

Research article

Identifying Factors Influencing Urbanization in Denpasar City

Gde Indra Surya Diputra^{1*}, I Made Risma M. Arsha¹

¹ Faculty of Business Economics and Tourism, Hindu University of Indonesia, Denpasar, Indonesia

* Correspondence author email: gdeindra@unhi.ac.id

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Abstract: Urbanization has both positive and negative impacts on an area. This study aims to analyze the relationship between GRDP, district minimum wages, and labor participation with urbanization in Denpasar City. The research method used is multiple linear regression analysis using GRDP data, district minimum wages and labor participation in 2010 - 2020 and processed with SPSS version 25.0 with a determined significance level of 95% ($p < 0.05$). The results of the study show that the Gross Regional Domestic Product (GRDP), district minimum wages and labor participation affect urbanization partially and simultaneously with probability ($p < 0.05$). Testing the level of correlation with the Adjusted R Square of 0.999 (99.9%) gross regional domestic product (GRDP), district minimum wages and labor participation have a very strong influence on urbanization in Denpasar City. Socio-economic disparities, inadequate infrastructure, low industrialization, low job availability, low wages, and inadequate social networks increase the desire for urbanization. The practical implication of this research is to increase economic growth and equity in controlled urbanization areas as a solution to accelerating economic development.

Keywords: urbanization, economic development, gap alleviation, spatial analysis.

JEL Classification: C12, Q56, R11

Abstrak: Urbanisasi memiliki dampak positif dan negatif pada suatu wilayah. Penelitian ini bertujuan untuk menganalisis hubungan antara PDRB, upah minimum kabupaten, dan partisipasi tenaga kerja dengan urbanisasi di Kota Denpasar. Metode penelitian yang digunakan adalah analisis regresi linier berganda dengan menggunakan data PDRB, upah minimum kabupaten dan tenaga partisipasi kerja tahun 2010 – 2020 dan diolah dengan SPSS version 25.0 dengan tingkat kemaknaan 95% ($p < 0,05$) ditetapkan. Hasil temuan menunjukkan produk domestik regional bruto (PDRB), upah minimum kabupaten dan tenaga partisipasi kerja mempengaruhi urbanisasi secara parsial dan simultan dengan probabilitas ($p < 0,05$). Pengujian tingkat korelasi dengan *Adjusted R Square* sebesar 0,999 (99,9%) produk domestik regional bruto (PDRB), upah minimum kabupaten dan tenaga partisipasi kerja memberikan pengaruh sangat kuat terhadap urbanisasi di Kota Denpasar. Kesenjangan sosial ekonomi, infrastruktur yang kurang layak, rendahnya industrialisasi, ketersediaan lapangan pekerjaan yang rendah, upah yang rendah, dan jaringan sosial yang kurang memadai meningkatkan keinginan urbanisasi. Implikasi praktis penelitian ini adalah meningkatkan pertumbuhan ekonomi dan pemerataan dalam wilayah urbanisasi terkontrol sebagai solusi percepatan pembangunan ekonomi.

Kata Kunci: Urbanisasi, pembangunan ekonomi, pengentasan kesenjangan, analisis spasial.

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1. INTRODUCTION

Urbanization is a complex process due to various economic, social, and demographic factors (Busso et al., 2021; M. Chen et al., 2023; Dewi, 2017) Developing countries, such as Indonesia,

often experience high levels of urbanization (Hakim et al., 2022; Suhartini & Jones, 2023). Chen et al. (2019) say that it is characterized by the concentration of people in cities, followed by the modernization of other things caused by the move from rural areas to urban centers. Key factors that commonly contribute to urbanization are economic opportunities, industrialization, rural–urban migration, social factors, and environmental factors. Several studies say the main thing that makes someone urbanize is economic pressure (Gross & Ouyang, 2021; Guo et al., 2022; Mitra, 2019; Y. Zhang et al., 2022). Urban areas offer more employment options, higher wages, and better access to resources and services, attracting people from rural areas seeking better livelihoods and improved living standards. Moreover, factors such as poverty, limited agricultural opportunities, natural disasters, or political instability can motivate individuals and families to leave rural areas and settle in urban centers, and changes in cultural norms, aspirations, and social networks can also contribute to urbanization (Ma, 2022; Petrovici et al., 2023; Taresh et al., 2021).

