
Factors Affecting the Status of Precarious Employees among Young Workers in the Formal Sector in Central Java Province 2024

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Abstract

The process of job informalization is a condition in which the previously stable formal sector is now increasingly resembling the informal sector, which lacks job security and offers low wages. This phenomenon is consistent with precarious employment, which refers to jobs that lack job stability, social security, and decent income. Young people tend to have limited skills and work experience. This forces young people to accept precarious employment as their only option. This study aims to provide an overview and to identify and analyze the social factors, experiences, and skills of individuals, as well as the socio-economic factors of regencys/cities that influence the precarious employment status among young workers in the formal sector in Central Java in 2024. The data used is sourced from the August 2024 Sakernas survey. The analysis method employed is multilevel binary logistic regression. The results of the study indicate that variables related to experience and skills factor, such as educational level, participation in training, and job tenure, moreover social factor such as marital status, occupation, and union membership, as well as the regional minimum wage (UMK) from socioeconomic factors, significantly influence the precarious employment status of young workers in the formal sector in Central Java Province in 2024.

Keywords: precarious employment, formal sector, youth, multilevel.

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1. Introduction

Goal 8 of the Sustainable Development Goals (SDGs) emphasizes the importance of inclusive and sustainable economic growth and the creation of decent jobs. The International Labour Organization (ILO) introduced a decent work agenda based on four main pillars, namely fulfillment of rights in the workplace, provision of full and productive employment, social protection, and strengthening of social dialogue. Various substantive elements have been

developed to measure the achievement of these four pillars. Stability and security of work are among the key elements because they provide certainty regarding the continuity of employment relationships as well as protection against health risks, accidents, and economic uncertainty, thereby contributing to increased productivity and the long-term welfare of workers.

In developing countries, the characteristics of decent work are greatly influenced by the structure of the labor market, which is generally divided into the formal and informal sectors. According to La Porta & Shleifer (2014), the formal sector is considered the ideal form of employment because it offers job security and better wages. However, the reality does not always reflect ideal work quality. Data from the Central Bureau Statistics (BPS, 2024b) shows that 48.44 percent of formal workers receive wages below the Provincial Minimum Wage (UMP), and 49.60 percent do not receive social security. Additionally, although the formal sector is synonymous with job stability, Government Regulation No. 35 of 2021 allows for labor flexibility, which has led to an increase in non-permanent workers, such as fixed-term contract workers (PKWT) and outsourced workers. As a result, many workers do not receive protection for their basic rights, especially regarding job stability and access to social security. This phenomenon is known as precarious employment. According to Tjandraningsih et al. (2010), precarious employment is a non-standard employment relationship characterized by a lack of job stability, inadequate wages, and no social security. This condition makes workers more vulnerable because they do not receive protection for their basic rights and threatened with material deprivation.

Based on research by Pontoh & Projo (2021), young people are the group most vulnerable to precarious employment. Although the younger generation today has a higher level of education and qualifications than previous generations, they face more insecure work situations due to an increasingly flexible and minimally regulated labor market (Stuth & Jahn, 2020). The job uncertainty faced by young workers impacts their well-being and difficulties in planning for the future (Cuervo & Chesters, 2019). Although often associated with the informal sector, precarious employment is also widely found in the formal sector. In fact, the condition can be worse because workers in the formal sector are still bound by regulations, such as the obligation to pay income tax, but do not get the rights and protection they deserve.

BPS (2024a) divides the Indonesian labor market segmentation into formal and informal sectors based on primary employment status. A person is categorized as working in the formal sector if they have an entrepreneurial status as employer assisted by permanent and paid worker or as employee. Conversely, workers with own account worker, employer assisted by temporary worker/family worker/unpaid worker, casual employee in agriculture or non-agriculture, and unpaid family workers are classified in the informal sector.

