causing someone to become a migrant is to improve their standard of living (Nurbaiti, 2017). To become a migrant requires sacrifice to bear the risks of uncertainty and pressures of city life, being far away from family and relatives, especially in a metropolitan city like Jakarta (Chotib and Nurbaiti, 2018). The definition of migrant when referring to the explanation from the Central Statistics Agency (BPS, 2000) administratively can be divided into three, namely: (1) *lifetime migration*, where the current place of residence is different from the place of birth, has settled in the current place for more than five years. year; (2) *total migration*, where the current residence is different from the previous place of residence; and (3) recent migrants (*recent migration)*, if a person.

The rural-urban wage gap is the main cause of the rapid flow of rural-urban migration and will continue to grow as long as migrants feel a positive impact (increased utility) in a new place. The main driving factor is the scarcity of jobs in the area of origin, but migration often occurs as a result of natural disasters, wars, conflicts, and the need for a better life. The attractiveness factor can also be the reason people migrate, including complete educational, health, and entertainment facilities (Todaro, 2000). Referring to the results of Nurbaiti and Chotib's research (2020), the informal sector develops because of financial and non-financial

benefits. In addition, the need for employment opportunities to generate income and reduce poverty by absorbing migrant workers is the main reason for entering the urban sector. Thus, it can be understood why the population continues to increase in cities, especially in DKI Jakarta as a result of urban-rural migration from year to year.

The existence of street vendors often uses space that is not intended to sell officially, most of which are in public spaces such as road shoulders, sidewalks, and even green open spaces. Street vendors produce urban social spaces that were originally abstract into real ones, which cannot be separated from social reality based on the control and domination of the parties involved (Lefebvre, 1991). The construction of entertainment facilities, as well as factories or offices, will produce a new social space, namely the rampant presence of street vendors around it. The phenomenon of street vendors refers to concrete spatial practices because in it there is a network of interaction and communication between individual street vendors daily. Space is formed by individuals with all their activities, and vice versa, humans act because they are formed by that space. street vendors, through buying and selling activities, form space according to their wishes.

As time goes by, the process of socialization and interaction occurs between street vendors, thus forming a space zone. The socialization lasted a long time intensively so that a strong interaction was formed between street vendors. As a result, the previous street vendors' space zone was getting stronger, thus forming its *power or power*. Even though it looks abstract, the power of spatial domination by street vendors is real, and it can be seen that the local government/Satpol PP is making efforts to control street vendors. This can be understood as the abstract space of street vendors. The space production process by street vendors can also have obstacles such as permits for trading places, a small number of visitors, small capital, and competition between street vendors. The positive impact of street vendors from a social and economic point of view can be seen in terms of overcoming unemployment and poverty. On the other hand, it can be negative, are the city's social problems such as environmental cleanliness, conversion of public land, and congestion. However, the arrangement and empowerment of street vendors have been regulated in Governor Regulation No. 10 of 2015 where street vendors are divided into 4 selling locations, namely: (1) Local Government Assisted Locations; (2) Temporary Locations; (3) Base / Fixed Location; and (4) Hawkers.

Economic resilience is measured through 4 aspects, namely: (1) the condition of the family's place of residence; (2) family income (husband and/or wife have a fixed income, primary needs are met such as clothing, food, and housing); (3) financing of children's education; and (4) family financial security. Resilience or family resilience must be considered as a concept that is 'created together' by all actors to be able to get through difficult times, especially when the Covid-19 pandemic hits parts of the world in various walks of life and increases the number of poverty rates (Lopez and Castro, 2021). Family resilience will be created if the family which generally consists of a husband, wife, and children carries out the eight family functions in a harmonious, harmonious, and balanced manner (REACH, 2021).

The eight functions of the family in question include: (1) the function of religion, where the family is a forum for introducing, teaching, and practicing religious values; (2) the function of affection, where affection is given from the time the child is born until an indefinite period of time; (3) protection function; (4) socio-cultural functions; (5) reproductive function; (6) socialization and education functions; (7) economic function; and (8) the function of environmental development. Therefore, family economic resilience is directly proportional to gender equality and justice applied in the family, where both husband and wife work hand in hand in domestic affairs and meet the needs of the family together (Aziz and Solikha, 2018).