The high predisposition of factors affecting urbanization has not positively improved the population's welfare, especially in Indonesia. Apart from being influenced by uneven geographical factors, this is also influenced by the tendency of individuals who carry out urbanization (Yi et al., 2021). In some regions, urbanization activities contribute positively to the population's welfare. Studies conducted by (Siregar et al., 2020) state that the percentage of the urban population and GRDP per capita positively impacted GRDP. A region's per capita income increases with the proportion of urban residents. Pilipiec et al. (2021) found that household sociodemographic changes, such as age, gender composition, location, occupation, and distribution, impact household spending but do not directly affect economic growth. This indicates that urbanization plays an essential role in economic growth in an area, one of which is in the GRDP (Faharuddin & Endrawati, 2022; Ha et al., 2021). Gross regional domestic product (GRDP) is a crucial indicator of economic growth and development within a specific region (Gibson et al., 2023; Thaddeus et al., 2022; L. Zhang et al., 2022). It measures the value of goods and services produced within the region's boundaries. A higher GRDP indicates increased economic activity, attracting investment and creating employment opportunities. This, in turn, draws people from rural areas to urban centers in search of better economic prospects, leading to urbanization (Gross & Ouyang, 2021; Thaddeus et al., 2022).

Urbanization activities in various regions are closely related to the economic needs of each individual (Huang et al., 2022). Most of the unmet primary needs, low minimum wage from employment, and few jobs make individuals take advantage of moving from rural areas to cities to make ends meet. As the minimum wage increases, it improves the standard of living for workers and their families. Higher wages allow individuals to access better education, healthcare, and housing options, which are often more readily available in urban areas. This also happens in the Bali Province area, in Denpasar City, the center of tourism, education, creative industries, arts, and other activities that have received various community groups to urbanize. This resulted in Bali Province occupying the ninth position in Indonesia as the region with the highest population density in Indonesia, reaching 690 people per km² in nine regencies/cities (BPS Bali, 2021).

According to publicly available data, the number of migrants in Denpasar City was 415,417 in 2010 (52.68% of the total population), and by 2020, its number is expected to have doubled, reaching 962,900 (BPS Bali, 2021). Increasing the number of people living in a particular area means more people can work there. Historically, this has helped the economy grow. As explained by (Pilipiec et al., 2021), an increase in the working population leads to an increase in productivity, and the larger population size also enhances the potential of the domestic market. According to research by Suffina & Suharto (2022), the municipal or regional minimum wage influences urbanization activities directly. The municipal or regional minimum wage directly impacts urbanization activities in several ways, shaping migration patterns, affecting employment opportunities, driving economic growth, improving living standards, and enabling social mobility. The minimum wage is a significant factor in attracting individuals to urban centers and driving the process of urbanization (Chen et al., 2023).

Furthermore, labor force participation has a significant impact on urbanization activities. Labor force participation is a crucial driver of urban job creation. As more individuals participate in

the labor market, there is a higher demand for employment opportunities. Urban areas, with their diverse economic activities and industries, are better positioned to provide a broader range of jobs compared to rural regions (Grigoli et al., 2018; Kurniawan A. et al., 2021; Pilipiec et al., 2021; Winkler, 2022; Karimah, 2022).

Reviewing the background above, showing many factors affecting urbanization, especially Gross Regional Domestic Product, District Minimum Wage, and labor force participation, is essential to prove, especially in Denpasar City. Throughout the literature review, there have been no reports that these three variables directly impact urbanization in Denpasar City. This study seeks to prove and fill the gap in the literature related to the relationship of these variables in influencing urbanization in Denpasar City. This study analyzes the correlation between Gross Regional Domestic Product, District Minimum Wage, and labor force participation influencing urbanization in Denpasar. By examining these factors and their influences, we can gain valuable insights into urban growth and development dynamics for effective urban planning and policymaking to ensure sustainable and inclusive urban development.

