

Analysis of the Effect of BPJS Ketenagakerjaan Death Benefits on the Socio-Economic Conditions of Heirs of Participants in the Informal Sector

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ABSTRACT

Informal workers constitute a major segment of Indonesia's labor force and remain highly vulnerable to income shocks due to limited social protection coverage. The Death Benefit Program (*Jaminan Kematian/JKM*), administered by *BPJS Ketenagakerjaan*, serves as a key social protection mechanism for informal workers and their survivors. Using a mixed-methods approach, this study examines the effects of *JKM* benefits on survivors' socioeconomic conditions and compares benefit utilization between rural and urban areas. Quantitative analysis based on the Basic Needs Approach and SEM-PLS reveals that *JKM* benefits have a positive and significant effect on all basic needs dimensions in both settings. The impact on food security is more pronounced in rural areas, whereas the effect on clothing needs is stronger in urban areas, reflecting differences in socioeconomic structures. Qualitative findings grounded in the Theory of Planned Behavior indicate that educational scholarships enhance educational continuity by strengthening attitudes, social norms, and perceived behavioral control. These results underscore the importance of region-sensitive social protection design for informal workers. *SWOT* analysis was used in this study to develop recommendations for *BPJS Ketenagakerjaan* in providing policies and education to improve the effectiveness of Death Benefit utilization by heirs in urban and rural areas, which resulted in a growth-oriented strategy in the form of efforts to increase social security literacy among young people, strengthen access to information and infrastructure in rural areas, and design contextual, region-based social protection policies to improve the effectiveness of *JKM* benefits utilization.

Keywords: Basic Needs; *BPJS Ketenagakerjaan*; Death Benefits; Educational Continuity Informal Workers; Social Protection.

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INTRODUCTION

Social security is protection provided by the state to ensure that every citizen has a sense of security and welfare in the face of social and economic risks, such as work accidents, death, old age, and job loss (Roberts, 2015; Song, 2015; Youngs, 2015). The concept of social security first appeared in the United States in the Social Security Act of 1935 as a response to the effects of the Great Depression. Since then, the concept of social security has continued to develop and has been adopted by many countries around the world, including Indonesia. In Indonesia, the implementation of social security is regulated in Law Number 40 of 2004 concerning the National Social Security System (*Sistem Jaminan Sosial Nasional* or *SJSN*) and is carried out by two main institutions, namely *BPJS Kesehatan* and *BPJS Ketenagakerjaan*. *BPJS Kesehatan* manages National Health Insurance (*Jaminan Kesehatan Nasional*), while *BPJS Ketenagakerjaan* manages Work Accident Insurance (*Jaminan Kecelakaan Kerja* or *JKK*), Death Insurance (*Jaminan Kematian* or *JKM*), Old Age Insurance (*Jaminan Hari Tua* or *JHT*), Pension Insurance (*Jaminan Pensiun* or *JP*), and Job Loss Insurance (*Jaminan Kehilangan Pekerjaan* or *JKP*) (BAAN, 2023; Fatimah et al., 2021; Kurniati & Maulana, 2024; Susanti et al., 2022).

One of the biggest challenges in implementing social security in Indonesia is expanding protection to informal sector workers. *BPJS Ketenagakerjaan* is expected to provide protection and expand the coverage of Employment Social Security (*Jaminan Sosial Ketenagakerjaan*), which should not only focus on the formal sector but also on the informal sector, which is the dominant segment of workers. Based on data from the Indonesian Central Statistics Agency

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(*Badan Pusat Statistik* or *BPS*), workers with employed status are self-employed without workers or employees, self-employed assisted by temporary workers or employees, freelance workers in the agricultural and non-agricultural sectors, and family workers. According to data from the Central Statistics Agency (*BPS*), workers in Indonesia are dominated by those in the informal sector (59.17%) rather than the formal sector (40.83%). It is known that most informal workers in Indonesia live in rural areas, accounting for 55.88%, with the rest living in urban areas. Furthermore, in September 2024, the national poverty line per capita was recorded at Rp595,242 per month. However, it should be noted that consumption occurs in the context of households, not per person. The average poor household consists of 4.71 household members, so the poverty line for one household on a national average is Rp2,803,590 per month. The poverty line differs for each province, as the poverty line and average number of poor household members vary by province. For example, the household poverty line in DKI Jakarta is IDR 4,238,886, in East Nusa Tenggara (*Nusa Tenggara Timur* or *NTT*) it is IDR 3,102,215, and in *Lampung* it is IDR 2,821,375. These differences reflect differences in price levels, living standards, and consumption patterns in each region (*BPS* 2025).

To reduce this vulnerability, the Employment Social Security Agency (*BPJS Ketenagakerjaan*) provides a Death Benefit Program (*Jaminan Kematian* or *JKM*) that aims to provide compensation to the heirs of participants who die from causes other than work accidents. Based on Government Regulation (*Peraturan Pemerintah* or *PP*) Number 44 of 2015, *JKM* benefits consist of death benefits of IDR 16,200,000, periodic benefits of IDR 4,800,000, funeral costs of IDR 3,000,000, and a child scholarship of IDR 12,000,000. These benefits were increased through Government Regulation (*PP*) Number 82 of 2019 to a total of IDR 42,000,000, which includes a cash benefit of IDR 20,000,000, a lump-sum periodic allowance of IDR 12,000,000, funeral expenses of IDR 10,000,000, and educational scholarships for participants with a minimum contribution period of three years. However, the effectiveness of this program in minimizing the socioeconomic impact on beneficiary families, particularly in the informal sector, still requires in-depth analysis (*PP* 2019).

