



“Challenges to residents’ lives in urban areas in the context of the COVID-19 pandemic in Vietnam”

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CHALLENGES TO RESIDENTS' LIVES IN URBAN AREAS IN THE CONTEXT OF THE COVID-19 PANDEMIC IN VIETNAM

Abstract

This study designed the challenges faced by urban dwellers in Vietnam during the outbreak of the COVID-19 pandemic. The challenges facing people are shown through research indicators such as people's income, expenditures, unemployment, and government support. The study collected data through the survey of 352 people (Survey respondents represent areas heavily affected by the COVID-19 pandemic in Vietnam, such as Bac Giang Province, Da Nang City, Hanoi Capital, and Ho Chi Minh City, Binh Duong Province). Among the 352 people surveyed, 206 lived in urban areas and 146 in rural and suburban areas. Differential analysis and multivariate regression were used to analyze the research data. The findings of the study show that the incomes of people in urban areas compared to those in rural areas varied before and after the COVID-19 pandemic. Additionally, the study shows that the income and expenditures of people in urban areas declined before and after the outbreak of the COVID-19 pandemic. The findings show different levels of impact of factors on income in urban areas affected by the COVID-19 pandemic. Government support factor has the greatest impact on people's income in urban areas of Vietnam (Standardized coefficients = 0.502).

Keywords

income, expenditure, livelihood, government support, urban, COVID-19, Vietnam

JEL Classification

D10, D60, O10, R10, R20

INTRODUCTION

The COVID-19 pandemic has had a significant negative impact on people's livelihoods, lives, activities, and work, both in rural and urban areas throughout Vietnam. The effects were documented by the research results of GSO (2022) statistics, about 1.5 million people working in employment tax in Vietnam; of these, the underemployment rate of working-age workers is higher in urban areas than in rural areas, at 4.06% and 2.95%, respectively. During and after the COVID-19 pandemic, urban residents experience more difficulty finding jobs and lead more difficult lives than those in rural regions, which is contrary to the statistical results before the COVID-19 pandemic broke out. This may add evidence that life has become more difficult for people in urban areas after the outbreak of the COVID-19 pandemic. This also brings great challenges to this region in Vietnam during the outbreak of the COVID-19 pandemic (GSO, 2021; Tan & Tran, 2021).

Furthermore, according to the ILO (2020), which collected survey data from 292 workers and 58 enterprises in industries heavily affected by the COVID-19 in Vietnam, those are tourism, textiles, electronics, wood processing, and seafood processing. Research findings have shown that the COVID-19 pandemic has caused serious impacts on workers and companies in Vietnam. Firms that wish to maintain operations have cut costs. This has resulted in direct difficulties for em-

employees when their salaries have decreased. In addition, the outbreak of the COVID-19 has caused damages to workers, especially in urban cities when their livelihood strategy, their source of income mostly come from salaried jobs in enterprises and processing factories.

The COVID-19 pandemic has adversely impacted livelihoods in many countries around the world (Bhagat et al., 2020), which not only affects people's livelihood but also affects their morale. These influences have adverse negative effects on the income of the people themselves (Guo et al., 2020). The impact of the COVID-19 pandemic has spread to the whole world in general and Vietnam in particular.

Studies have had different approaches to the influence of the COVID-19 pandemic on people from spiritual, material, and daily life, and more broadly, those are the impacts of the COVID-19 pandemic on economic growth and development as well as economic sectors across countries (Pattiruhu & Paais, 2020; Suratman et al., 2021; Obrenovic et al., 2020; Shen et al., 2020).

As summarized by GSO's statistical results, people's lives in Vietnam have been changed by the COVID-19 pandemic; besides, the effects of COVID-19 on aspects of people's lives have also been shown in previous studies. Based on previous studies, as well as on the reality arising when the COVID-19 pandemic hit people's lives in Vietnam, it is necessary to study the changes to the lives of residents in urban areas of Vietnam; research results will be used to propose solutions and provide a reference for researchers and policymakers when implementing policies to support people in Vietnam's urban areas in the context of difficulties when the COVID-19 epidemic broke out in the country.

