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Exploring Accessibility to Subsidized Housing: An Analysis of the Impact of Minimum Wages, Population, and Unemployment Rate in Central Java

Ricki Ahmad Siddiq Ghazali

Department of Economics, Faculty of Economics and Business, Diponegoro University, Indonesia

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***Corresponding author:** Ricki Ahmad Siddiq Ghazali

Department of Economics, Faculty of Economics and Business, Diponegoro University, Indonesia

Abstract

This study aims to examine the influence of regional minimum wage (UMK), population size, and unemployment rate on subsidized housing ownership in Central Java Province. Using panel data from 33 districts/cities spanning the period 2020 to 2023, the analysis applies the Ordinary Least Squares (OLS) method to assess the relationship between these macroeconomic variables and subsidized housing ownership. The estimation results reveal that all three variables jointly influence the level of subsidized home ownership, albeit with differing directions and significance levels. Among them, the regional minimum wage exerts the most substantial and statistically significant positive effect, reinforcing the critical role of income policy in enhancing access to affordable housing for low-income groups. Population size also shows a positive but less significant effect, suggesting that demographic pressures may increase housing demand without necessarily translating into ownership. Conversely, the open unemployment rate has a statistically significant negative effect, indicating that higher unemployment undermines the ability of households to purchase homes, even when subsidized. These findings underscore the need for integrated policy measures that go beyond wage adjustments, including job creation, financial education, and the promotion of public-private partnerships (PPP) to expand housing availability. Strengthening the effectiveness of housing financing schemes like FLPP and further research into social and cultural determinants are essential for ensuring the long-term sustainability and inclusivity of subsidized housing programs in Central Java.

Keywords: Subsidized Housing, UMK, OLS, Central Java Province.

1. INTRODUCTION

The issue of homeownership in Indonesia, particularly among low-income communities, remains a major concern for the government. At the beginning of President Prabowo Subianto's administration, the Ministry of Housing and Settlement Areas was established as part of efforts to provide adequate housing. A house is not merely a physical structure but also reflects the social and economic conditions of its inhabitants over time (Turner, 1972). In Indonesia, housing demand is high across both urban and rural areas, yet

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limited land availability and low purchasing power remain key obstacles (Hernawan, 2011).

Meeting housing needs is also a constitutional mandate and part of the fulfillment of basic human rights as stipulated in the 1945 Constitution and Law No. 39 of 1999 on Human Rights. However, the gap between housing demand and supply (backlog) remains significant. One of the government's main solutions is the subsidized housing program, particularly through subsidized mortgage schemes (KPR) for low-income earners with monthly incomes between IDR 1,000,000 and IDR 2,500,000 (Mangeswuri, 2016). The effectiveness of this program varies depending on local economic factors such as minimum wages, population size, and household consumption patterns.

The enactment of Law No. 1 of 2011 on Housing and Settlement Areas reaffirmed the government's commitment to addressing the housing backlog. The One Million Houses Program, launched in 2015, was one of the government's key initiatives, resulting in the construction of over 805,000 housing units in 2016, most of which were for low-income groups. The program involved collaboration with various stakeholders, including banks, developers, and local governments. An additional financing mechanism, Tapera, was also introduced to support homeownership for both formal and informal workers.

KPR loan data indicates continuous growth from IDR 521 trillion in 2020 to IDR 692 trillion in 2023, reflecting a rising demand for housing. However, improving purchasing power remains crucial. Thus, housing policy must address not only the supply side but also strengthen demand through economic empowerment of low-income households (Juniarko et al., 2012).

Central Java Province, with its large and diverse population, is an important case study in housing development analysis. A study in Semarang in a poor neighborhood shows that housing affordability especially for low-income communities is greatly influenced by the minimum wage in the region (Kustieni et al., 2024). Higher minimum wages are theoretically linked to better purchasing power. Meanwhile, rapid population growth also drives housing demand, especially in urban areas near economic hubs. Additionally, household consumption behavior can affect the decision to purchase property, particularly if income is allocated toward non-essential spending.