III.   METHODS, HYPOTHESIS, AND RESEARCH RESULTS

Early research was conducted for 6 (six) months starting from November 30, 2021, to the end of May 27, 2022, using a questionnaire instrument for 420 street vendors in East Jakarta. The approach used is quantitative which includes: (1) descriptive analysis; (2) *bivariate* analysis; and (3) inferential analysis of logistic multinomial regression results to test the research hypothesis. Quantitative data analysis was performed using a multinomial logistic regression function with the following equation:

$$ln\left(\tfrac{y=1}{y=0}\right) = \beta_0 + \beta_1 * KL04 + \beta_2 * KR08 + \beta_3 * KR12 + e \quad (1)$$

$$ln\left(\tfrac{y=2}{y=0}\right) = \beta_0 + \beta_1 * KL04 + \beta_2 * KR08 + \beta_3 * KR12 + e \quad (2)$$

Where :
y   = street vendors' economic resilience, which are :
$ln\left(\tfrac{y=1}{y=0}\right)$ is the probability of street vendors to have moderate economic resilience against street vendors who have low economic resilience

$ln\left(\frac{y=2}{y=0}\right)$ is the probability of street vendors to have high economic resilience against street vendors who have low economic resilience

KL04 = types of street vendors at 4 locations

KR 08 = gender

KR12 = lifetime migration status

There are 3 research hypotheses, namely:

Hypothesis 1 (H1): street vendors who trade in local government-assisted locations have higher economic resilience than other selling locations;

Hypothesis 2 (H2): male street vendors have higher economic resilience than female street vendors;

Hypothesis 3 (H3): street vendors with lifetime migrant status have higher economic resilience than street vendors with non-lifetime migrants.

IV. DISCUSSION

The public space used by street vendors in trading and daily activities is 68% using pedestrians/sidewalks. There are 2 (two) types of sidewalks that are used, namely sidewalks with pedestrian, bicycle, or disabled lanes, as well as sidewalks specifically for pedestrians. As many as 28% of street vendors use the road area for selling, followed by the use of crossroads as much as 3%. There are as many as 1% of street vendors using green open spaces such as parks and or urban forests. For the respondents surveyed in this study, none of them sold using riverbanks, crossing bridges, and over waterways.

Table 4.1 Analysis of Economic Resilience by Selling Location

Variable	Group	Low (N %)	Moderate (N %)	High (N %)	Total (N %)
Selling Location	1. Local Government Assisted Location	9.3%	25.6%	65.1%	100.0%
	2. Temporary Location	41.1%	30.1%	28.8%	100.0%
	3. Base/Fixed Location	26.0%	57.7%	16.3%	100.0%
	4. Hawkers	27.8%	55.6%	16.7%	100.0%
	Total	30.2%	43.6%	26.2%	100.0%

Source: processed by the author (2022)

Referring to Table 4.1 regarding the results of the cross-tabulation analysis of the category of economic resilience on the type of street vendors trading locations, it can be seen that low economic resilience tends to be in street vendors who trade in Temporary Locations. Moderate economic resilience tends to be in Base/Fixed Locations and Hawkers, while high economic resilience is found in street vendors located in Local Government Assisted Locations.

Table 4.2 Analysis of Economic Resilience by Gender

Variable	Group	Low (N %)	Moderate (N %)	High (N %)	Total (N %)
Gender	1. Male	30.0%	50.2%	19.7%	100.0%
	2. Female	30.5%	35.3%	34.2%	100.0%
	Total	30.2%	43.6%	26.2%	100.0%

Source: processed by the author (2022)

Based on the results of the cross-tabulation analysis of the categories of economic resilience in Table 4.2 associated with the sex of street vendors, it can be seen that low economic resilience can occur in male and female street vendors, there is no significant difference. Moderate economic resilience tends to be in male street vendors, while those with low and high economic resilience are found in female street vendors.

Table 4.3 Analysis of Economic Resilience by Migration Status

Variable	Group	Low (N %)	Moderate (N %)	High (N %)	Total (N %)
Migration Status	1. Non-Life Time Migrants	25.5%	41.3%	33.2%	100.0%
	2. Life Time Migrants	33.9%	45.3%	20.8%	100.0%
	Total	30.2%	43.6%	26.2%	100.0%

Source: processed by the author (2022)

Refer to the results of the cross-tabulation analysis of the categories of economic resilience in Table 4.3, that street vendors with non-lifetime migrants migration status have high economic resilience. On the other hand, street vendors with the status of lifetime migrants have low to moderate economic resilience.