Meanwhile, the identification of precarious employment focuses on individuals who are employed as workers/employee. This is in line with the aspect of job stability, given that the continuity of the employment relationship is determined by the employer. This means that the length of a worker's employment largely depends on the decisions and needs of the employer. In Sakernas, precarious employees can be identified as employee with fixed-term employment

contracts (PKWT), employee with verbal employment contracts, and casual employee in both the agricultural and non-agricultural sectors. However, the category of casual employee is included in the informal sector, so to identify precarious employees in the formal sector is using category employees.

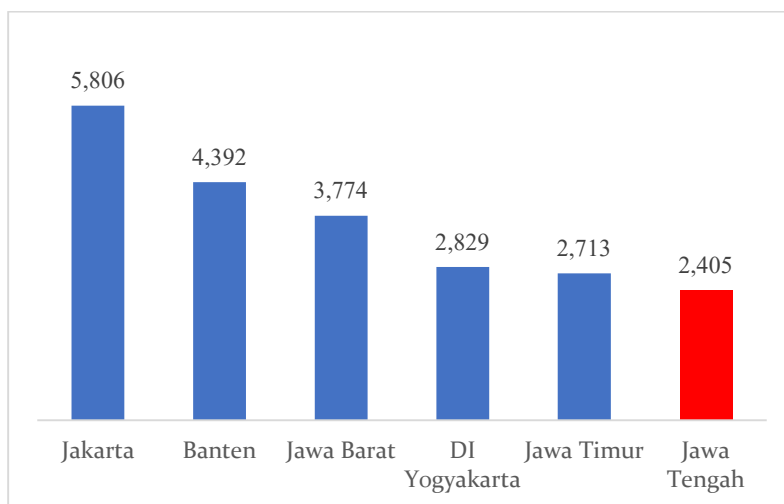


Figure 1. Average Wages for Employees by Province on Java Island in 2024 (millions of rupiah)
Source: BPS (2024)

Java island is the center of population concentration and the main destination for youth migration. High population density creates major challenges in providing employment, especially in the formal sector, which has limited capacity. This encourages young people to start their careers in the formal sector as contract workers or PKWT, which is classified as precarious employment (Fahmi et al., 2021). This condition is often assumed a steppingstone towards ideal employment in the formal sector. Based on data from BPS (2024), Central Java Province has the second highest number of people aged 15-29 years working as employees on the island of Java, namely 2.69 million people. However, the average net wage received by formal workers in the province is the lowest in the Java region. Foti (2017) emphasizes that workers in precarious employment situations tend to receive low wages, which ultimately increases the risk of economic uncertainty and the likelihood of being trapped in poverty.

Vosko (2006) states that precarious employment is influenced by micro factors at the individual level, such as skills and resources. In addition, there are macro factors related to the work environment and policies in a particular region. Through labour relations, institutions or governments shape the structure of employment opportunities through regulations, social protection, and freedom of association, while individuals respond based on their capacity.

Several previous studies have identified factors that are thought to influence the status of precarious employment among workers, namely gender, marital status (Sapkal & Sundar, 2017), education level (Broughton, 2016), participation in training (Utomo & Sugiharti, 2022), unemployment history, employment sector, length of service, and union membership

(Baranowska & Gebel, 2010). In addition, several studies also analyze regional factors, such as unemployment rates, regional average wages, and economic growth (Chung & van Oorschot, 2012). However, most of these studies are on a national scale and do not highlight more specific cohorts, such as young workers in the formal sector. Based on this background, this study aims to obtain an overview of precarious employment among young workers in the formal sector based on their social factors, work experience, skills, and the socioeconomic characteristics of regencies/cities in Central Java Province in 2024. In addition, this study seeks to identify the variables of related factors that influence the status of precarious employees and the tendency of young formal sector workers to be in precarious employment.