In light of these challenges and dynamics, it becomes increasingly important to understand how regional macroeconomic conditions shape access to subsidized housing. Therefore, this study aims to examine the influence of macroeconomic variables namely minimum wage, population, and household consumption on subsidized home ownership in Central Java Province. The findings are expected to offer valuable insights for policymakers in designing more effective and inclusive housing programs.

2. LITERATURE REVIEW

2.1 Public Interest Economic Regulation Theory

Public interest theory of regulation explains that government intervention through regulation is necessary to protect the public good, correct market failures, ensure efficient resource allocation, and maintain economic stability. This theory assumes the government acts neutrally for societal benefit, not for private or group interests. It is rooted in the idea that free markets often fail due to imperfect conditions such as monopolies, externalities, incomplete information, or public goods leading to inefficient outcomes. In such cases, regulation is justified to enhance economic efficiency and social welfare.

According to Pareto's optimality principle, efficiency is achieved when no individual can be made better off without making someone else worse off. This was later expanded by Kaldor-Hicks efficiency, which accepts redistribution if total gains outweigh losses. However, such optimal conditions are rare in real-world markets. Arrow & Debreu (1954) showed that competitive equilibrium only yields Pareto-efficient outcomes under highly ideal conditions perfect competition, complete markets, zero transaction costs, and perfect information. Greenwald & Stiglitz (1986) confirmed that without these, market outcomes are generally inefficient.

Thus, public interest regulation emerges as a corrective tool to address these inefficiencies. Regulations may include price controls, subsidies, taxes, or quotas that aim to guide market behavior toward socially desirable outcomes. In housing markets, this theory justifies state intervention to ensure access to adequate housing, especially when private markets fail to meet the needs of low-income populations. When the benefits of such regulation exceed the costs, intervention is considered efficient and necessary. Ultimately, the theory rests on the assumption that policymakers act in pursuit of collective welfare, and that regulation serves as a legitimate mechanism to realign market outcomes with public interests.

2.2 Housing Policy

Housing policy refers to a set of rules, programs, and regulations designed by governments to ensure access to safe, adequate, and affordable housing for the population. It plays a crucial role in shaping socio-economic conditions and improving citizens' quality of life. Allen & Gurney (1997) argue that housing studies should be approached through interdisciplinary perspectives, with housing policy serving as a central focus. Similarly, Kemeny (1992) criticized the dominance of empirical approaches in housing research and advocated for applying broader social science theories to better understand policy dynamics. In practice, housing policy is not solely the domain of national governments but is formed through networks of public, private, and hybrid actors (Clapham, 2018). In countries like the United States and the United Kingdom, housing responsibilities are divided across national and local governments, depending on the administrative structure.

Governments employ various mechanisms to intervene in the housing sector. These include market regulation (e.g., rent control), direct housing provision (such as public housing projects), financial support through subsidies or grants, and the dissemination of information and guidance to the public. Governments may also enforce accountability standards for housing providers, shape public discourse around housing issues (e.g., homelessness), or even opt for non-intervention as a policy decision itself (Doling, 1997).

These interventions result in physical outcomes (such as the number of houses built), behavioral impacts (e.g., market responses or shifts in individual choices), and symbolic meanings (e.g., the cultural value of homeownership). The choice of policy tools often reflects political goals, local conditions, and dominant ideologies. Therefore, understanding housing policy requires not only a technical perspective but also consideration of its social, behavioral, and symbolic dimensions.

2.3 Previous Research

The development of subsidized housing in Central Java is influenced by macroeconomic factors such as minimum wage (UMK), population size, and unemployment rate. Understanding the

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relationship between these variables is essential to grasp the dynamics of the subsidized housing market for low-income groups.

Kim & Renaud (2009) found that rapid economic growth in South Korea led to housing market imbalances, where soaring house prices outpaced household income, reducing affordability especially for low-income families. Similarly, Wu et al. (2012) observed that strong economic growth spurred speculation in real estate markets, further inflating prices and limiting access to affordable housing.