Table 4.4 Logistic Regression Multinomial Test Results on Economic Resilience

Independent Variable	Medium to Low		High to Low	
	Odds Ratio	Std. Error	Odds Ratio	Std. Error
Intercept		.964		.014
[KL04. Selling location = 1. Local Government Assisted Location]	1.174	.823	6,901 **)	4.204
[KL04. Selling location = 2. Temporary Location]	.328 *)	.622	.695	.201
[KL04. Selling location = 3. Base / Fixed Location]	1.104	.584	.963	.002
[KL04. Selling location = 4. Hawkers	.	.	.	.
[KR08. 1=male]	1.009	.272	.591	2.877
[KR08. 3 = female]	.	.	.	.
[Non Life Time Migrant=.00]	1,810 **)	.266	1.96 3**)	5.122
[Migrant Life Time=1.00]	.	.	.	.

Note: *) Significant at = 10%; **) Significant at = 5%; Source: processed by author (2022)

Table 4.4 provides an explanation of the economic resilience of street sellers in each profile, aiding in the resolution of the study question.

conjecture. Based on multinomial logistic regression data processing, two circumstances were examined: (1) strong economic resilience in comparison to low economic resilience, and (2) moderate economic resilience in comparison to low economic resilience. In the first condition, which involves comparing the likelihood of moderate economic resilience to low economic resilience, the selling site type and non-lifetime immigrant status are important independent variables. The independent variables for the second condition, which compares the probability of strong vs low economic resilience, are selling location and non-lifetime migrant status, and they are substantially similar.

The empirical findings of this study corroborate studies by Darmadi (2017), which demonstrate that employee learning orientation and the MSME Funding Strategy have a major impact on employee creativity. Furthermore, the relationship between employee learning orientation and creativity is mediated by creative self-efficacy. On the other hand, the influence of MSMEs Funding Strategy on employee creativity is not mediated by creative self-efficacy. Using creative self-efficacy as a mediating variable, this study looked at how employee learning orientation and MSMEs funding strategy affected employee creativity. In the Special Region of Yogyakarta (DIY), Indonesia, a radio company employing 126 creative sector workers participated in this study. This study used a quantitative method and research methodology. Hierarchical regression analysis is the data analysis technique employed.

Compared to street sellers without locations or hawkers, the chance of experiencing economic resilience is 0.328 times smaller for street vendors operating in temporary spaces. Put another way, compared to street sellers in transitory sites, those without a regular location have a higher chance of surviving on a moderate income. The nonlifetime migration rate of street sellers is 1,810 times higher than their lifetime migration rate when it comes to the likelihood of moderate economic resilience. In other words, street vendors in local government-assisted places have stronger economic resilience than hawkers. Opportunities for high economic resilience are found in these locations 6,901 times more frequently than in hawker areas. Additionally, it can be argued that

street vendors in areas supported by the local government have a better chance of being economically resilient than Street vendors who were not lifetime migrants saw the same outcomes, with a 1,963-fold increase in likelihood compared to those who were lifetime migrants. Input another way, compared to lifetime migrants, street vendors and non-migrants are more likely to have strong economic resilience. The economic resilience of male and female street vendors is not significantly different based on gender.

V. CONCLUSION

One of the biggest health issues in the world right now is the COVID-19 outbreak, and the SARSCoV-2 infection rate is rising. The current study's findings indicate that younger people had a reduced prevalence of COVID-19 infection. people (0–9 years old), and the death rate from this infection rises with age as the death rate in the over-60 age group sharply rises. However, more research on the disease's epidemiology is needed, preferably in other Iranian cities with larger study populations.

According to the first hypothesis, street vendors with greater economic resilience than other sellers are those who operate in areas supported by the local government. locales, whether validated or acknowledged. The DKI Jakarta government has provided street vendors with tables, chairs, and tents that are neatly arranged, making the street vendors more organized and comfortable. Other amenities that the street vendors enjoy include trading facilities, clean water, and electricity. In order to help street vendors become organized or relocate to areas supported by the local government, it is vital to upgrade comparable facilities for those who sell in other locations. It is believed that hawkers and street sellers who leave would eventually be able to be helped to sell in better places. There is no evidence to support the second theory, which holds that men street vendors are more resilient financially than women. Street vendors who are female have comparable economic resilience to those who are male, demonstrating that women are capable of fulfilling their dual tasks of caring for the home and engaging in public trade.

Consequently, the overall street vendor empowerment program has been implemented by the agencies that are pertinent, in this instance the Small and Medium Enterprises Cooperative Trade Industry Service (SME CTIS), in order to enable it to concentrate on assisting female street vendors in preserving their financial stability.

The third hypothesis, according to which street sellers who identify as lifetime migrants have greater economic resilience than street vendors who are not migrants, is unproven because the research in the field shows the contrary. This situation demonstrates that non-migrants or the indigenous population in the area already have a larger network and adequate capital accumulation compared to migrants, making them more resilient to adversity, such as this epidemic.

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