2. Research method

2.1. Scope of Research

Krumboltz (1976) introduced the Social Learning Theory of Career Decision Making, positing that career choices are shaped by the interaction between internal factors (cognitive abilities) and external conditions (economic environment), which collectively establish an opportunity structure for individuals. In practice, decision-making is often constrained by limited information and cognitive capacity. This aligns with Gary S. Becker's (1962) Human Capital Theory, which argues that the accumulation of education and skills is essential for accessing decent work. Ultimately, a deficit in human capital restricts an individual's range of choices, forcing them into precarious employment as a result of their weakened bargaining position in the labor market.

According to Rodgers & Rodgers (1989), precarious employment is defined as work that deviates from stable and secure standards, characterized by job instability, lack of control over working conditions, insufficient legal protection, and low wages. This theoretical framework establishes a spectrum of vulnerability that is not exclusively confined to the informal sector; rather, precariousness can also occur within the formal sector through short-term contracts, outsourcing, or lack of social benefits. Despite these conceptualizations, a universal definition or measurement for precarious employees has yet to be established internationally, as characteristics and labor dynamics vary significantly across different countries.

This study is a quantitative study covering the entire region of Central Java Province in 2024. The unit of analysis used is working youth, namely residents aged 16-30 years whose main employment status is laborer/employee/staff. According to Stuth & Jahn (2020), young people are the group most vulnerable to precarious employment, as they often utilize it as a stepping stone to avoid unemployment. The data used in this study is secondary data sourced from the August 2024 Sakernas data and BPS publications. The dependent variables in this study were determined using the August 2024 Sakernas questionnaire, specifically a combination of questions R14.A and R26.A. Question R14.A contains information about primary employment status, while R26.A asks about the existence of an employment agreement or contract. A worker whose main employment status is as an employee will be categorized as a precarious employee in the formal sector if they

have a fixed-term employment agreement, a verbal employment contract, or even no employment agreement/contract at all. Conversely, workers who do not meet these conditions are classified as non-precarious employees in the formal sector. The independent variables used in this study are listed in Table 1.

Table 1. List of variables and categorizations used in the study

Variable	Notation	Category
Variable Independent Level 1		
Education Level	X_{10}	Less than High School University*
Marital status	X_{20}	Unmarried Married*
Training	X_{30}	Never Ever Followed*
Formal Work Experience	X_{40}	Worked Never worked*
Occupation	X_{50}	Industry Non-industry*
Union Membership	X_{60}	No Member*
Job Tenure	X_{70}	-
Variable Independent Level 2		
Unemployment Rate (TPT)	Z_{01}	-
Minimum Wage (UMK)	Z_{02}	-
GDP Growth Rate (PE)	Z_{03}	-

Description: *Reference category

2.2. Methodology

The analytical methods used in this study were descriptive and inferential analysis. Descriptive analysis aims to provide a detailed overview of precarious employee among young workers in the formal sector using tables and maps. Furthermore, inferential analysis was used in the form of multilevel binary logistic regression with random intercepts to identify factors that influence the status of precarious employee among young workers in formal sector. This study utilizes data from the August 2024 Sakernas, which employed a stratified two-stage sampling design. The data processing does not utilize weighting due to the large sample size, which aligns with the assumption of a normal distribution. In the inferential analysis, representative samples are used because the fundamental concept of statistical inference relies on a sample's ability to accurately reflect and generalize the characteristics of the entire population. The stages of multilevel binary logistic regression are calculating the intraclass correlation coefficient (ICC), testing the significance of the random effect, testing the significance of the parameters simultaneously and partially, and then interpreting the odds ratio. The general form of a multilevel binary logistic regression model with a random intercept is as follows:

$$\ln\left(\frac{1-\pi_{ij}}{\pi_{ij}}\right) = \gamma_{00} + \sum_{q=1}^Q \gamma_{0q} Z_{qj} + \sum_{p=1}^P \gamma_{p0} X_{pij} + u_{0j} \quad (1)$$

Description:

- γ_{00} : intercept
 γ_{p0} : parameter for the p -th independent variable at level 1, where $p = 1, 2, \dots, P$
 γ_{0q} : parameter for the q -th independent variable at level 2, where $q = 1, 2, \dots, Q$
 X_{pij} : the p -th independent variable at level 1 for individual i in group j at level 2
 Z_{qj} : the q -th independent variable at level 2 for group j
 u_{0j} : random effect for the j -th group at level 2
 i : individual at level 1
 j : group at level 2

3. Results and Discussion

3.1. Overview of Precarious Employment Among Young Workers in the Formal Sector Based on Related Factors

Based on the results of the August 2024 Sakernas data processing, the percentage of young workers in the formal sector who are precarious employees in Central Java Province reached 84.67 percent. Meanwhile, the remaining 15.33 percent of young workers in the formal sector are non-precarious employees. Then, to obtain an overview of the factors related to precarious employee status, Table 2 is presented as follows:

Table 2. Percentage status of precarious employee according categorical variables

Variable	Category	Percentage	Precarious Employee (PE) Status	
			PE	NON-PE
Education Level	Less than High School	83.40%	86.71%	13.29%
	University*	16.60%	74.44%	15.56%
Marital status	Unmarried	72.28%	85.95%	14.05%
	Married*	27.72%	81.35%	18.65%
Training	Never	64.94%	86.27%	13.73%
	Ever Followed*	35.06%	81.71%	18.29%
Formal Work Experience	Worked	6.23%	89.59%	10.41%
	Never worked*	93.77%	84.35%	15.65%
Occupation	Industry	45.50%	83.54%	16.46%
	Non-industry*	54.50%	85.62%	14.38%
Union Membership	No	93.27%	86.27%	13.73%
	Member*	6.73%	62.53%	37.47%

Source: Sakernas (August 2024), processed

Based on social factors, most young people are unmarried, work in non-industrial fields, and are not members of labor unions. These characteristics also make young people vulnerable to becoming precarious employees. Popelo et al. (2021) state that technological developments in the service sector have encouraged the emergence of non-standard jobs, including precarious

employment. Meanwhile, Kachman (2002) emphasizes that the lack of information about the role of labor unions makes the younger generation reluctant to join.

Then, when viewed from the factors of experience and skills, the characteristics of young people with a high school education level or below, who have never participated in training, and have never worked formally, are vulnerable to becoming precarious employees. This is because workers with low knowledge and skills have low bargaining power in the eyes of employers. Furthermore, they are considered to lack qualifications, so they are more likely to obtain jobs of poor quality.

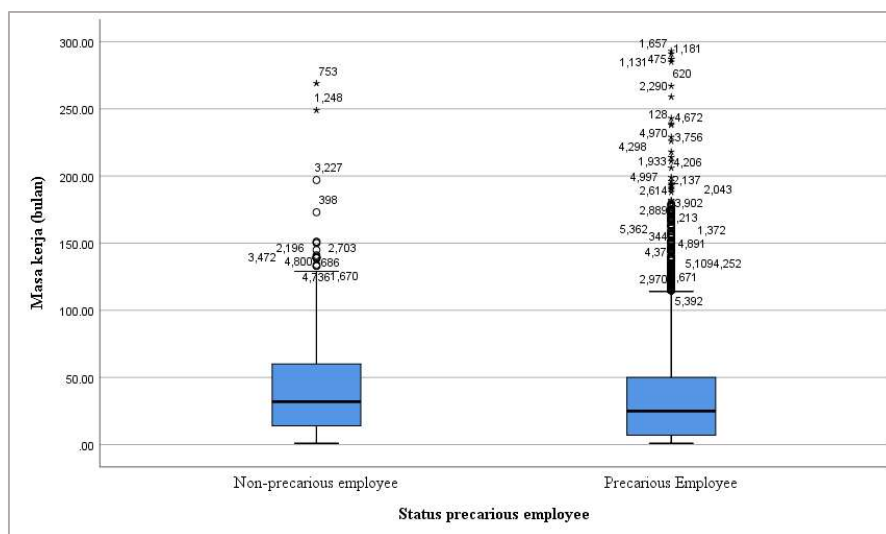


Figure 2. Distribution of job tenure according to precarious employee status among young workers in the formal sector in Central Java in 2024 (Month)