2. RESEARCH METHODS

A quantitative approach was used in this study (Darwin et al., 2021). Spatial regression analysis is a way of looking at data to determine what is causing urbanization. The Central Bureau of Statistics for the Province of Bali provides secondary data for the purposes of this study.

Table 1. Data on GRDP, minimum wage, and employment opportunities in Denpasar City, 2010-2020

Years	Gross Regional Domestic Product (Million)	City Minimum Wage (Rupiah)	Labor Force Participation Rate (%)
2010	20.309.166,28	1.100.000	76.41
2011	21.763.406,25	1.191.500	70.58
2012	23.397.173,90	1.259.000	70.07
2013	25.026.208,70	1.358.000	69.18
2014	26.778.585,10	1.656.900	72.26
2015	28.422.697,54	1.800.000	72.69
2016	30.273.394,32	2.007.000	76.41
2017	32.105.350,20	2.173.000	73.91
2018	34.166.036,35	2.363.000	73.52
2019	36.154.417,02	2.553.000	71.70
2020	32.740.224,18	2.770.300	70.91

Source: BPS Bali (2021)

Data of this study from 2010 to 2020 the urbanization of Denpasar City is seen from several factors including the Gross Regional Domestic Product (GRDP), the city's minimum wage, and employment opportunities. SPSS version 25.0 was used for data analysis, which included spatial regression analysis with probability ($p < 0.05$). The results are presented in the form of tables and a concise narrative (Adnyana, 2021). The following equations are employed in the framework of this study model.

$$URBAN_t = \alpha + \beta_1 GDRP_t + \beta_2 CMW_t + \beta_3 LFORCE_t + e_t \tag{1}$$

where *URBAN* is the dependent variable, namely, urbanization; α is a constant; $\beta_1 - \beta_3$ is the independent variable regression coefficient; *GDRP_t* is the gross regional domestic product; *CMW_t* is the city's minimum wage; and *LFORCE_t* is labor force participation.

3. RESULTS AND DISCUSSION

In this study, basic assumptions related to the components of the variables studied were carried out. Asymptotic values of 0.783 generally indicate distributed data ($p > 0.05$), as confirmed by evaluating the normality of the data. Classical assumption test results are presented in Table 2 as follows.

Table 2. Classical assumption test results

Normality test			
Unstandar Residual	0.783	> 0,05	Normal
Heteroscedasticity test			
GRDP	0.418	> 0,05	No heteroskedasticity occurs
CMW	0.163	> 0,05	No heteroskedasticity occurs
LFORCE	0.445	> 0,05	No heteroskedasticity occurs
Multicollinearity test			
Variable	Tolerance	VIF	Information
GRDP	.667	1.499	No multicollinearity occurs
CMW	.122	8.209	No multicollinearity occurs
LFORCE	.111	8.974	No multicollinearity occurs
Autocorrelation test			
Unstandar Residual	0.540	>0,05	No autocorrelation occurs

Source: Processed Data

The testing of disturbances that appeared in the regression analysis for each of the variables, they have obtained in the variables of gross regional domestic product (0.418), labor force participation (0.163), and municipal minimum wage (0.445), which were all above 0.05. Thus, there was no heterogeneity in all research variables. Due to tolerance levels > 0.10 and $VIF < 10$, the multicollinearity test results demonstrate no multicollinearity. The test results of heteroscedasticity and multicollinearity.

The next step is autocorrelation testing, which determines whether a relationship exists between the disruptor error in period t and the error in period $t - 1$ (prior) in a linear regression model. Autocorrelation occurs if there is a correlation. It is caused by residuals (errors) not being independent of one observation to another (Darwin et al., 2021). The run test results revealed an asymp.sig value of $0.540 > 0.05$, indicating that no autocorrelation occurred, in other words, residual under random or random conditions. In the final stage, hypothesis testing is performed using multiple linear regression with two test models: the f test (simultaneous) and the t test (partial).