Nevertheless, the effectiveness of Death Benefits (*JKM*) on the socioeconomic conditions of heirs needs to be re-examined, especially for informal workers who tend to have no fixed income and minimal protection, as well as differences in context between informal workers in villages and cities, which are important factors. In rural areas, *JKM* benefits may appear significant in nominal terms (the relative value is greater than the cost of living in rural areas), but access to formal financial institutions and financial literacy are still low, limiting the effectiveness of the use of funds. In cities, *JKM* benefits may be used up more quickly due to higher living costs, but financial literacy is higher and access to banks or formal financial programs is more open, allowing for more productive and optimal fund management (Muhammad Mftuhin & Deni Kusmawardani 2022).

The role of *BPJS Ketenagakerjaan* after providing benefits and Death Benefits (*JKM*) is crucial in providing short-term social protection for families of workers who have lost their main breadwinner. The *JKM* program not only helps reduce the sudden financial burden caused by death but also acts as a safety net that prevents families from falling into extreme poverty (Hadianto & Wijaya 2020). In addition, the mechanism of providing gradual benefits, such as scholarships for affected workers' children, strengthens the sustainability of social protection, ensuring that access to education remains guaranteed even in the event of loss of income (Pratama et al. 2021).

The provision of gradual benefits through scholarships by *BPJS Ketenagakerjaan* reflects a holistic approach to social protection, in which long-term support is needed to break the chain of intergenerational poverty. This program not only mitigates the immediate economic impact but also invests in improving the quality of human resources through education (Pratama et al. 2021). The combination of *JKM* and scholarships demonstrates *BPJS*

Ketenagakerjaan's commitment to integrating emergency assistance with sustainable capacity building, which is in line with the principles of inclusiveness and sustainability of the social security system (Hadianto & Wijaya 2020).

Previous research highlights the significance of *JKM* benefits as a short-term social protection mechanism for families who have lost their primary breadwinners. Hadianto & Wijaya (2020) emphasize that the *JKM* program not only alleviates sudden financial burdens but also serves as a safety net preventing families from falling into extreme poverty. Additionally, the inclusion of educational scholarships ensures the continuity of children's education, thereby breaking the cycle of intergenerational poverty (Pratama et al., 2021). However, the effectiveness of *JKM* benefits varies between urban and rural contexts. In rural areas, the nominal value of benefits may be relatively higher compared to the cost of living, yet limited access to formal financial institutions and low financial literacy hinder optimal utilization. Conversely, in urban areas, higher living costs may deplete benefits more quickly, but greater financial literacy and better access to banking services enable more productive fund management (Mftuhin & Kusmawardani, 2022).

During 2023, *BPJS Ketenagakerjaan* paid benefits to participants amounting to IDR 53,513.11 billion for 4,575,307 claims under the Work Accident Insurance (*JKK*), Death Insurance (*JKM*), Old Age Insurance (*JHT*), Pension Insurance (*JP*), and Job Loss Insurance (*JKP*). The benefits paid from 2021 amounted to IDR 42.778 billion, increasing to IDR 53,513.11 billion in 2023, indicating an increase in the number of claims and benefits paid (DP-BK 2023).

Tabel 1. Realization of *BPJS Ketenagakerjaan* Benefit Payments for 2021-2023

Program	2021		2022		2023	
	Rp Billion	Amount	Rp Billion	Amount	Rp Billion	Amount
JKK	1.790,01	234.370	2.391,24	297.725	3.041,60	370.747
JKM	3.164,04	104.769	2.704,95	103.349	3.219,44	152.246
JHT	37.088,36	2.556.757	43.248,26	3.395.961	45.634,64	3.619.708
JP	735,95	142.788	649,42	130.870	1.259,23	195.056
JKP	-	-	44,52	9.794	367,2	237.550
Total	42.778	3.038.684	49.038	3.937.699	53.513,11	4.575.307

Source: Processed from *BPJS Ketenagakerjaan* Annual Reports (DP-BK), 2021-2023

Based on the above description, this study aims to describe the statistical profile of participants in the Death Benefit Program (*Jaminan Kematian, JKM*) at *BPJS Ketenagakerjaan*; analyze the impact of *JKM* on socioeconomic conditions—based on basic needs factors—among beneficiaries in urban and rural areas; examine the effect of *JKM* education scholarships (*beasiswa pendidikan*) on the continuity of education for beneficiaries' children in both settings; and formulate recommendations for *BPJS Ketenagakerjaan* on policies and education to enhance the effectiveness of *JKM* compensation utilization.

This study makes significant contributions to various stakeholders. Theoretically, it enriches public policy and social security research by integrating the Basic Needs Approach (BNA) and Theory of Planned Behavior (TPB) frameworks within Indonesia's social protection context. For *BPJS Ketenagakerjaan*, the findings and strategic recommendations provide a basis for refining the design and implementation of the *JKM* program to better address urban-rural needs differences. For heirs of informal sector participants, it identifies factors influencing benefit utilization, thereby enhancing support for family socioeconomic conditions and children's educational continuity. More broadly, for government and policymakers, the results

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offer references for designing more inclusive, equitable, and sustainable social protection policies to strengthen the national social security system.

METHOD

To answer the research objectives, the researcher used descriptive analysis to describe the profile of JKM participants in *BPJS Ketenagakerjaan*. Structural Equation Modeling (SEM) analysis was used to test the hypothesis of the influence of basic needs using the Basic Needs Approach (BNA), while in-depth interviews were used to analyze educational continuity (Theory of Planned Behavior/TPB) between groups and to compare the differences between heirs in rural and urban areas. Recommendations for *BPJS Ketenagakerjaan* in providing policies and education to improve the effectiveness of Death Benefit utilization by heirs in urban and rural areas will be compiled using the SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis method.