Source: BPS (2024)

Based on the median value, the distribution of job tenure in both the precarious and non-precarious employee groups tends to skew to the right. The median job tenure for the non-precarious group is 32 months, while for the precarious group it is 25 months. These findings indicate that precarious employee status is generally associated with a relatively short employment duration.

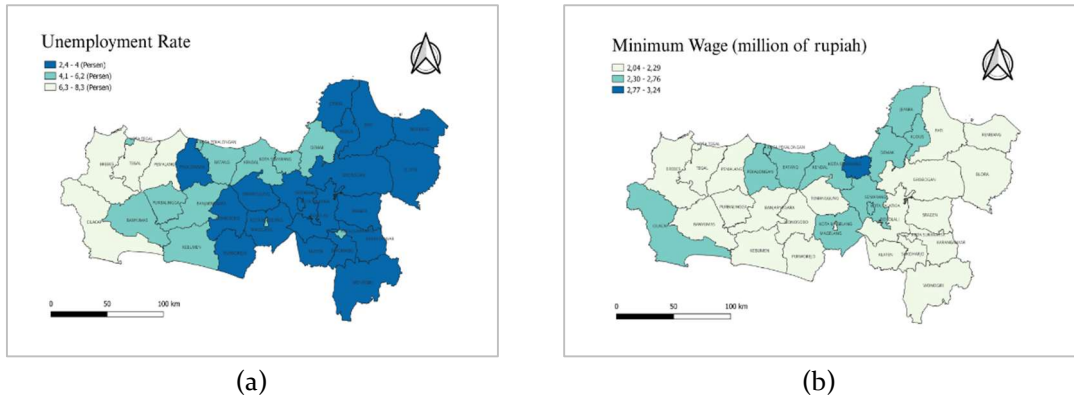


Figure 3. Distribution Map of : (a) Unemployment Rate; and (b) Minimum Wage by Regency/City in Central Java 2024

Source: BPS (2024)

Figure 3. (a) shows the distribution of unemployment rate (TPT) by regency/city in Central Java Province in 2024. The categorization of the percentage of precarious employees was carried out using the natural breaks method and divided into 3 categories. Based on the distribution map, most of the eastern part of Central Java has a low TPT, urban areas tend to have a moderate TPT because the labor market is more competitive, while regencys show varied results with four regencys (Pemalang, Tegal, Cilacap, and Brebes) having a high TPT. Meanwhile, the distribution pattern of the minimum wage (UMK) size in Figure 3. (b) tends to be homogeneous, with most regions falling into the UMK category of 2.04-2.29 million rupiah. Some areas with industrial potential, such as Jepara and Kudus, have a moderate UMK category. Meanwhile, Semarang City is the only region with a high UMK category.

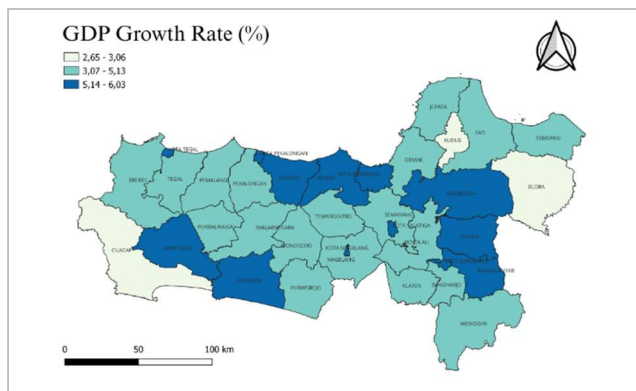


Figure 4. Distribution of GDP Growth Rate by Regency/City in Central Java in 2024 (Percent)

Source: BPS (2024)

Based on Figure 4, economic growth in Central Java is generally in the moderate category, with the central and eastern regions showing higher achievements due to the support of industrial, trade, and service centers. In contrast, several regions still record low growth. These

differences are influenced by variations in economic activity, concentration of productive sectors, trade accessibility, and regional policies in supporting the business climate.