Table 3. The results of multiple linear regression

Dependent variable = URBAN				
Variables	β	t-stat	Sig t	Information
Constant	10.243			
GRDP	0.065	6.028	0.001*	Significant
CMW	0.162	26.788	0.000*	Significant
LFORCE	0.232	4.688	0.002*	Significant
F-stat	2955.219			
Sig.(F-stat)	0.000			
Adjusted R Square	0.999			

Note: * represents significance at the 5% level

Source: Author's calculations

Table 3 the interpreted constant coefficient is 10,243, meaning that if it is gross regional domestic product (GRDP), city minimum wage (CMW), and labor force participation (LFORCE) = 0, urbanization is 10,243. $\beta_1 = 0.065$, meaning that assuming the GRDP is fixed (unchanged), then every increase in CMW and LFORCE of 1 unit will increase urbanization by 0.065. This result is significant in alpha 5% of the t test results. $\beta_2 = 0.162$, meaning that assuming the city minimum wage (CMW) is fixed (unchanged), then every increase in GRDP and LFORCE of 1 unit will increase urbanization by 0.162. This result is significant in Alpha 5% of the t test results. $\beta_3 = 0.232$, meaning that assuming Labor Force Participation is fixed (unchanged), then every increase in GRDP and CMW of 1 unit will increase urbanization by 0.232. This result is significant in Alpha 5% of the t test results.

Based on the results of the hypothesis evaluation in this study, the variable GRDP obtained a t-statistic value of 6.028 with a probability of 0.001 ($p < 0.05$). Thus, the GRDP significantly influences urbanization in Denpasar city. The results showed that the amount of added value of goods and services produced by various production units in the territory of a country in a certain period, or the so-called GRDP, directly affects the desire of individuals to urbanize Denpasar City. If you look at the data in Table 1, the value of GRDP in Denpasar City fluctuated from 2010 to 2019 but decreased in 2020 due to the COVID-19 pandemic.

The need to carry out urbanization in Denpasar City has been proven by an annual increase in the gross regional domestic product. The higher the value of GDP in an area, the greater urbanization. Urbanization can significantly impact the GRDP of a region (Guo et al., 2022). This finding is in line with research in Vietnam that shows that high urbanization activities have implications for increasing the value of gross regional domestic product in Vietnam, which is indirectly able to reduce poverty in the region and increase local income (Ha et al., 2021). This result assumes GDP to be one of the benchmarks in efforts to alleviate poverty in an area. Increasing job opportunities through increased infrastructure productivity, better industrialization development, and strengthening economic knowledge are significant factors why the GRDP affects urbanization and vice versa.

Additionally, studies conducted by Suffina & Suharto (2022) in Samarinda City, East Kalimantan, found that urbanization has resulted in remarkable and considerable growth in the gross regional product. This is because Samarinda City's level of urbanization will rise due to the high value of the regional gross domestic product. The inhabitants in the village will urbanize to death, which is regarded as deserving of being used as a source to acquire welfare levels of living because of the improved economic condition in terms of the stability or increase in Gross Regional Domestic Product every year in the area. According to Richardson's economic base theory from 1973, one way to gauge economic progress is to look at the gross regional domestic product value increase. This growth is calculated using the GRDP value at constant prices because the GRDP value is unaffected by price changes, making the changes discovered genuine and unaffected by price fluctuations (Lin & Zhu, 2022; Zhang et al., 2022; Zhang et al., 2023).

