

The Effect Of Ability To Pay And Willingness To Pay On Bpjs Premium Payment Compliance Among The Community In Mojosongo Surrounding, Surakarta

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Received : 6 June 2026

Revised : 29 June 2026

Accepted : 30 June 2026

ABSTRACT

Background : The National Health Insurance (JKN) program managed by BPJS Kesehatan is an effort by the Indonesian government to achieve Universal Health Coverage (UHC). Since its implementation in 2014, BPJS Kesehatan has been facing financial deficits due to low participant compliance in paying premiums. Low Ability to pay and Willingness to pay, especially among low-income communities, as well as negative perceptions of service quality, are the main factors causing arrears. This condition has the potential to threaten the sustainability of the JKN program, so it is necessary to study the influence of ATP and WTP on participant compliance as a basis for formulating more targeted and data-based policies. **Research Objectives.** To determine the influence of Ability to pay and Willingness to pay on BPJS premium payment compliance in the community in Mojosongo Village, Surakarta. **Methods :** Research Design. This research is a quantitative study with a cross-sectional study design. **Research Subjects.** The subjects in the study were the community of Mojosongo Village, Surakarta with a population of 3,507 people. The number of samples in this study was 107 respondents using purposive sampling technique. **Results :** The results of this study indicate that the influence of Ability to pay increases compliance in paying BPJS premiums by (OR =3,156; CI 95%; 1.224 – 8.137, p = 0.017) was proven to be statistically significant and the influence of willingness to pay increased compliance in paying BPJS premiums by (OR = 6.902, CI 95% = 2.649 – 17.980, p = 0.001) was proven to be statistically significant. The most dominant influencing variable was willingness to pay (OR = 6.902, CI 95% = 2.649 – 17.980, p = 0.001). **Conclusion :** The results of this study indicate a relationship between ability to pay and willingness to pay on BPJS premium payment compliance, with willingness to pay being the most dominant variable influencing compliance.

Keywords: Ability to pay, BPJS Health, JKN, Willingness to pay

Introduction

The National Health Insurance (JKN) program was officially in effect from 2014 to 2019. During the 2014–2019 period, BPJS Kesehatan experienced a significant increase in its financial deficit, from IDR 3.3 trillion in 2014 to IDR 18.9 trillion in 2019, before decreasing to IDR 9.1 trillion in 2018. This condition indicates that the financing burden borne exceeds the revenue received. In fact, in 2022, BPJS Kesehatan recorded a loss of IDR 4.94 billion, despite receiving an additional tax benefit of IDR 104.09 billion. This deficit was influenced by the mismatch between premium amounts and actuarial calculations, high costs for catastrophic illnesses, and low levels of participant compliance in paying contributions (1).

The government's commitment to improving health outcomes is embodied in the National Health Insurance Program (JKN), which aims to achieve 95% Universal Health Coverage (UHC) by 2019. However, this target has not yet been met, and BPJS Kesehatan continues to face a funding deficit due to high levels of outstanding premiums from participants. In 2018, approximately 12 million JKN participants or 24% of self-enrolled participants were recorded as having overdue premiums, including 323 participants who were chronic defaulters. This

situation prompted the government to raise JKN premiums in an effort to ensure the program's financial sustainability, although this policy has drawn mixed reactions, particularly from self-enrolled participants. (2). In June 2019, South Tangerang City ranked second in Banten Province in terms of the number of overdue BPJS Kesehatan premiums. The Pamulang subdistrict recorded 32,484 participants with overdue premiums, with 4,586 of them from the Benda Baru urban village. This situation highlights the need to analyze the factors influencing compliance with BPJS Health premium payments (3). BPJS Health in Central Java Province reported a deficit, with total health expenditures reaching Rp 8.52 trillion as of April 2025, while premium revenue amounted to only Rp 2.76 trillion. This creates a gap between revenue and the insurance costs that must be covered (4). Meanwhile, in 2019, the Surakarta City BPJS Kesehatan branch experienced a significant deficit of Rp 150 billion per month, forcing the central government to provide a bailout to cover the deficit (5).

Health financing is one of the key components of the health system, serving to ensure the availability of funds for the delivery of health services. Optimal financing supports equitable and sustainable access to health services in achieving Universal Health Coverage (UHC) (6). A community is a group of individuals who live in a specific area, interact with one another, and build social relationships based on shared values, culture, and identity. These interactions form a social system supported by an economic structure that serves as the foundation for social and economic activities. (7). As public needs increase, health care has become a vital component in improving health status and quality of life. Health care encompasses promotive, preventive, curative, and rehabilitative efforts carried out both individually and through organized programs to maintain and restore public health. (8)

The government provides health insurance through the National Social Security System–Healthy Indonesia Card (SJSN-KIS), which is administered by BPJS Kesehatan as the health insurance provider (9). BPJS Kesehatan membership consists of Premium Assistance Recipients (PBI) and non-PBI participants (10). It has been reported that Ability to Pay (ATP) and Willingness to Pay (WTP) are significantly associated with the determination of JKN premium tiers, with willingness to pay showing a stronger influence than ability to pay.