3.2. Factors Affecting Precarious Employment Among Young Workers in The Formal Sector

After examining the overview of precarious employees among young workers in the formal sector based on related factors, the next step is conducting an inferential analysis using the multilevel binary logistic regression method. The analysis begins with the calculation of the ICC as an initial measure to identify the proportion of variation explained by group structures within the population. The resulting ICC value is 0.066, indicating that 6.6 percent of the variation in precarious employment status among young workers in the formal sector in Central Java Province is attributable to differences in characteristics across regencys and cities.

The next stage is testing the significance of the random effect. Based on the results of the likelihood ratio test, the LR value is 100.63, where $LR > \chi^2_{(0.05;1)} = 3.84$ and the p-value is 0.000, which is less than $\alpha=0.05$. Thus, at the 5 percent significance level, the null hypothesis is rejected. This result indicates that the random effect is statistically significant, meaning there is variation in the status of precarious employees across regencys and cities. Therefore, the multilevel binary logistic regression model is considered appropriate for the data.

The simultaneous parameter significance test was conducted to examine whether the independent variables collectively influence the status of precarious employees among young workers in the formal sector in Central Java Province in 2024. The test results show that the G statistic is 181.44, while the critical value of $\chi^2_{(0.05;10)}$ is 18.31. Since, $G = 181.44 > \chi^2_{(0.05;10)}$, the null hypothesis is rejected. Therefore, it can be concluded that at the 5 percent significance level, at least one independent variable has a significant effect on the status of precarious employees among young workers in the formal sector in Central Java Province.

After conducting the simultaneous parameter significance test, the next step is the partial parameter significance test using the Wald statistic. The results of the analysis show the independent variables that significantly affect the status of precarious employees, as presented in Table 3.

Table 3. Results of Partial Parameter Significance Test

Variable	$\hat{\gamma}$	SE($\hat{\gamma}$)	z-value	p-value
Intercept	1.276	0.880	1.450	0.147
Variabel individual level				
Education Level	0.796	0.101	7.848	0.000**
Marital status	0.181	0.089	2.039	0.041**
Training	0.154	0.084	1.831	0.067*
Formal Work Experience	0.289	0.191	1.517	0.129
Occupation	-0.143	0.087	-1.646	0.099*
Union Membership	0.978	0.125	7.774	0.000**

Variable	$\hat{\gamma}$	SE($\hat{\gamma}$)	z-value	p-value
Job Tenure	-0.003	0.001	-2.679	0.007**
Variable regency/city level				
Unemployment Rate	0.031	0.052	0.599	0.549
Minimum Wage	-0.743	0.302	-2.460	0.014**
GDP Growth Rate	0.102	0.102	0.994	0.320

Description: *) significance at $\alpha = 10\%$, **) significance at $\alpha = 5\%$

Based on the results presented in Table 3, the variables of education level, marital status, union membership, length of service, and minimum wage were found to have a statistically significant effect at the 5 percent level of significance. In addition, training participation and business field demonstrated a significant influence at the 10 percent level. Conversely, the variable of formal work experience did not exhibit a significant effect at either the 5 percent or 10 percent significance level. This result contrasts with the findings of Pontoh & Projo (2021), who argued that work experience significantly increases the likelihood of becoming a precarious employee. Nevertheless, this finding is consistent with the descriptive statistics in Table 2, which indicate that only a small proportion of young workers possess prior formal work experience. Moreover, the proportion of precarious employment between workers with and without such experience in the formal sector does not differ substantially. Therefore, having or lacking prior formal sector work experience does not significantly influence the precarious employment status of young formal sector workers in Central Java Province in 2024.