In Indonesia, the minimum wage plays an important role in supporting housing affordability for low-income communities. Kustieni et al. (2024) found that inflation and the minimum wage jointly affect home ownership rates in Malang City, so adjustments to the minimum wage need to be balanced with housing price controls. In addition, population growth also drives housing demand. Cahyani et al. (2023) found population growth, both natural and due to migration, increases the need for housing, especially in urban areas such as Surakarta. These findings emphasize the importance of synchronizing wage policies (UMK) and the provision of subsidized housing in densely populated areas.

Unemployment affects both household income and developers' investment decisions. Anundsen & Jansen (2013) found that rising unemployment in European countries led to a decline in new housing construction due to economic uncertainty. In summary, minimum wage and population growth tend to have a positive impact on subsidized housing development, while unemployment poses a challenge. Addressing these factors through well-targeted policies is crucial to expanding access to affordable housing in Indonesia.

3. METHODOLOGY

3.1 Data and Model Specifications

This study employs three independent variables: the Regency/City Minimum Wage, Population, and Unemployment Rate. The dependent variable is the level of subsidized home ownership in regencies/cities within Central Java Province. The analytical technique used is Ordinary Least Squares (OLS). The data utilized in this research are panel data, consisting of a time series from 2020 to 2023 and cross-sectional data from 33 regencies/cities in Central Java. The data were obtained from the Public Housing Savings Management Agency (BP Tapera) and Statistics Indonesia (BPS).

The selection of this model is based on data availability. This study hypothesizes that the increase in new housing units under the subsidized mortgage (KPR Subsidi) program in Central Java is influenced by the minimum wage (UMR), population size, and unemployment rate. The following modified supply function is assumed for the multiple regression using the Ordinary Least Squares (OLS) method.

Variable	Description	Source
KPRS	Subsidized Home Ownership (%)	Tapera
UMK	Regency/City Minimum Wage Level (%)	BPS
JMP	Population Size (%)	BPS
TPT	Unemployment Rate (%)	BPS

$$KPRS = (UMK, JMP, TPT) \quad (1)$$

$$KPRS_{it} = \beta_0 + \beta_1 UMK_{it} + \beta_2 JMP_{it} + \beta_3 TPT_{it} + \varepsilon_i \quad (2)$$

Equations with natural logarithm transformations:

$$lnKPRS_{it} = \beta_0 + \beta_1 lnUMK_{it} + \beta_2 lnJMP_{it} + \beta_3 TPT_{it} + \varepsilon_{it} \quad (3)$$

Where:

lnKPRS = Log Subsidized Home Ownership
lnUMK = Log Regency/City Minimum Wage Level
lnJMP = Log Population Size
TPT = Unemployment Rate
β_0 = Intercept
$\beta_1, \beta_2, \beta_3$ = Coefficient
μ = Error term
t = 2020…,2023 (time periods)
i = 1,2, 3,…,33 (Regency/City).

The model is used in three specifications: a general constant, which allows for fixed effects, and one that allows for random effects. The model will be estimated using the Ordinary Least Squares (OLS) method, with regression periods that appear to be unrelated. Next, researchers will evaluate the appropriate stochastic assumptions of the regression on the error term component.

This is very important for estimating the β parameter. The multiple regression function shows the impact of each independent variable on the dependent variable. The β value indicates the degree of influence on the dependent variable. A positive or negative sign indicates the direction of the relationship. The higher the β value, the greater the influence of a particular variable on the dependent variable (Makena, 2012).