The research was conducted at the *BPJS Ketenagakerjaan* regional office with the highest number of claims in 2024. The focus of inferential testing will be on three regions, namely the Banuspa Region (Bali, Nusa Tenggara, Papua), the Sulama Region (Sulawesi, Maluku), and the West Java Region, with a distinction between urban and rural areas. The research will be conducted from October to December 2025.

Data on participants receiving Death Benefit coverage in the research areas was obtained from the operational reports of the Worker Protection Information System (SMILE) from *BPJS Ketenagakerjaan*. To obtain a descriptive statistical overview of participants in the Death Benefit program (JKM) at *BPJS Ketenagakerjaan*, data was collected from monthly/annual reports on JKM participants, data on compensation claims, education scholarships, and participant contribution records (amount and frequency of payments) in 2024 to analyze variables such as Participation Targets, Participation Realization, participant age at registration, participant wages, and Participation Period. Additionally, from the benefits perspective, there will be data on the number of cases, the amount of benefits paid, the number of children receiving scholarships, and the children's educational levels (elementary school/junior high school/senior high school/higher education). Meanwhile, the questionnaire for the 1-5 Likert scale is based on the Basic Needs Approach (BNA) indicators. The sample uses a purposive sampling method from 120 respondents who are heirs of Death Benefit (JKM) recipients in cities and 120 respondents who are heirs of Death Benefit (JKM) recipients in rural areas. The Basic Needs Approach (BNA) variables are: Food, Shelter, Clothing, Healthcare, Education, Clean water and sanitation.

The Structural Equation Modeling (SEM) analysis technique using the SmartPLS application will be used to examine the effect of JKM benefits on BNA variables with control variables. The proposed model structure is as shown in the following figure.

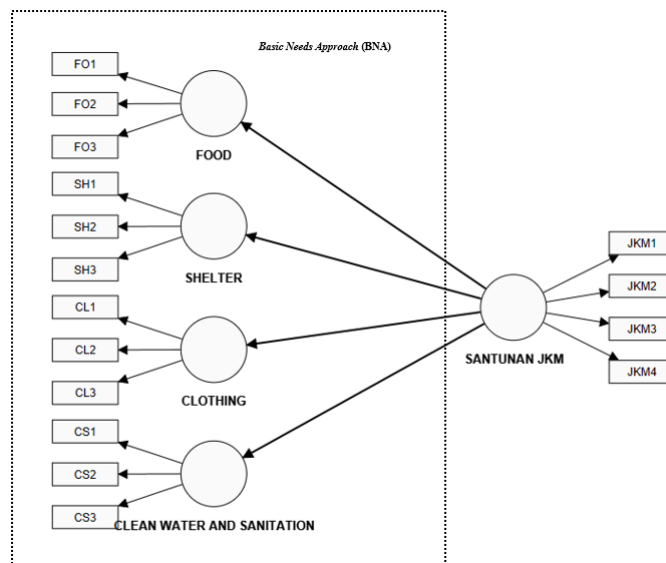


Figure 1. BNA model structure and JKM compensation

Source: Developed by the author for this study

The relationship between variables will be analyzed using the Structural Equation Modeling (SEM) technique with the SmartPLS application. The construction of the relationship between variables is shown in the figure. The hypothesis proposed in this study is H_0 , namely that JKM compensation does not have a positive effect on the Basic Needs Approach variable, and H_1 , namely that JKM compensation has a positive effect on the Basic Needs Approach variable.

In addition to testing the BNA hypothesis, a validity and reliability test will be conducted to see whether the indicators used correctly explain the latent variables, while the reliability test is used to see whether the research instruments used are reliable enough. Each indicator must have a high outer loading value to ensure that they significantly contribute to the construct being measured, with an ideal value above 0.70 (Hair et al. 2017).

To analyze the effect of the Death Benefit (JKM) education scholarship on the continuity of education for children of beneficiaries in urban and rural areas, testing the difference in the average continuity of education between children of beneficiaries in urban and rural areas using the Theory of Planned Behavior (TPB) approach, interviews will be conducted to explore the basic beliefs that shape their intention to continue their education, namely Attitude, Subjective Norms, and Perceived Behavioral Control, using thematic and comparative analysis. These interviews will involve 24 respondents, with 12 respondents from urban areas and 12 respondents from rural areas, and will focus on the beliefs that underlie the intention to continue the education of children of heirs based on the TPB framework, comparing the results in urban and rural areas. The researcher will use thematic analysis based on the steps outlined by Braun and Clarke (2006), namely:

1. Familiarization
2. Coding
3. Generating Themes
4. Reviewing Themes
5. Defining and Naming Themes

Policy/education recommendations from *BPJS Ketenagakerjaan* on the utilization of JKM benefits in both urban and rural areas using quantitative and qualitative synthesis. The quantitative results are derived from survey data and research hypothesis results using the Basic Needs Approach (BNA) from the heirs of Death Benefit recipients and qualitative results from

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structured interviews with heir respondents using the Theory of Planned Behavior (TPB) approach. Recommendations will be compiled using the SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis method. The SWOT analysis will also cover internal factors (which can be controlled by *BPJS Ketenagakerjaan* or are related to its programs) and external factors (the environment beyond the control of *BPJS Ketenagakerjaan*).

Table 2. SWOT Analysis

Internal	S (strength)	W (weakness)
External	O (opportunity)	WO
	Strategy that uses strengths to take advantage of opportunities	Strategies that minimize weaknesses to take advantage of opportunities
	T (threat)	WT
	Strategies that use strengths to overcome threats	Strategies that minimize weaknesses to avoid threats

Source: Developed by the author based on internal and external factor analysis for this study

RESULT AND DISCUSSION

The demographic data of BPU participants shows the distribution of participation based on region and age group, which provides an important picture of the characteristics of informal sector workers in Indonesia. Overall, the total number of BPU participants reached 9,899,338, or 67% of the national target of 14,686,854. This figure shows that BPU participation still faces significant challenges, despite variations in performance between regions. This can be seen in the following table.