1. LITERATURE REVIEW AND HYPOTHESES

Within the context of the COVID-19 pandemic, people face challenges relating to job losses, income losses, people's health, and issues directly related to their lives (Qian & Fan, 2020; Dao et al., 2022; Le et al., 2021). Studies have examined different aspects of the impact of the COVID-19 pandemic on people's lives and jobs in other regions. For Le et al. (2021), specifically, the study used data selected from employees working in the aviation sector to analyze the impact of the COVID-19 on employees. According to research findings, incomes for employees in the aviation sector have decreased significantly between the two periods before and after the outbreak of the COVID-19 pandemic. Research has also shown that the aviation sector is the one hardest hit by the COVID-19 pandemic. The data collected from people are studied not only in the area of air transport but also in tourism – these are the most affected. Dao et al. (2022) indicate that the income of people in the research area of the research team is significantly affected by the COVID-19 pandemic that has caused changes in people's income; people's income has been redistributed to fit the new context when the COVID-19 pandemic broke

out. The results of the above studies all support the viewpoint of DFID (1999) that the outbreak of COVID-19 causes a shock to people's wellbeing. This shock affects all aspects of people's lives and is an external condition that affects people's livelihoods.

The difficulties for residents in urban areas also occur when they cannot withstand the difficult economic pressures faced when the social distancing occurs continuously, people are unemployed and have to migrate; the migration of people has brought negative effects in the response to the COVID-19 pandemic (Bhagat et al., 2020; Paul et al., 2021). The effects are considered both material and spiritual. Governmental support measures are introduced to reduce the pressure on residents in urban areas to avoid migration; this causes negative social impacts such as labor shortages, order and security, and social imbalance.

The COVID-19 pandemic has had a negative impact on people's lives (Buheji et al., 2020; Paul et al., 2021; Huynh et al., 2021). The negative impacts or challenges that residents have faced varied according to the study areas (low-income areas, urban areas, areas with conditions for the development of specific occupations), and this has resulted in

challenges for people's livelihood strategies. When considering the COVID-19 pandemic as a shock that causes vulnerability to people's livelihoods, those shocks will be regarded as an external factor that affects and forces people to change. Based on the sustainable livelihoods research framework of DFID (1999), studies have looked at the assessment of livelihood vulnerability that people have to face with other shocks as studied by Dai et al. (2013), Bui et al. (2013). The challenges people face have changed their incomes (Bury, 2004), people's livelihoods and expenditures (Tran, 2013; Nguyen & Bui, 2011; Jansen et al., 2006).

A variety of approaches have been used to study the challenge of context affecting people's livelihoods, including quantifying the relationship between externalities and shocks, one of the most prominent factors considered (Tu et al., 2015; Le et al., 2020; Le et al., 2021). Meanwhile, there are studies aimed at calculating the vulnerability of people's livelihoods in the face of shocks (Rohan et al., 2005; Nelson et al., 2010; Adger et al., 2001). Especially, Vietnam is the research context, Le and Le (2020), Tu et al. (2012), and Tu et al. (2015) calculated people's adaptive capacity by calculating people's livelihood vulnerability in the context of epidemics and natural disasters.

The COVID-19 pandemic has produced negative impacts not only on the entire world economy but also on countries that closed their borders, making it difficult for goods to circulate. Economic growth and development are greatly affected, but it also directly affects the lives of people in countries, especially those without diverse livelihood strategies, as well as those with limited adaptive capacity.