3.2 Determination of Model Estimation Methods

a. Common Effect Model (CEM)

The Common Effect Model is the simplest panel data approach, as it merely combines time series and cross-sectional data. This model does not account for individual or time-specific dimensions, thereby assuming that the behavior of the data remains consistent across different time periods and entities. This method can be estimated using the Ordinary Least Squares (OLS) approach or the least squares technique for panel data models (Winarno, 2015). The model equation is formulated as follows:

$$Y_{it} = \beta_0 + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_n Xn_{it} + \varepsilon_{it}$$

The Common Effect Model (CEM) assumes that the constant term (β_0) and the coefficients of the independent variables ($\beta_1, \ldots, \beta_n$) remain unchanged across time and individuals. However, this assumption is often inappropriate for panel data, as CEM does not take into account individual-specific characteristics. Therefore, further testing using alternative models is necessary.

b. Fixed Effect Model (FEM)

This model assumes that differences across individuals can be captured through variations in their intercepts. To estimate panel data using the Fixed Effects Model, the dummy variable technique is employed to account for intercept differences among firms, which may result from variations in work culture, management practices, or incentive structures. However, the slope coefficients are assumed to be constant across firms. This estimation approach is also commonly referred to as the Least Squares Dummy Variable (LSDV) technique (Widarjono, 2015). The model is represented by the following equation:

$$Y_{it} = (\beta_0 + \gamma_i) + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_n Xn_{it} + \varepsilon_{it}$$

In this equation, $\beta_0 + i$ represents the intercept, while β_1 and β_2 denote the slope coefficients. The addition of i to the intercept indicates that the intercept varies across cross-sectional units. If it is

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assumed that the intercept differs across both individuals and time, a differential dummy variable approach can be applied. The equation can then be rewritten as follows:

$$Y_{it} = \alpha 1 + \alpha 2 D2_i + \alpha 3 D3_i + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it}$$

where n represents the individuals for the dummy variables, i denotes the sample units (individuals), and t refers to the time period. This model employs dummy variables.

c. Random Effect Model (REM)

The Random Effects Model is used to estimate panel data in which the error terms may be correlated across time and individuals. In explaining the random effects, it is assumed that each firm has a different intercept. This model is particularly useful when the individual firms in the sample are randomly selected and represent the broader population. The model is expressed in the following equation:

$$Y_{it} = \beta_{0i} + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it}$$

Unlike the Fixed Effects Model (FEM), the Random Effects Model (REM) treats β_{0i} as a random variable rather than a fixed constant. In this case, it is assumed to have a mean value of β_0 (without the subscript i) (Basuki, 2015).

3.3 Estimation Model Selection

a. The Chow Test is conducted to determine whether the Common Effect Model (CEM) or the Fixed Effect Model (FEM) is more appropriate for panel data regression. The hypotheses for the Chow Test are as follows (Basuki, 2015).
   H0: value prob cross section F > α (0,05), CEM
   H1: value prob cross section F < α (0,05), FEM

b. The Hausman Test is used to determine whether the Fixed Effects Model (FEM) or the Random Effects Model (REM) is more appropriate for panel data regression (Basuki, 2015). The hypotheses for the Hausman Test are as follows:
   H0: value prob Chi-Square > α (0,05), REM
   H1: value prob Chi-Square < α (0,05), FEM

c. The Lagrange Multiplier (LM) Test is conducted to determine whether the Common Effect Model (CEM) or the Random Effects Model (REM) is more appropriate for panel data regression (Basuki, 2015). The hypotheses for the Lagrange Multiplier Test are as follows:

   H0: value prob Breusch-Pagan > α (0,05), CEM.
   H1: value prob Breusch-Pagan < α (0,05), REM.

3.4 Hypothesis Testing

a. Parameter Significance Test (t-test)

The *t*-test is used to determine whether each independent variable has a statistically significant effect on the dependent variable. This partial test is conducted by comparing the *t*-statistic with the *t*-table value at a 5% significance level, as well as by comparing the *p*-value of the *t*-statistic with the chosen significance level. Conclusions are drawn by evaluating the significance value against the alpha level (5%), based on the following criteria:

- If the significance value is < α, then H_o is rejected.
- If the significance value > α, then H_o is accepted.

b. Joint significance test (F-test)

This test is conducted to examine the simultaneous effect of the independent variables on the dependent variable. It is performed by comparing the significance value with the alpha level (5%) at a 5% significance degree. Conclusions are drawn by evaluating the significance value against the α level (5%), based on the following criteria:

- If the significance value is < α, then H_o is rejected.
- If the significance value > α, then H_o is accepted.

c. Testing the Coefficient of Determination (R^2)

The regression line formed from a set of observational data must be evaluated to determine how well the model represents the actual conditions. In regression analysis, a commonly used measure for this purpose is the Coefficient of Determination (R^2). The coefficient of determination is used to assess the strength of the relationship between the dependent and independent variables, as reflected by the value of R-square.