Table 3. Demographic Table of Non-Wage Earner (BPU) Participants

No	Regional Office	BPU Participation		
		Target	Actual	%
1	Sumbagut	1.048.784	609.256	58%
2	Sumbagsel	1.035.735	564.707	55%
3	DKI Jakarta	1.674.971	1.190.147	71%
4	Jawa Barat	1.536.325	990.498	64%
5	Jateng & DIY	1.450.123	810.264	56%
6	Jawa Timur	1.623.247	976.477	60%
7	Kalimantan	1.456.866	1.058.699	73%
8	Sulawesi Maluku	1.366.569	924.975	68%
9	Sumbarriau	1.111.846	618.561	56%
10	Banten	1.071.096	850.596	79%
11	Banuspa	1.311.292	1.001.582	76%
12	Lainnya		303.576	0%
Total		14.686.854	9.899.338	67%

Source: Processed from *BPJS Ketenagakerjaan's* Worker Protection Information System (SMILE) data, 2024

When viewed from the perspective of age characteristics, it can be seen that the composition of BPU participants is dominated by the middle productive age group. The 50-56 age group is the largest with 4,794 participants, followed by the 45-50 age group (3,125 participants) and the 40-45 age group (1,895 participants).

An analysis of wage limits shows that the majority of participants (25,902 people or more than 96%) registered wages in the ≤ IDR 1 million category. This pattern shows a strong preference for low contribution payments, namely IDR 16,800 per month (combined JKK and JKM). The group of participants with medium wages (IDR 1-5 million) was very small, and the high wage category was almost non-existent (only 19 participants in the >IDR 5 million category). The dominance of participants in the minimum wage category reflects the actual conditions of informal workers: unstable income, limited purchasing power, and very cautious financial decisions. From a policy perspective, these findings confirm the flat benefit character of the JKM program, where the amount of compensation is not determined by reported wages, so that low-income workers still receive the same level of protection. This is in line with the principle of social adequacy, which is to provide adequate minimum benefits regardless of the amount of contributions.

In terms of duration, JKM membership is dominated by groups with relatively short active periods. There were 4,647 participants with a membership period of ≤6 months, 8,015 participants with a duration of 6 months-1 year, and 8,732 participants in the 1-2 year range. Cumulatively, more than 78% of participants had a membership duration of less than two years. This phenomenon reflects the characteristics of informal workers who tend to have unstable incomes and therefore often experience contribution interruptions. Participants with long durations (>5 years) are very few, for example, only 1,154 participants in the 5-10 year range, and the ≥10 year group is almost non-existent. This low contribution sustainability indicates that perceived behavioral control or the ability to manage routine payments is still a major obstacle for BPU participants.

Tabel 4. JKM Benefits and Children's Scholarships

Regional Office	Case	Benefits (IDR)
Sumbagut	2.969	122.271.500.000
Sumbagsel	1.343	55.609.000.000
DKI Jakarta	1.254	51.123.500.000
Jawa Barat	3.318	135.954.500.000
Jateng & DIY	1.467	59.356.000.000
Jawa Timur	1.792	71.365.500.000
Kalimantan	2.258	93.061.000.000
Sulawesi Maluku	3.758	154.840.500.000
Sumbarriau	1.582	64.353.000.000
Banten	2.617	109.140.500.000
Banuspa	4.420	184.299.500.000
Total	26.778	1.101.374.500.000

Source: Processed from *BPJS Ketenagakerjaan's* JKM claim and scholarship disbursement data, 2024

The dominance of cases in these regions is relevant to the high number of economically vulnerable informal workers and the high number of older productive age groups recorded in the previous demographic analysis. The larger the BPU worker population in a region, the higher the potential risk of death and claims filed by heirs. This variation also reflects the level of participation penetration and public awareness of social protection. For example, the Banuspa region shows the highest number of cases as well as the largest total benefit payments, indicating that BPU participant coverage is quite strong and the program functions optimally as a social safety net. In addition to death benefits, the JKM program provides educational

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scholarships to eligible participants' children. There are 8,743 scholarship recipients, with a total nominal value of IDR 31,793,500,000.

The impact of the Death Benefit Program (JKM) on the socioeconomic conditions of beneficiaries.

Convergent Validity Test

In this study, the questionnaire was based on the Basic Needs Approach (BNA) indicators with the variables of Food, Shelter, Clothing, Healthcare, Education, and Clean Water and Sanitation. The results of the convergent validity test and outer loading parameters for Rural and Urban data can be seen in the following figure.

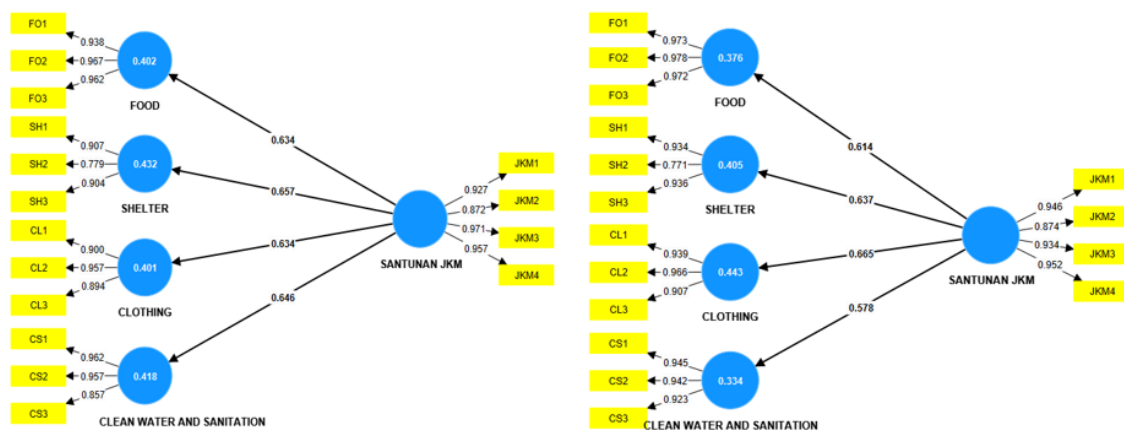


Figure 2. Rural Test Results (left) and Urban Test Results (right)