The study proposes the following research hypotheses:

- H1: *There is a difference in the living standards of people in urban areas of Vietnam before and after the outbreak of the COVID-19 pandemic. People's living standards are measured through two factors: income and expenditure.*
- H2: *There are different degrees of impact of the COVID-19 pandemic on people's income in urban areas of Vietnam.*

2. METHODS

2.1. Data collection methods

According to research and survey on the total number of households living in urban areas of Vietnam, the number of observations is as follows:

Urban residents: While the COVID-19 pandemic broke out in Vietnam in the early 2020s, some of the hardest-hit areas included Bac Giang Province, Da Nang City, Hanoi Capital, and Ho Chi Minh City, and Binh Duong Province. Cities are listed here in the order in which they were affected by the COVID-19 pandemic. 400 questionnaires were completed for those affected by the COVID-19 pandemic and who belong to the following target groups: Migrant workers (Those who come from other localities to work in that urban area); Inhabitants in urban areas, this survey is to ensure the analyzed and gain a better understanding of the difficulties that target groups of people face in urban areas. Out of a total of 400 survey questionnaires sent out, the research team collected 302 questionnaires, performed data entry, and kept 206 survey questionnaires because the remaining questionnaires lacked collected information.

People living in suburban or rural areas are guaranteed to live in the same province/city surveyed to ensure that the policies of the households approached are the same, the conditions of support are the same from the local government between the two groups of respondents. The research team surveyed 50 survey questionnaires in each city, with the total number of survey 250 questionnaires distributed. Out of a total of 250 issued questionnaires, the research team collected 193 survey questionnaires, performed data entry, and 146 questionnaires met the data requirements of the survey.

As a result, there are 352 observations for data analysis in this study, and 352 of those observations meet the minimum number of samples set by Nguyen (2014) for statistical analyses.

Time to carry out the survey of the study (Survey time): Research and implement a survey according to the GSO survey form (2020), implementation period from April to September 2021. This is

a time when Vietnamese cities are most affected by the COVID-19 pandemic, this is the largest COVID-19 pandemic in Vietnam, the fourth wave of COVID-19 in Vietnam.

2.2. Data analysis method

From the selected data, the study analyzed the challenges facing people in urban areas of Vietnam from two aspects.

Firstly, the study examines descriptive statistical analysis and tests the difference in people's living standards in urban areas of Vietnam before and after the COVID-19 pandemic. People's living standards are analyzed through income and expenditure (DFID, 1999).

Secondly, the study analyzes the influence of factors on the income of people in urban areas to see the difficulties that residents in urban areas face during the outbreak of the COVID-19. The scales used to assess factors that influence the income of people in urban areas of Vietnam in the context of the COVID-19 are as follows (Table 1).

With the above scales, the study uses multivariable regression (OLS) to estimate the impact of factors on people's income in urban areas of Vietnam.

3. RESULTS

Based on the collected data, descriptive statistics on income and expenditure of households belonging to the two groups of subjects surveyed in the contexts before and after the COVID-19 outbreak were compiled.

Regarding income before the outbreak of the COVID-19 pandemic, the income of surveyed households showed a relative difference between urban and rural areas, suburban. Specifically, the average income of households in urban areas is about 17.391 million VND/month, while the other group's income is about 13.282 million VND/month. This income level reflects the reality of the average income in Vietnam's urban areas as well as in rural and suburban locations; in urban areas, income seems to be higher, jobs are also easier to find than in other regions due to many job opportunities in this area.

However, when the COVID-19 pandemic broke out, especially the outbreak of the fourth COVID-19 wave in Vietnam, the income of the areas has declined drastically, especially in urban areas where governments have required "social distancing", stopping production and business activities, which causes damage to people when

Table 1. Variables of the model

Variable name	Symbol	Explain	The basis for variable selection
1. Dependent variable			
Income of households in urban areas	Y	This is the variable used to measure the total income of surveyed households. Income of households is measured in million VND/month.	Bezerra et al. (2020); Qian and Fan (2020).
2. Independent variables			
Education level of an interviewee	HV	Reflect the educational level of the interviewee. Educational level is coded according to the levels: High school; College; University and postgraduate. These are the levels according to the job positions employed by the recruitment agencies. Households with higher education are expected to earn higher incomes and vice versa.	Tran and Vu (2014); Qian and Fan (2020); Le et al. (2021).
Age of an interviewee	T	As a scale for describing an interviewee's age, the age of the interviewee is coded according to their actual age.	Paul et al. (2021); Cu et al. (2020)
Work experience of an interviewee	KN	This is a scale that measures the work experience of the surveyed people in similar positions. Experience is coded by the interviewees' years of experience. With more experience, a higher income will follow, also, the higher the seniority, the higher the income will follow.	Dao et al. (2022); Nguyen and Bui (2011)
Living area	KV	Living areas measured in this study include residents living in urban areas as well as in other settings (rural, suburban). This scale is used to measure the difference in the living area affecting the income of the surveyed people.	Qian and Fan (2020); Paul et al. (2021); Bezerra et al. (2020).