The R-square value ranges from zero to one, with zero indicating the lowest explanatory power and one indicating the highest. A low R-square value suggests that the independent variables are not able to sufficiently explain the variation in the dependent variable. Conversely, a high R-square value indicates that the independent variables provide the necessary information to predict the dependent variable.

4. RESULTS AND DISCUSSION

4.1 Statistik Deskriptif

Table 2 provides a comprehensive overview of the distribution and statistical characteristics of subsidized home ownership (KPRS), regency/city minimum wage (UMK), population size (JMP), and open unemployment rate (TPT) across a sample of 132 observations. The mean and standard deviation offer insights into the central tendency and dispersion of the data, while the range illustrates the variability observed within each variable.

This statistical analysis is essential in the context of our research, as it reveals potential patterns and trends within the data and supports deeper interpretation of subsequent statistical results. Moreover, it helps describe the characteristics of the population represented by our sample. In academic writing, a thorough explanation of statistical tables such as this one is an important component of both the methodology and research findings. The presented statistical data provide a solid empirical foundation to support the study's findings and conclusions.

Table 2. Descriptive Statistics of All Variables

Var	Mean	Std. D	Min	Max	Obs
KPRS	506.166	729.829	1.00000	4496.00	132
UMK	2072930	228418.3	1748000	3060349	132
JMP	1100379	429679.2	192322.0	2043077	132
TPT	5.542045	1.937809	1.760000	9.970000	132

4.2 Selection of Panel Data Regression Estimation Models

4.2.1 Chow Test

This test aims to determine the most appropriate model between the Common Effects Model and the Fixed Effects Model. According to the criteria, if the F-probability value is less than 0.05, the Fixed Effects Model is considered the better choice. The results of the Chow test are presented in the following table:

Table 3. Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	6.694694	(32,96)	0.0000

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Cross-section Chi-square	154.831571	32	0.0000

Based on the results of the panel data regression estimation, the Chow test shows a cross-section F probability value of 0.0000, which is smaller than the significance level α of 5% (0.05). Therefore, it can be concluded that the Fixed Effects Model is the appropriate method to be used in this study, as it is more suitable than the Common Effects Model.

4.2.2 Hausman test

After conducting the Chow test, which indicated that the Fixed Effects Model is appropriate, the Hausman test was then performed to determine the best model between the Random Effects Model and the Fixed Effects Model. According to the criteria, if the probability value is less than 0.05, the Fixed Effects Model is considered the better choice. The results of the Hausman test are presented in the following table:

Table 4. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f	Prob.
Cross-section random	2.301397	3	0.5123

Based on the results of the panel data regression estimation, the Hausman test shows a chi-square value of 2.301397 with a cross-section random probability value of 0.5123, which is greater than the significance level α of 5% (0.05). Therefore, it can be concluded that the Random Effects Model is the appropriate method to be used in this study, as it is more suitable than the Fixed Effects Model.

4.2.3 Lagrange Multiplier Test

After conducting the Hausman test, which indicated that the Random Effects Model is the appropriate model, the Lagrange Multiplier (LM) test was then performed to determine the best model between the Random Effects Model and the Common Effects Model. According to the criteria, if the probability value is less than 0.05, the Random Effects Model is considered the better choice. The results of the Lagrange Multiplier test are presented in the following table:

Table 5. Lagrange Multiplier Test Results

Test Hypothesis			
	Cross-section	**Time**	**Both**
Breusch-Pagan	64.06571	7.545232	71.61094
	(0.0000)	(0.0060)	(0.0000)

Table 5 above presents the results of the Lagrange Multiplier test, in which the probability value of the cross-section Breusch-Pagan test is 0.0000, which is lower than the significance level of 5% (0.05). This indicates that the alternative hypothesis (H_1) is accepted and the null hypothesis (H_0) is rejected, meaning that the Random Effects Model is more appropriate than the Common Effects Model.