Source: Output of convergent validity test using SmartPLS

Based on the test results, all statement indicators were declared accurate because the loading factor values reached or were ≥ 0.70 . High loading factor values indicate that these indicators have a strong correlation with the measured construct, so they can be relied upon to measure the variables in the research model.

Discriminant Validity Test

Discriminant validity testing is an important step in measurement model analysis, especially in the context of Structural Equation Modeling (SEM) and Partial Least Squares (PLS). Discriminant validity refers to the extent to which a construct can be distinguished from other constructs in the model. In other words, discriminant validity ensures that the indicators used to measure a construct are not too correlated with indicators from other constructs, so that each construct can be uniquely identified.

In this study, discriminant validity was tested using cross-loading parameters. The study emphasized the importance of discriminant validity in the context of SEM and PLS. They stated that cross-loading is one effective method for assessing discriminant validity, whereby indicators should have higher loadings on the expected construct than on other constructs. This study shows that good discriminant validity not only increases the reliability of the model but also provides a strong basis for data-driven decision making (Henseler et al. 2015).

Table 5. Cross loading for rural data

Variable	Food	Shelter	Clothing	Clean Water % Sanitation	JKM Compensation
FO1	0.938	0.789	0.796	0.738	0.554
FO2	0.967	0.848	0.810	0.822	0.606
FO3	0.962	0.865	0.824	0.797	0.651
SH1	0.830	0.907	0.801	0.800	0.605

Variable	Food	Shelter	Clothing	Clean Water % Sanitation	JKM Compensation
SH2	0.589	0.779	0.606	0.608	0.492
SH3	0.828	0.904	0.883	0.860	0.600
CL1	0.788	0.834	0.900	0.862	0.598
CL2	0.775	0.839	0.957	0.855	0.605
CL3	0.770	0.774	0.894	0.767	0.536
CS1	0.812	0.878	0.887	0.962	0.615
CS2	0.787	0.845	0.876	0.957	0.669
CS3	0.682	0.715	0.741	0.857	0.495
JKM1	0.665	0.659	0.649	0.658	0.927
JKM2	0.464	0.543	0.530	0.547	0.872
JKM3	0.627	0.627	0.595	0.614	0.971
JKM4	0.587	0.611	0.578	0.582	0.957

Source: Output of discriminant validity test (cross-loading) using SmartPLS

Tabel 6. Cross loading for cities data

Variable	Food	Shelter	Clothing	Clean Water % Sanitation	JKM Compensation
FO1	0.973	0.901	0.841	0.752	0.604
FO2	0.978	0.866	0.833	0.717	0.603
FO3	0.972	0.851	0.870	0.729	0.586
SH1	0.896	0.934	0.876	0.837	0.580
SH2	0.644	0.771	0.573	0.515	0.448
SH3	0.818	0.936	0.907	0.855	0.640
CL1	0.821	0.884	0.939	0.839	0.610
CL2	0.796	0.858	0.966	0.854	0.653
CL3	0.834	0.805	0.907	0.755	0.607
CS1	0.764	0.860	0.868	0.945	0.605
CS2	0.661	0.768	0.779	0.942	0.454
CS3	0.674	0.748	0.789	0.923	0.543
JKM1	0.544	0.576	0.602	0.521	0.946
JKM2	0.499	0.497	0.556	0.411	0.874
JKM3	0.613	0.637	0.666	0.604	0.934
JKM4	0.606	0.634	0.632	0.583	0.952

Source: Output of discriminant validity test (cross-loading) using SmartPLS

Based on the table, it can be determined that the cross-loading validity test is fulfilled. This can be seen from the cross-loading value of each statement item for the variable itself being greater than the correlation value of the statement item for other variables. The same thing also occurs in the cross-loading validity test for urban data, which is also fulfilled.

Research Hypothesis Test Results

In this study, hypothesis testing was conducted using the bootstrapping technique in SEM-PLS to test the relationship between the latent variables proposed in the research model. The bootstrapping technique allows researchers to generate sample distributions by repeatedly sampling from the original data, which is then used to calculate inferential statistics such as T-statistics and p-values to test the statistical significance of the relationship between variables in the model.

T-statistic values and p-values are two main indicators used to assess the statistical significance of the paths in the model. T-statistics are used to determine whether the path coefficients are significantly different from zero, where T-statistic values greater than 1.96 are considered significant at a 95% confidence level.

P-values, on the other hand, indicate the probability that the observed results could have occurred by chance. P-values less than 0.05 are usually considered significant, indicating that there is less than a 5% chance that the results occurred by chance (Hair et al. 2017).