Table 1 (cont.). Variables of the model

Variable name	Symbol	Explain	The basis for variable selection
The amount of government support for households affected by COVID-19	HTCP	This is the money the government and local authorities support for households affected by the COVID-19 pandemic. This scale is measured based on the actual level of government assistance each household received; the unit is a million VND/household. This scale is expected to have a positive relationship with the income of surveyed households.	Paul et al. (2021); Bhagat et al. (2020).
Number of family members infected with COVID-19	TVB	COVID-19 has affected the lives of many people and the health of their families. Having a member infected will directly impact household income and cause damage and difficulties in life. This scale measures the number of members in each family infected with COVID-19. This scale is expected to have the opposite relationship with the income of surveyed households.	Paul et al. (2021); White and Van (2020); Guo et al. (2020).
Number of family members unemployed due to the outbreak of the Covid-19 pandemic	TN	This scale measures how many household members lost their jobs during the outbreak of the Covid-19.. This variable is expected to have the opposite relationship with household income.	Paul et al. (2021); Le et al. (2021); Dao et al. (2022).

they are out of work. When people lack employment, their earnings are cut, and there are even families that lose their incomes completely due to the COVID-19 pandemic. The average income per family is only about 9.772 million VND/month. Meanwhile, for the other group, it decreased to about 6.265 million VND/month.

The reduction in income of surveyed households will also directly affect their expenditures. Research findings confirm that urban residents were more severely affected than those living in rural areas when the COVID-19 pandemic broke out. Spending by residents in suburban and rural areas can shift from being self-sufficient for their living. They are more active in farming activities for their products than in urban areas. Based on the survey results, the expenditure level of people in urban areas has decreased, but the decrease is not significant as urban residents must maintain essential living costs and expenses, and living costs in urban areas are higher than in other areas. This shows

that the vulnerability of urban areas in the context of the COVID-19 outbreak is relatively obvious. Expenditures in urban areas before the outbreak of the COVID-19 pandemic were about 8.369 million VND/month, and this number decreased to about 5.479 million VND/month. Meanwhile, for rural and suburban areas, expenditure before and after the outbreak of the COVID-19 pandemic is VND 5.479 million/month and VND 4.744 million/month, respectively.

Check the differences between the incomes and expenditures of the two survey groups before and after the COVID-19 pandemic (Table 3).

The results of using the T-test have revealed that there is a difference in income and expenditure between the two groups surveyed. It seems that the income and expenditure disparities between these two groups were smaller when the COVID 19 pandemic occurred. The reason for this phenomenon is as follows: The results of the survey

Table 2. Statistical results describing income and expenditure before and after the COVID-19 pandemic between two groups of people in urban and other areas

Items	Mean	Std. Deviation
Income before COVID-19 (Y_B)	Urban area	17.391
	Rural areas, suburban areas	13.282
Income after COVID-19 (Y_A)	Urban area	9.772
	Rural areas, suburban areas	6.265
Expenditure before the COVID-19 pandemic (CP_B)	Urban area	8.369
	Rural areas, suburban areas	7.356
Expenditure after the COVID-19 pandemic (CP_A)	Urban area	5.479
	Rural areas, suburban areas	4.744