Meanwhile, at the regency/city socioeconomic level, the variables of the unemployment rate (TPT) and GDP growth rate (PE) were not found to have a significant effect at either the 5 percent or 10 percent significance level. Based on Figure 3. (b) and Figure 4, the distribution patterns of these two variables tend to vary between regencys/cities. The high variability between regions in this relationship pattern can result in an increase in the standard error value in the parameter estimation so that the coefficient is not statistically significant.

3.3. The Tendency of Precarious Employment Among Young Workers in The Formal Sector

To examine the tendency of young workers in formal sector to become precarious employees, the interpretation was conducted using the odds ratio. The odds ratio was derived by exponentiating the estimated regression coefficients. This interpretation was applied to the model in which all variables were statistically significant. Accordingly, the regression coefficients and odds ratios from this model are presented in Table 4.

Table 4. Regression Coefficients and Odds Ratios

Variable	$\hat{\gamma}$	Exp ($\hat{\gamma}$)
Education Level	0.796	2.232
Marital status	0.181	1.199
Training	0.154	1.161

Variable	$\hat{\gamma}$	Exp ($\hat{\gamma}$)
Occupation	-0.143	0.865
Union Membership	0.978	2.679
Job Tenure	-0.003	0.997
Minimum Wage	-0.743	0.489

In terms of social factors, the marital status variable yields an odds ratio of 1.199. This indicates that unmarried young workers are 1.199 times more likely to be in precarious employment compared to their married counterparts, holding other independent variables constant. This finding aligns with the results of Kretsos & Livanos (2016) and reinforced by Sapkal & Sundar (2017), which shows that married workers are less likely to engage in precarious employment, because they are motivated to seek more stable jobs in order to fulfill their household responsibilities.

In addition, the occupation variable demonstrates a regression coefficient of -0.144 , suggesting a negative relationship between employment in the industrial sector and precarious employment status. Thus, young workers in the formal sector employed in non-industrial industries are 1.153 times more likely to be precarious employees compared to young workers employed in industrial sectors, assuming other variables remain constant. According to Foti (2017), industrial workers (industrial proletariat) have been displaced or replaced by service workers (service precariat). This condition is attributed to technological developments that have driven the digital economy.

The last variable of individual social factors is union membership. Based on the results, the union membership variable has a regression coefficient value of 0.985, resulting in an odds ratio value of 2.679. This indicates that young formal sector workers who are not union members are 2.679 times more likely to be precarious employees than young people who are registered as union members, assuming other variables remain constant. These findings are consistent with the study conducted by Anderson & Pontusson (2007), which demonstrates that union membership decreases the likelihood of workers being engaged in precarious employment. Workers who receive institutional support through unions generally possess a stronger bargaining position within the labor market.

Furthermore, the variables from the experience and skill factors that exert a significant influence include education level, training participation, and length of employment. The regression coefficient for the education level variable is 0.803, which corresponds to an odds ratio of 2.232. This indicates that young workers in the formal sector with a high school education or below are 2.232 times more likely to be precarious employees compared to those with a college education, assuming other independent variables remain constant. These results suggest that higher levels of education reduce the likelihood of being in precarious employment. This finding is consistent with Sapkal & Sundar (2017), who reported that higher educational attainment is associated with a lower tendency toward precarious employment, particularly among workers

with shorter tenures. Such evidence reinforces the notion that quality education fosters a skilled and competent labor force, thereby enhancing competitiveness in the labor market (Ali, 2024). Moreover, education plays a crucial role in facilitating the school-to-work transition by equipping young individuals with qualifications that support the establishment of clearer and more stable career trajectories (Masdonati et al., 2022).