Table 7. Path coefficients Rural

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Description
JKM Compensation -> Food	0.634	0.633	0.074	8.563	0.000	Significant
JKM Compensation -> Shelter	0.657	0.659	0.072	9.087	0.000	Significant
JKM Compensation -> Clothing	0.634	0.634	0.076	8.384	0.000	Significant
JKM Compensation -> Clean Water and Sanitation	0.646	0.648	0.075	8.604	0.000	Significant

Source: Output of hypothesis testing (bootstrapping) using SEM-PLS (SmartPLS)

Table 8. Path coefficients Urban

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Description
JKM Compensation -> Food	0.614	0.613	0.075	8.186	0.000	Significant
JKM Compensation -> Shelter	0.637	0.638	0.070	9.039	0.000	Significant
JKM Compensation -> Clothing	0.665	0.665	0.071	9.392	0.000	Significant
JKM Compensation -> Clean Water and Sanitation	0.578	0.582	0.081	7.154	0.000	Significant

Source: Output of hypothesis testing (bootstrapping) using SEM-PLS (SmartPLS)

Based on the results of hypothesis testing with SEM-PLS above, it can be concluded that all hypotheses tested are statistically significant, indicating that JKM compensation has a positive and meaningful effect on the four dimensions of basic needs in both urban and rural areas.

Comparison of Hypothesis Results for Rural and Urban Respondents

Based on the results of hypothesis testing with SEM-PLS presented above, it can be concluded that all research hypotheses are statistically significant. JKM assistance has a positive and significant effect on all dimensions of basic needs, with original sample values ranging from 0.634 to 0.657, indicating a strong relationship. T-statistics values well above the threshold of 1.96 (ranging from 8.384 to 9.087) and p-values of 0.000 confirm that all these relationships are significant at a 99.9% confidence level.

Based on the results of the SEM-PLS hypothesis test on two residential groups (rural and urban), there are several differences that can be analyzed. Although all relationships are significant (p-value < 0.05), the magnitude of the effect (original sample/O) and the strength of the relationship (T-statistics) show interesting variations. First, based on the analysis results, Death Benefit (JKM) assistance was found to have a greater effect on meeting food needs in rural areas (0.634) than in urban areas (0.614), although both areas showed strong statistical significance (with T-statistics of 8.563 and 8.186, respectively). This finding confirms that JKM benefits play a more critical role in maintaining household food security in rural areas. This condition can be explained by the structural characteristics of the rural economy, which is characterized by high dependence on irregular income and the informal sector, as well as limited access to adequate alternative food sources. Rural communities tend to be more vulnerable to economic shocks due to the loss of their main breadwinner, so cash transfers such as JKM benefits are more effective in securing access to staple foods than in urban areas, which have more alternative food sources and social safety nets (Smith and Widyastuti 2020).

Furthermore, the results show that JKM assistance has a greater impact on meeting clothing needs in urban areas (0.665) than in rural areas (0.634), with T-statistic values of 9.392 and 8.384, respectively, indicating very strong significance. These findings indicate that although JKM benefits contribute to the fulfillment of clothing needs in both areas, the impact is more substantial in urban environments. This phenomenon can be explained by differences in consumption patterns and social pressures in urban areas, where clothing serves not only as a basic necessity but also as a symbol of status and social identity. Urban communities tend to pay more attention to style, quality, and fashion trends in their clothing expenditures, so the allocation of JKM assistance is more optimal for meeting these needs. Meanwhile, in rural areas, clothing needs are more focused on functionality and durability, so the impact of the assistance is relatively more limited. These findings reinforce the importance of considering the socio-cultural context when evaluating the effectiveness of social assistance programs (Davis and Lee 2021).

In urban areas, although the assistance remains significant, its impact is relatively lower because most residents already have better access to clean water and sanitation infrastructure through public and private services. JKM assistance in rural areas tends to be allocated for the construction of wells, family toilets, or improving water quality, while in urban areas it is more complementary to existing infrastructure. These findings reinforce the importance of policies that are responsive to geographical disparities in social protection programs (World Bank 2018).

Results of the analysis of data from interviews with heirs in rural areas and analysis of data from interviews with heirs in cities.

In this section, the researcher will make a comparison from two sides, based on the steps outlined by Braun and Clarke (2006), namely Familiarization, Coding, Generating Themes, and Reviewing Themes, and Defining and Naming Themes. Furthermore, the researcher will make comparisons based on the Theory of Planned Behavior (TPB), which shapes their intention to continue their education, namely Attitude, Subjective Norms, and Perceived Behavioral Control.

At the Familiarization stage, both in rural and urban areas, the majority of respondents emphasized the importance of education as an investment in their children's future. In rural areas, respondents such as Lucky Rishan Rafi Parie and Noviyanti Purnama Sari emphasized that education is the main provision for a better future. Meanwhile, in urban areas, Yeni Ida Rohayani and Rasni also emphasized the importance of higher education for a brighter future. Support from the surrounding environment was also acknowledged by both groups, although in urban areas there were some who were less supportive due to reasons of cost or distance.

In the coding stage, the TPB components of Attitude, Subjective Norms, and Perceived Behavioral Control were used to identify important parts of the data. In rural areas, positive attitudes toward education and the economic benefits of JKM scholarships were identified as important factors. In the city, similar attitudes were found, with an emphasis on education as a means to improve economic and social status. Subjective norms in both locations showed support from family and the surrounding environment as the main driving factors.

Themes emerging from interviews in rural areas included social support, economic constraints, and strategies for overcoming constraints. Social support from family and the surrounding environment was a prominent theme, with neighbors and the community providing positive encouragement. In the city, similar themes emerged, with the addition that extended families often had positive views on the importance of education. Economic constraints were a major obstacle in both locations, with high education costs posing a significant challenge.

In the Reviewing Themes stage, the themes of social support, economic constraints, and strategies for overcoming obstacles were evaluated to ensure their relevance and validity. In rural areas, social support from neighbors and the community helped overcome the obstacle of education costs. In urban areas, social support also provided moral and practical motivation,

despite challenges from a small number of less supportive environments. Economic constraints in both locations forced families to seek creative solutions, such as finding additional work or reorganizing their finances.