4.3 Panel Data Regression

Based on the results of the panel data regression model estimation tests namely the Chow test, the Hausman test, and the Lagrange Multiplier test it is concluded that the most appropriate and best-fitting model for this study is the Random Effects Model. The results of the Random Effects Model analysis are presented in the following table:

Table 6. Results of Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-62.12246	26.08853	-2.38121	0.0187
LUMK	3.895859	1.773672	2.196493	0.0299
LJMP	0.843220	0.478023	1.763976	0.0801
TPT	-0.153527	0.090669	-1.69327	0.0928
F-statistic	4.308535	R-squared	0.091719	
Prob(F-stat)	0.006242	Adj R-squar	0.070432	

- The constant term (C) is −62.1225. This indicates that if all independent variables are equal to zero, the baseline value of subsidized home ownership (LKPRS) would be −62.1225. This value is statistically significant (p = 0.0187), suggesting that, aside from the included variables, there are strong underlying factors that support subsidized home ownership in Central Java.
- This positive coefficient indicates that a 1% increase in the Regency/City Minimum Wage (LUMK) is expected to increase the value of subsidized home ownership (LKPRS) by approximately 389.59%, assuming other variables remain constant. The coefficient has a p-value of 0.0299, indicating that LUMK has a statistically significant effect on LKPRS at the 5% confidence level.
- The coefficient for LJMP is also positive, indicating that a 1% increase in LJMP is expected to increase the value of LKPRS by approximately 84.32%. LJMP has a statistically significant effect at the 10% confidence level.
- This coefficient is negative, indicating that a 1% increase in the unemployment rate (TPT) tends to reduce subsidized home ownership (LKPRS) by approximately 15.35%, assuming other variables remain constant. The effect is statistically significant at the 10% confidence level.
- Weighted R-squared = 0.0917: This means that approximately 9.17% of the variation in subsidized home ownership (LKPRS) can be explained by this model. The relatively low R-squared value indicates that many other factors not included in the model may influence LKPRS.
- F-statistic (p = 0.0062): The F-statistic tests whether all independent variables jointly have a significant effect on subsidized home ownership (LKPRS). With a p-value of 0.0062, the model is statistically significant overall, indicating that at least one independent variable has a significant influence on LKPRS.

4.4 Discussion

4.4.1 Minimum wage in regencies/cities in relation to subsidized housing ownership

The Regency/City Minimum Wage (LUMK) plays a crucial role in determining individuals' purchasing power, particularly in relation to subsidized home ownership. An increase in the LUMK is expected to enhance the financial capacity of the population, especially among low-income groups. With higher minimum wages, individuals may be better able to meet the requirements for down payments and mortgage installments on subsidized housing. Therefore, there is a positive relationship between the LUMK and subsidized home ownership (LKPRS), where an increase in the LUMK may promote greater access to and ownership of subsidized homes.

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Research shows that an increase in the minimum wage in a region can contribute to improving the public's purchasing power for basic needs, including housing. According to the theory of supply and demand, income growth resulting from a rise in the Regional Minimum Wage (LUMK) can lead to increased demand for housing, including subsidized housing. This leads to the assumption that an increase in the LUMK has the potential to raise the level of subsidized home ownership (LKPRS).

The study Estimating the Minimum Wage's Spillover Effect on Below Median Local Housing Rents, Tidemann (2025) in the Atlantic Economic Journal found empirical evidence that minimum wage increases have a significant effect on improving housing affordability for low-income workers. The study states that a $1 increase in the minimum wage can reduce monthly rents in the lower segment of the market by 0.7–2 percent, thereby substantially reducing the housing cost burden for this group. These findings reinforce the understanding that minimum wage policies not only increase purchasing power but also have a direct impact on lowering local rents, thereby expanding access to affordable home ownership.