The regression coefficient value for the training participation variable is 0.149 with an odds ratio value of 1.160. This means that young people in the formal sector who have never participated in training exhibit a higher propensity toward precarious employment. With an odds ratio of 1.160 for trained individuals becoming precarious, it implies that the lack of vocational preparation and formal training remains a critical driver that pushes young workers into unstable and precarious job arrangements, assuming other variables remain constant. This result is in line with the findings of a study conducted by Utomo & Sugiharti (2022) which shows that workers who have never participated in training are more likely to be precarious employees. Training plays an important role in improving workers' skills, thereby strengthening their competitiveness and bargaining power in the labor market. Additionally, the skills acquired from training reflect an individual's specific competencies, thereby increasing their chances of obtaining more stable employment (Biavaschi et al., 2012).

Then, the job tenure variable is known to have a significant effect on the status of precarious employees with a regression coefficient value of -0.003 and an odds ratio value of 0.997. This means that every 1-month increase in job tenure will reduce the tendency of young workers in the formal sector to become precarious employees by 0.997 times, assuming other variables remain constant. This finding is in line with the results of Booth et al. (2002) which show that length of employment is an important factor in the transition from temporary to permanent employment. This result is also supported by the findings of Jetha et al. (2020), which show that workers with shorter employment periods tend to face higher job uncertainty, especially in navigating the work environment and obtaining career development opportunities.

Furthermore, in terms of the socioeconomic factors of the regency/city, the only variable that had a significant effect was the minimum wage. The odds ratio value of the minimum wage variable was 0.489, which means that every increase of 1 million in the minimum wage will reduce the tendency of young people working in the formal sector by 0.498 times to become precarious employees, assuming that other variables remain constant. This result aligns with the research by Sugiharti & Utomo (2022), which shows that regions with high average wages will reduce the tendency for precarious employment in those regions. This finding is also supported by Hakansta et al. (2025), who state that minimum wage policies can increase financial compensation for precarious employees, although their impact on employment security tends to be small. While this result contradicts labor supply theory, which suggests higher wages draw more people into the market, it strongly supports labor demand theory by highlighting how mandated rates can exceed a firm's financial capacity (Septiana & Utomo, 2025). Consequently, the minimum wage

serves as a vital tool for enhancing financial compensation, even if its broader influence on overall employment security remains limited.

4. Conclusion and Recommendations

Based on the results and discussion, the following conclusions can be drawn:

Approximately 84.67% of young formal workers in Central Java are classified as precarious, indicating a significant lack of decent and stable employment. This condition is most prevalent among those with a high school education or lower, suggesting that current compulsory education policies have not yet provided sufficient qualifications for secure work. Notably, longer tenure does not guarantee improved status, as even workers with over 100 months of experience remain precariously employed. Key risk factors include being unmarried, lacking professional training, working in non-industrial sectors, and having no labor union membership. However, regional data shows that higher minimum wages significantly reduce the tendency for young workers to fall into precarious employment.

To reduce the tendency toward precarious employment, young workers must prioritize market driven skills and active union participation to strengthen their individual and collective bargaining power. Simultaneously, the government should implement link-and-match training programs and tighten contract supervision through rigorous labor inspections to prevent exploitation. It is also essential for the government to stimulate emerging digital economic potentials to ensure the creation of high quality and sustainable job opportunities. Future research should build on these findings by analyzing contract duration and renewal patterns to provide a more granular understanding of job insecurity dynamics among the youth.

Study Limitation

This study classifies formal and informal sectors based on BPS standards, where the formal sector comprises both employers (self-employed with permanent employees) and employees. Referring to the BPS and ILO (2013) frameworks, the identification of precarious employment in this research is limited to the paid employment group, specifically employees and casual employees. This is due to the lack of standardized precarious employment classifications for other categories, such as own-account workers, employers assisted by temporary/unpaid workers, and unpaid family workers. Consequently, the unit of analysis for precarious employees within the formal sector in this study focuses exclusively on the employee category.

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