Urbanization is driven by various supporting factors that contribute to economic expansion and transformation. Ways in which urbanization can contribute to the increase in GRDP include (a) Economic opportunities. Urban areas offer a more comprehensive range of job opportunities than rural areas. As more people migrate to cities, the labor force increases, increasing productivity and economic output. The presence of diverse industries, businesses, and services in urban areas stimulates economic growth and contributes to the overall GRDP (Chen & Paudel, 2021; Dadi et al., 2022). (b) Infrastructure development and urbanization often lead to increased investment in infrastructure development. As cities grow, there is a need for better transportation networks, including roads, bridges, and public transportation systems. Additionally, urban areas require improved utilities such as water supply, sanitation, and energy infrastructure. These investments in infrastructure not only support the growing urban population but also attract businesses and industries, boosting the GRDP (Faharuddin & Endrawati, 2022; Hong Diep et al., 2022; Suhartini & Jones, 2023). (c) Concentration of services: Urban areas are known for their concentration of various services, such as healthcare, education, finance, and entertainment. This concentration of services attracts people from surrounding regions, leading to increased economic activity. The

presence of hospitals, universities, banks, shopping centers, and entertainment venues in urban areas contributes to higher consumer spending, business investments, and ultimately, an increase in GRDP. (d) Innovation and knowledge economy: urban areas often become hubs for innovation, research, and development. The concentration of universities, research institutions, and technology clusters in cities fosters collaboration and knowledge exchange, leading to the development of new technologies and industries. The growth of the knowledge economy, driven by urbanization, can significantly contribute to the GRDP through increased productivity and the creation of high-value jobs (Zhang et al., 2023).

After recognizing the importance of GRDP in influencing urbanization in Denpasar City, the variable district/city minimum wage (CMW) also has a very significant influence, as seen in testing the hypothesis that the t-statistic obtained is 26,788 with probability 0,000 ($p < 0,05$). Thus, the district minimum wage partially has a significant effect on influencing urbanization in Denpasar City. These results indicate that individuals urbanizing from rural to urban areas are affected by high socioeconomic needs. Factors such as family poverty, inadequate work, and meeting the low cost of daily living have implications for a person's desire to urbanize. Table 1 shows that the minimum wage for districts/cities in Denpasar City has increased from 2010 – 2020. This indicates that high employment, high labor needs, and rapid industrialization affect the growth of the Gross Regional Domestic Product and indirectly increase the district minimum wage in Denpasar City (Atack et al., 2022).

The findings of this study are consistent with research done in Samarinda, which found that the city's minimum wage significantly and favorably impacts urbanization in Samarinda. This is because, by demand theory (demand), employment depends on the level of societal demand. Furthermore, the district minimum wage is one of the foundations for urbanization, mediated by the need for decent work and economic, social, and cultural needs. The district's high and low minimum wage has implications for socioeconomic status, thus contributing to the actions chosen by a person (Suffina & Suharto, 2022). The district minimum wage also contributes to reducing economic inequality, and this is because the better a person's capabilities are, the dominant person is looking for a more decent job and looking for a company/job that has a high district minimum wage as a result of which to be able to get the desired wage, someone urbanizes to improve the economy and reduce economic inequality. The study proved in Brazil that economic inequality could be reduced by increasing the district minimum wage by 45% (Engbom & Moser, 2021)

An increase in district minimum wages can contribute to urbanization by attracting workers to urban areas for better economic opportunities, improved quality of life, and upward mobility. There are many factors that cause urbanization to be affected by district minimum wages including economic opportunities, higher minimum wages attract workers to urban areas, as they seek better job prospects and higher incomes. When districts raise their minimum wages, it can increase employment and economic opportunities, particularly in sectors that rely heavily on low-wage labor, such as retail, hospitality, and service industries. This influx of workers contributes to urbanization by driving population growth in cities. The development of small and small businesses (MSMEs) also contributes to opening job opportunities that indirectly bring people to urbanize to meet their needs. In line with opinions and research that state that a place or region's level of urbanization will rise dramatically in proportion to its MSEMSE. Urbanization is a crucial driver of economic modernization and growth, a global socioeconomic development trend that cannot be stopped (Cai et al., 2020; Dustmann et al. & vom Berge, 2022; Fedorets & Shupe, 2021).