Table 3. Independent sample test

Items		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Y_B	Equal variances assumed	17.357	.000	3.624	350	.000	4.1086	1.1339
	Equal variances not assumed			3.783	347.335	.000	4.1086	1.0861
Y_A	Equal variances assumed	33.276	.000	5.102	350	.000	3.5068	.6874
	Equal variances not assumed			5.437	349.326	.000	3.5068	.6450
CP_B	Equal variances assumed	16.374	.000	1.952	350	.052	1.0128	.5188
	Equal variances not assumed			2.045	348.433	.042	1.0128	.4953
CP_A	Equal variances assumed	9.043	.003	1.637	350	.103	.7353	.4493
	Equal variances not assumed			1.693	342.813	.091	.7353	.4343

show that the 4th wave of COVID-19 outbreaks in Vietnam has affected the income and expenditure of residents in urban areas, with measures such as "social distancing", closing down service establishments, which has caused people's income to decrease significantly; meanwhile, this pressure on rural and suburban areas tends to be lower than in large urban areas. Therefore, the income between the two survey groups tends to decrease gradually. Moreover, in the context of the COVID-19 pandemic breaking out in Vietnam, residents tend to spend less on unneeded items, the trend to purchase only the essential items for life is gaining more and more popularity; so both groups' expenditures, as well as the gap between the two groups, have decreased.

Assessing the influence of factors on people's income in the context of the COVID-19 pandemic. Test the fit of the regression model. Based on the model test results, the selected research model is appropriate, with the independent variables explaining about 68.8% of the dependent variable. Sig coefficient. = 0.000, the research model is suitable.

The estimation results of the model's regression parameters are shown in Table 4.

The estimated results show that factors have different levels of influence on the income of households in urban areas in the context of the outbreak of the COVID-19 pandemic. Specifically, the emergence of the COVID-19 pandemic has caused great difficulties and challenges for people, and government support is one of the measures applied in Vietnam to ease pressure on people's livelihoods. In Vietnam, this support is applied by the year of payment of social insurance

premiums. Support levels are paid once to each employee. In addition, businesses and local governments, as well as organizations, have also taken measures to support vulnerable households in the context of the COVID-19 pandemic. As a result of research, the standardized coefficient of the supporting variable was 0.502, which highlights the large and positive effects of this variable on the lives of people, especially those who live in urban areas. The results of the study also support the views of previous studies such as Paul et al. (2021) and Bhagat et al. (2020).

As a result of the outbreak of COVID-19 in Vietnam, specifically, the fourth outbreak of COVID-19, workers at enterprises fell into a relatively large state of unemployment because enterprises tend to cut personnel or close production and business activities. A part of employees had to change direction to find new livelihood strategies, find new jobs, and having a high level of skill is an advantage. Due to general economic difficulties and individual hardships, a high education level, knowledge of the field of work, and high skills can ensure income for workers, which will then guarantee a common income for the whole family. The standardized coefficients of the education variable are 0.199, which reflects that the research results fully support the previous views of Tran and Vu (2014), Qian and Fan (2020), and Le et al. (2021).

As a result of the COVID-19 pandemic, there have been both physical and mental impacts on people. The number of family members infected with COVID-19 has disrupted and affected the lives of every household. If a family member is infected with COVID-19, the income-generating activities in that household will be stopped

Table 4. Regression model results

Model	Standardized Coefficients	T	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
(Constant)		6.907	.000		
KV	.040	.756	.450	.325	3.074
HTCP	.502	10.172	.000	.373	2.681
T	-.608	-14.579	.000	.522	1.915
Gent	.115	2.438	.015	.410	2.439
HV	.199	5.510	.000	.698	1.433
KN	.395	6.745	.000	.264	3.783
TVB	-.120	-2.919	.004	.537	1.861
TN	-.381	-7.946	.000	.396	2.525
R Square		0.688			
Adjusted R Square		0.681			
Mean Square		1306.216			
F		94.712			
Sig.		0.000			

while they undergo medical isolation according to government regulations. In addition to affecting people's health, their income is also reduced. The Standardized Coefficients of the variable are -0.12, which accurately reflects the actual influence of the variable on people's income. Research outcomes support the view of Paul et al. (2021), White and Van (2020), and Guo et al. (2020).