4.4.2 Population size with subsidized housing ownership

The test results indicate that population size alone is not sufficient to significantly increase subsidized home ownership without being supported by other policies that enhance people's purchasing power. Therefore, in addition to aligning the supply of subsidized housing with population growth, the government also needs to improve purchasing power through adequate minimum wage policies, affordable financing schemes, or other housing initiatives targeted at low-income communities.

Teklemariam et al. (2025), in the journal Land, examined land use policies for affordable housing in a medium-sized developing city in the United States. They found that increasing the supply of land for affordable housing can significantly stabilize housing prices in the medium term, particularly in urban areas experiencing rapid population growth. In this context, the interdependence between rising population numbers and land supply becomes critical: in rapidly growing cities, effective land policies prevent housing prices from skyrocketing and ensure the availability of affordable units.

Gong & Yao (2022) show that population growth due to urbanization and migration significantly increases housing demand in urban areas. This demand pressure drives the need for affordable housing, including subsidized housing, especially for people who cannot access the conventional housing market.

4.4.3 Unemployment rate relative to subsidized housing ownership

The test results show that the unemployment rate has a negative effect on subsidized home ownership in Central Java, as rising unemployment reduces people's purchasing power. Although this effect is not statistically significant at the 5% confidence level, the findings still suggest that increasing unemployment may indirectly reduce subsidized home ownership by weakening households' financial capacity.

The findings of this study are consistent with those of Haurin & Gill (2002), who found that rising unemployment significantly reduces housing demand, leading to a decline in house prices. Their study indicates that unemployment lowers household purchasing power, thereby affecting the housing market as a whole. Similarly, research by Anundsen & Jansen (2013) revealed that increasing unemployment leads to a significant decrease in new housing construction. The economic uncertainty caused by high unemployment discourages developers from investing in new housing projects.

Similar findings are reported in a study by Garcia-Montalvo (2003), which shows that high unemployment has a negative impact on home ownership rates and new housing development. Unemployment leads to financial instability among households, reducing their ability to purchase homes. Tomlinson (2007) also found that high unemployment constrains the growth of the housing sector, as developers face lower demand and higher financial risks. In addition, elevated unemployment rates reduce access to housing credit for low-income households.

5. CONCLUSION

This study aimed to analyze the influence of regional minimum wages (UMK), population size, and the open unemployment rate on subsidized home ownership in Central Java Province. The estimation results indicate that all three variables simultaneously affect the development of subsidized housing ownership, although with varying degrees and directions of influence.

Among the variables, the regional minimum wage (UMK) was found to have the strongest and most significant positive effect. An increase in UMK enhances the purchasing power of low-income communities, thus increasing their ability to access subsidized housing. This finding highlights the importance of wage policies that align with the cost of living as a key strategy to expand access to affordable housing.

Population size also shows a positive influence, though with a lower level of significance. While population growth drives housing demand, this demand may not translate into ownership without sufficient purchasing power. In contrast, the open unemployment rate has a significant negative effect, indicating that high unemployment hampers the ability of people to own homes, even when subsidized.

Therefore, improving access to subsidized housing requires a holistic approach. The government should regularly evaluate and adjust regional minimum wages to reflect living costs accurately. At the same time, efforts to create jobs and promote balanced regional development are essential to reduce unemployment and strengthen people's capacity to own homes.

The Housing Financing Liquidity Facility (FLPP) program should also be improved by ensuring transparency and providing financial education to low-income households. Additionally, private sector involvement through Public-Private Partnership (PPP) schemes is an important alternative to expand the availability of subsidized housing.

Finally, further research is needed to explore other factors influencing subsidized housing ownership, including social and cultural aspects. With integrated and evidence-based policy approaches, subsidized housing programs can be made more effective in addressing the housing needs of low-income communities sustainably.

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