In the final stage, the main themes identified were social support, economic constraints, and strategies to overcome obstacles. In rural areas, social support from family and community is a major driving factor in children's education. In urban areas, social support from extended family and the surrounding environment also plays an important role, despite challenges from a small number of unsupportive individuals. Economic constraints in both locations are overcome with strategies such as seeking additional sources of income and applying for scholarships or assistance from the government. These strategies demonstrate parents' commitment to ensuring that their children's education is not hindered by economic problems.

Comparison of the Results of Data Analysis of Interviews with Heirs in Rural and Urban Areas Based on the Theory of Planned Behavior (TPB) Approach

In the analysis of data from interviews with heirs in rural areas, attitudes toward education were very positive. Respondents such as Lucky Rishan Rafi Parie emphasized that education is an important bridge to a better future, showing a positive attitude toward education as the main provision for their children's future. Noviyanti Purnama Sari also emphasized the importance of education, especially when parents are no longer around, as a provision for facing the world in the future. This attitude shows that education is not only seen as a means of acquiring knowledge, but also as a tool to improve the quality of life and achieve economic independence in the future. According to previous research, this positive attitude can influence parents' intentions and behavior in supporting their children's education (Braun and Clarke 2006).

In cities, attitudes toward education are also very positive, with an emphasis on education as an important investment for a better future. Yeni Ida Rohayani from West Java stated that higher education is important for a better future, even though there are cost challenges that must be faced. Rasni from Maluku Sulawesi also emphasized the importance of education for a brighter future for children. This attitude shows that parents have a strong belief that education is an important investment for their children's future. Aswan from Sulama mentions that education can help children improve their quality of life, have better job opportunities, and become more independent. This positive attitude reflects the belief that education is not only important for children's personal and social development, but also provides significant economic benefits for their future.

In rural areas, social support from family and the surrounding environment is very prominent in shaping subjective norms that encourage children's education. Respondents such as Nurhayani and Risny Sarmadayoh emphasized that family and neighbors provide very positive encouragement and motivation for children's education. This support comes not only from the immediate family but also from the wider community, as expressed by Norita Rosa Manakutty, who mentioned that neighbors always provide encouragement and help overcome the obstacle of education costs. These social norms reinforce parents' intentions to continue their children's education, despite significant economic constraints.

In cities, subjective norms also play an important role in supporting children's education, although there are some differences in the context of social support. Most respondents acknowledged the support from their surroundings, although a small number were less supportive due to cost or distance. Yeni Ida Rohayani from West Java stated that her neighborhood provided positive encouragement, and her family highly valued education. The views of the extended family also played an important role, as expressed by Marlyn Adelin Adipati, who stated that her family prioritized her children's education. This support provided significant moral motivation for parents in facing various educational obstacles.

In rural areas, perceived behavioral control is mainly influenced by economic constraints and the strategies adopted to overcome them. Respondents such as Azmaul Rivaldi Astin identified the cost of education as a major obstacle, but the availability of JKM scholarships gave them greater control to overcome this obstacle. Some respondents, such as Nurhayani, rely on personal savings as a strategy to overcome scholarship shortages, indicating that they feel they have control over the situation by seeking alternative solutions. This strategy reflects the belief that despite economic constraints, they can find ways to ensure their children's education continues.

In cities, perceived behavioral control is also influenced by economic constraints, but with a slightly different approach. Respondents such as Yeni Ida Rohayani from West Java stated that their families could not afford their children's education, and this was a major obstacle. However, many respondents had strategies to overcome educational cost constraints, such as seeking additional sources of income and managing their finances. Rasni from Sulama stated that if compensation or scholarships were insufficient, they would increase the family budget and seek other funding alternatives such as additional scholarships or educational assistance from the government. This shows that despite perceptions of financial limitations, parents still try to find solutions to ensure their children's education is not hindered.

Recommendations for the effective utilization of Death Benefit assistance to beneficiaries in urban and rural areas.

After identifying the internal and external factors that influence the effectiveness of the Death Benefit program (JKM), the next crucial step is to assess the weight and score of each factor with the following results.

Table 9. Internal Factor Analysis Summary

		Strategic Factors	Weight	Rating	Score
<i>Strength</i>	1	Significant benefits of the JKM program in meeting the basic needs of heirs	0,15	4,5	0,67
	2	The existence of educational scholarships that support the continuity of children's education	0,15	4	0,59
	3	Level of satisfaction of beneficiaries with the program	0,11	4	0,44
	4	Supporting infrastructure such as a digitized claims system	0,07	3	0,22
		Sub Total	0,48		1,93
<i>Weakness</i>	1	Lack of understanding among beneficiaries regarding JKM claim procedures	0,11	3	0,33
	2	Unequal access to information between urban and rural areas	0,15	4	0,59
	3	Administrative obstacles that hinder the disbursement of compensation	0,11	2	0,22
	4	Variations in basic needs between cities and villages that have not been fully accommodated	0,15	3	0,44
		Sub Total	0,52		1,59
		Total	1,0		3,52

Source: Analysis and weighting by the author based on survey and interview data

The weighting results in the Internal Factor Analysis Summary Table show that the strengths and weaknesses of the Death Benefit (JKM) program and educational scholarships have a significant influence on the continuity of education for the children of beneficiaries.