Moreover, when production and business activities cease due to the COVID-19 pandemic, a number of employees become unemployed because they do not meet the minimum requirements of the job or the demand for their services has decreased. As a result, their Standardized Coefficient is -0.381, showing the negative impact the Standardized Coefficient of this variable is -0.381, which shows the negative effects of unemployment on people's income. Research results support the view of Paul et al. (2021), Le et al. (2021), and Dao et al. (2022).

Besides that, the research findings have also reflected the influence of other factors such as age and working experience on people's income. The results of the study support the previous view of Dao et al. (2022) and Nguyen and Bui (2011).

Research findings have completely supported the proposed hypothesis. Specifically: People's income and expenditure decreased between before

and after the Covid-19. Different factors have also affected people's income differently during the outbreak of the Covid-19 pandemic.

4. DISCUSSION

Research findings have shown that the COVID-19 pandemic has negatively affected the lives of people in urban areas of Vietnam. To limit the challenges that people in urban areas may face, some recommendations are proposed.

First, choosing the form of remote working, working online should be considered by firms, in which employees apply to be able to maintain their working status, thereby ensuring a stable source of income for the family, so that they can maintain the minimum consumption for the family. The idea of working online and finding jobs online has also been proposed in previous studies in other countries (Stephany et al., 2020). However, the solution of working online will not be feasible for manufacturing companies, the three on-site options for employees should be considered by production enterprises, in the context of the complicated outbreak of the COVID-19 pandemic.

Second, the government should have supportive measures for both firms and workers, especially

in urban areas. For enterprises, the government should have support solutions such as stimulus packages, loan interest support packages for businesses, capital support, tax rate support to reduce pressure on companies. During the complicated development of the COVID-19 pandemic, a series of businesses declared bankruptcy or closed, which has had direct negative impacts on people's lives and social issues. In addition, from the perspective of workers, the government should have supportive policies so that people can stabilize their lives, at least for urban residents, so that people do not go hungry, there is no shortage of food when there is no other option to ensure food other than the supply from supermarkets and wholesale markets. When the COVID-19 epidemic broke out, the supply chain

was interrupted, the transportation of food materials was difficult, thus causing difficulties for people in urban areas. Therefore, it is necessary to support the government to ensure people's lives. Since enterprises and employees are the target of support, parallel support will help the two groups have a mutual impact, when enterprises are supported, being rescued will also mean creating job opportunities for employees. From there, their lives will be stable, the economy will gradually stabilize again.

Third, there should be solutions to encourage people in urban areas to diversify their livelihood strategies, as this will reduce risks for people in urban areas in particular, and people in Vietnam in general.

CONCLUSION

The results of the study confirmed the research hypothesis that showed different living standards existed in urban Vietnam before and after the COVID-19 outbreak. Besides, there is a difference in the level of influence of factors on people's income in urban areas of Vietnam. The effects of the COVID-19 pandemic on the income and expenditure of people in urban areas reflect that result. Additionally, the influence of urbanizing factors on people's income can be seen in the context of the outbreak of the COVID-19 pandemic. The findings of this study show that there is a difference in expenditure before and after the outbreak of the COVID-19 pandemic; the expenditure of urban areas before the outbreak of the COVID-19 pandemic was about VND 8.369 million/month; this number decreased to about 5.479 million dong per month. Besides, the study also shows a positive impact of government support on people's income (Standardized Coefficients = 0.502), along with the positive influence of work experience and education level. However, the number of family members infected with COVID-19, as well as the number of unemployed family members, negatively affect the income of people in urban areas in Vietnam in the context of the COVID-19 outbreak. Based on the results of the study, recommendations were made on the development of new livelihood strategies for people to support them in the difficult situation of dealing with the COVID-19 epidemic.

AUTHOR CONTRIBUTIONS

Conceptualization: Thanh Thuy Cu.

Data curation: Thanh Thuy Cu.

Investigation: Quan Le.

Methodology: Quan Le, Thanh Thuy Cu.

Resources: Quan Le, Thanh Thuy Cu.

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