Then, factors such as skill acquisition, upward mobility, and higher minimum wages can incentivize workers to acquire new skills and improve their qualifications to access better-paying jobs. This process of upskilling and acquiring higher education often occurs more readily in urban areas, where educational institutions, training centers, and diverse job opportunities are concentrated. Consequently, increasing district minimum wages can promote urbanization as individuals seek to enhance their skills and prospects (Dustmann et al., 2022; Engbom & Moser, 2022a; Zhang, 2018). Furthermore, labor market competition and a rise in minimum wages can also increase labor market competition. Employers may face challenges hiring and retaining

workers due to higher labor costs. To attract and retain employees, businesses may locate in urban areas with larger labor pools and a diverse workforce. This trend can contribute to urbanization as companies establish their operations in cities to tap into the available labor force (Hopenhayn et al., 2022; Kurniawan et al., 2021). Thus, urbanization activities are indirectly influenced by the district minimum wage; the higher the value of this wage, the higher the urbanization.

Urbanization in a region is strongly influenced by labor force participation (X_3), as evidenced by the results of the analysis showing a statistical t value of 4,688 with a probability value of 0.002 ($p < 0.05$), which indicates that labor participation has a significant partial effect in influencing urbanization. This indicates that urbanization is closely related to the need for decent work, increasing the need for a large workforce and massive industrialization. The high rate of urbanization in Denpasar City directly affects the amount of labor needed, contributing to increased participation of job seekers from various sources. In line with research in Kenya, we found a positive and substantial relationship between urbanization and increased local labor force participation. Economic growth in an area, especially in the city district, is very dependent on economic growth, the amount of infrastructure, and the creative economy that can open high job opportunities, so these factors make some urbanize (Galenson, 2022; Hopenhayn et al., 2022; Pilipiec et al., 2021; Y. Zhang et al., 2022). Employment opportunity is the number of positions open to the labor force looking for work or a situation that indicates the number of positions still unfilled and available for applicants (M. Chen et al., 2023; Jardim et al., 2022; D. Zhang, 2018). Neoclassical theories assume that supply and demand for labor are always equal. The equilibrium point is when there is an equal power supply to the demand. There is no unemployment when the supply of labor meets the demand. Its foundation is the Human Capital Model's core tenet (Hopenhayn et al., 2022; Ramadhan et al., 2023). According to this hypothesis, the desire to relocate is motivated by the need to find higher-paying jobs.

Labor force participation is greatly influenced by urbanization, as cities offer a variety of opportunities and resources that attract individuals to find work. Several factors support urbanization, which has implications for increasing labor force participation in urban areas. By meeting infrastructure needs, facilitating skills development, encouraging job creation, ensuring affordable housing, and providing social safety nets, labor force participation has increased, which has implications for urbanization activities in Denpasar City.

In the process of urbanization, labor force participation is influenced by various determinants, including (a) job availability; urban areas tend to have a more diverse and robust job market than rural areas. The concentration of industries, businesses, and services in cities creates a broader range of employment opportunities, attracting individuals to participate in the labor force. (b) For higher wages, urban areas often offer higher wages and better working conditions than rural regions. This wage differential serves as a significant pull factor, encouraging individuals to move to cities and actively participate in the labor force. (c) Education and skills: Urban centers usually have better access to educational institutions, vocational training centers, and skill development programs. This enables individuals to acquire the necessary qualifications and skills demanded by urban job markets, increasing their likelihood of participating in the labor force (Anita & Sentosa, 2021). (d) Infrastructure and amenities: Urban areas typically have superior infrastructure, including transportation networks, healthcare facilities, and social amenities. These amenities enhance the overall quality of life and make cities more attractive to individuals seeking employment, thereby increasing labor force participation; dan (e) networking and social connections: cities offer more excellent networking opportunities and social connections than rural areas. The concentration of people from diverse backgrounds facilitates professional networking, knowledge sharing, and collaboration, which can lead to increased employment prospects and labor force participation (Galenson, 2022; Hopenhayn et al., 2022). Thus, labor force participation can affect urbanization directly and indirectly.