Table 10. External Factor Analysis Summary

Analysis of The Effect of BPJS KETENAKERJAAN Death Benefits on The Socio-Economic Conditions of Heirs of Participants In The Informal Sector

	Strategic Factors	Weight	Rating	Score
<i>Opportunities</i>	1 Scholarship Programs and External Assistance	0,08	3	0,25
	2 Support from the Community and Environment	0,17	4	0,67
	3 Awareness of the Importance of Education	0,13	4	0,50
	4 Better Job Opportunities with Higher Education	0,13	2	0,25
	Sub Total	0,50		1,67
<i>Threats</i>	1 Increase in Education Costs	0,13	3	0,38
	2 Economic Uncertainty	0,17	4	0,67
	3 Limitations of External Assistance	0,13	2	0,25
	4 Negative Views from Some Circles	0,08	2	0,17
	Sub Total	0,5		1,46
	Total	1,00		3,13

Source: Analysis and weighting by the author based on survey and interview data

The weighting results in the External Factor Analysis Summary Table show that the opportunity and threat factors of scholarship programs and external support have a significant influence on children's education.

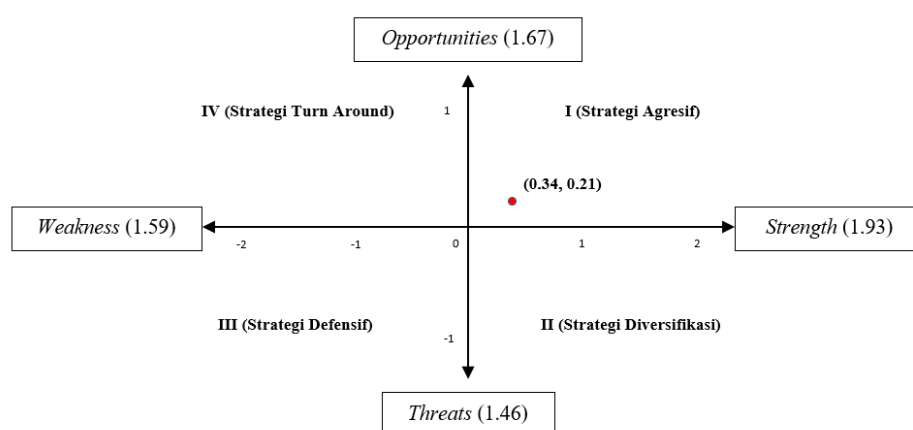


Figure 3. SWOT Diagram

Source: Developed by the author based on the results of the Internal and External Factor Analysis (Tables 9 & 10)

Based on the results of the SWOT diagram analysis, which shows that the Strength value (1.93) is higher than the Weakness value (1.59), and that Opportunities (1.67) significantly exceed Threats (1.46), the program is in Quadrant I, which recommends an aggressive (growth oriented) strategy. This position reflects strong internal conditions with real competitive advantages in the JKM program and educational support, supported by digital infrastructure and beneficiary satisfaction levels, which form a solid foundation for expansion. Externally, opportunities arising from community support, educational awareness, and the potential for external collaboration create an environment conducive to growth, although economic threats and education costs must still be watched carefully.

Table 11. SWOT Strategy Matrix

Internal	S (strength)		W (weakness)		
	1. Significant benefits of the JKM program in meeting the basic needs of heirs	2. The existence of educational scholarships that support the continuity of children's education	3. Level of satisfaction of beneficiaries with the program	4. Supporting infrastructure such as a digitized claims system	
External					
O (opportunity)		SO		WO	
1. Scholarship Programs and External Assistance	2. Support from the Community and Environment	3. Awareness of the Importance of Education	4. Better Job Opportunities with Higher Education	1. Use educational scholarship programs as a tool to improve social security literacy among participating children, so that they better understand the importance of social security in the future.	2. Leverage social solidarity in rural areas to develop educational programs that improve social security literacy and the productive use of benefits.
				3. Conduct social awareness campaigns in areas with high rates of JKM cases to increase penetration and public awareness of social protection.	
T (threat)		ST		WT	
1. Increase in Education Costs	2. Economic Uncertainty	3. Limitations of External Assistance	4. Negative Views from Some Circles	1. Focus on strengthening the JKM program in areas with high income instability to ensure that benefits can still be felt despite income fluctuations.	2. Adjust JKM benefits based on the cost of living in urban areas to ensure that compensation remains relevant and effective.
				3. Develop specific policies that can help informal workers in urban areas to continue participating in the JKM program despite the high cost of living.	
				1. Develop specific policies that can help informal workers with unstable incomes to continue participating in the JKM program, for example through a more flexible contribution scheme.	
				2. Improve financial literacy in urban areas to ensure that JKM benefits can be managed productively and do not run out quickly.	
				3. Strengthen cooperation with financial institutions to provide better access for JKM participants in managing and utilizing benefits optimally.	

Source: Developed by the author based on the SWOT analysis (Figure 3)

CONCLUSION

Statistics on *Jaminan Kematian* (JKM) participants at *BPJS Ketenagakerjaan* reveal 9,899,338 *BPU* enrollees (67% of the 14,686,854 national target), with strong penetration in regions like Banuspa, Kalimantan, and South Sumatra, dominated by the 50-56 age group amid low youth participation (≤ 20 and 20-25 years) due to limited social security literacy and perceived low mortality risk. JKM compensation most impacts shelter needs (0.657), followed by food/clothing (0.634) and clean water/sanitation (0.646), with greater rural significance for housing and food security given lower living costs and fewer alternatives. The *JKM education scholarship* (*beasiswa pendidikan*) sustains heirs' schooling, breaking intergenerational poverty—especially vital in rural areas with access barriers—while bolstering human capital through family and community support. Recommendations urge *BPJS Ketenagakerjaan* to boost youth literacy, enhance rural information infrastructure, and tailor policies to regional

disparities for better benefit utilization. For future research, longitudinal studies could track long-term socioeconomic outcomes of JKM scholarships on heirs' employment and income, comparing urban-rural trajectories to refine program scalability.

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