Finally, the results of simultaneous testing between gross regional domestic product (GRDP), city minimum wage (CMW), and labor force participation obtained an F-count value of 2955.219 with a probability of 0.000 ($p < 0.05$); thus, these three variables together affect the occurrence of

urbanization in Denpasar city. Then, the results of the examination of the strength of the relationship with the coefficient of determination test (R^2) obtained an Adjusted R Square value of 0.999 (99.9%), which indicates that gross regional domestic product, city minimum wage and Labor Force Participation have a strong relationship in influencing urbanization, while other variables influence 0.1%. This study's results align with several other studies, including those that discovered that urbanization is positively impacted by gross regional domestic product (Hong et al., 2021; Kurniawan A. et al., 2021; Siregar et al., 2020), city minimum wage (Dustmann et al., & vom Berge, 2022; Engbom & Moser, 2022b; Jardim et al., 2022; Suffina & Suharto, 2022) and Labor Force Participation (Galenson, 2022; Ginting et al., 2021; Sato & Shiraishi, 2020; Winkler, 2022).

Gross regional domestic product, city minimum wage, and labor force participation are interconnected factors influencing urbanization. A strong GRDP, a reasonable minimum wage, and increased labor force participation can stimulate urbanization. The determining factors that cause these three determinants to affect urbanization include the following. On the variable, gross regional domestic product is supported by (a) economic growth, and higher GRDP indicates economic growth and development in a region, which attracts investment and job opportunities. Urban areas tend to have higher GRDP than rural areas, leading to increased urbanization (Hakim et al., 2022; Li et al., 2022); and (b) infrastructure development: higher GRDP enables the development of better infrastructure, including transportation, housing, healthcare, and education facilities.

Improved infrastructure attracts people to urban areas and supports urbanization. Then, city minimum wage (CMW) is supported by (a) income disparity; setting a higher minimum wage in cities can help reduce income disparity by providing workers with a decent standard of living. This can attract workers from rural areas to urban centers, contributing to urbanization; and (b) improved living conditions: a higher minimum wage enables workers to afford better housing, healthcare, education, and other amenities in urban areas. This, in turn, supports urbanization by making cities more attractive places to live and work. Last, on Labor Force Participation Influenced by (a) job opportunities, urban areas generally offer more job opportunities than rural areas. Higher labor force participation in cities can lead to increased urbanization as people migrate in search of employment and economic opportunities. (b) Skill development: Urban areas often provide better access to education, training, and skill development opportunities. This can attract individuals seeking to improve their skills and increase their employability, further supporting urbanization. The contribution of these three variables simultaneously has a very significant effect on increasing urbanization in Denpasar City.

4. CONCLUSIONS

Urbanization has an essential role in the progress and growth of the economy in an area. The higher the level of urbanization, the more progress an area makes and changes continuously. In these findings, we confirm that the factors or determinants influencing urbanization in Denpasar City for a decade (2010–2020) were influenced by gross regional domestic product, municipal minimum wage, and labor participation simultaneously and partially, with a relationship strength of 99.99%. Thus, it is essential to focus on these three variables to increase economic growth, especially in Denpasar City. The policy implications of this study are as follows: (a) governments can focus on promoting economic growth through policies that encourage investment, entrepreneurship, and innovation. They can also prioritize infrastructure development in urban areas to support urbanization. (b) Governments can review and adjust minimum wage policies to ensure that workers receive fair labor compensation. It is essential to strike a balance between providing a liveable wage and avoiding potential negative impacts on businesses and employment opportunities. (c) Governments can invest in job creation initiatives, promote skill development programs, and improve access to quality education and vocational training, which can enhance labor force participation and contribute to urbanization. Further research is needed to determine the sectors that have a significant impact in supporting these three variables to boost economic growth and reduce poverty in the region.

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