Ability to Pay (ATP) is influenced by economic conditions, particularly income and the number of family dependents, while Willingness to Pay (WTP) reflects participants' willingness to pay premiums. It is important to measure both of these aspects because they play a role in determining compliance with BPJS Kesehatan premium payments.(11).

Ability to pay or ability to pay is the ability of an individual or household to meet the costs of certain goods, services, or obligations. Ability to pay in the context of health refers to the ability to pay for medical treatment, either directly or through insurance (12). An individual's willingness to pay, sacrifice or exchange services received is a motivation considered by the mind and feelings to obtain goods and services to achieve certain goals (13). Meanwhile, compliance refers to the positive behavior exhibited by the public in adhering to a rule (14)

Research by (2) shows that Ability to Pay (ATP) and Willingness to Pay (WTP) are associated with self-enrolled participants' compliance in paying National Health Insurance (JKN) premiums, with WTP being the most dominant factor. In line with this, (15) reported that monthly income affects the Ability to Pay (ATP) and Willingness to Pay (WTP) of self-enrolled participants in paying their BPJS Kesehatan premiums. (16) reported that Ability to Pay (ATP) and Willingness to Pay (WTP) are significantly associated with the determination of JKN premium classes, with WTP having a stronger relationship than ATP. Meanwhile, (17) found that income, household size, access to health services, and participant satisfaction are associated with compliance in paying BPJS Kesehatan premiums, with income being the most dominant factor.

Methods

This study used a quantitative method with a cross-sectional approach to determine the effect of ability to pay and willingness to pay on compliance with BPJS premium payments among residents of Mojosongo Village, Surakarta. The study population consists of residents of RW

07, RW 09, and RW 12 in Mojosongo Village, Surakarta, with a sample size of 107 respondents determined using the slovin formula and random sampling. The research instrument is a questionnaire that measures the variables of ability to pay, willingness to pay, and compliance with BPJS premium payments using a nominal scale. Validity was assessed using Pearson’s correlation, and reliability was tested using Cronbach’s alpha. Data analysis was conducted using univariate analysis to describe respondent characteristics; bivariate analysis used the chi-square test with a 95% significance level; and multivariate analysis employed multiple logistic regression and Odds Ratio (OR) calculations to determine the influence of compliance with BPJS premium payments.

Operational Definition

Ability to pay The ability to pay is the ability of an individual to pay after receiving the required service. This study used a questionnaire and indicators for the ability to pay variable, namely BPJS Class 1, BPJS Class 2, and BPJS Class 3.

Willingness to pay this is a person's willingness to pay after receiving services. This study used a questionnaire and indicators for the willingness-to-pay variable, namely BPJS Class 1, BPJS Class 2, and BPJS Class 3.

The dependent variable in this study is BPJS premium payment compliance, which refers to the individual's adherence to their obligation to pay BPJS premiums to obtain benefits from BPJS services. The measuring instrument used in this study was a questionnaire with indicators of BPJS Class 1, BPJS Class 2, and BPJS Class 3 premium payment compliance.

Research Ethics

The Ethical Eligibility Sheet with number 1.737 / VIII / HREC / 2025 has been issued and approved by Dr. Moewardi Regional Hospital.

Results

Table 1 Respondent characteristics and dichotomous variables

Respondent Characteristics	F	%
Gender		
Man	39	36.4%
Woman	68	63.6%
Last education		
<High School	54	50.5%
≥High School	53	49.5%
Work		
EmployeeNon-formal	98	91.6%
Formal Employees	9	8.4%
BPJS Class		
Class 1	4	3.7%
Grade 2	22	20.6%
Grade 3	81	75.7%

Based on the table above, the majority of respondents were female, totaling 68 respondents (63.6%), while male respondents numbered 39 (36.4%). Based on educational level, 54 respondents (50.5%) had less than a high school education, and 53 respondents (49.5%) had a high school education or higher, resulting in a relatively balanced distribution. Based on occupation, the majority of respondents worked in the informal sector—98 respondents (91.6%)—while 9 respondents (8.4%) were formal-sector workers. Based on their BPJS Kesehatan membership class, the majority of respondents were enrolled in Class 3,

totaling 81 respondents (75.7%), followed by Class 2 with 22 respondents (20.6%), and Class 1 with 4 respondents (3.7%).

Table 1.2 Respondent characteristics and continuous variables

Variables	Mean	Standard Deviation	Minimum	Maximum
Age	44	13	21	83
Income	2040740	761519	300000	4150000
Ability	50009	22308	25000	150000
Will	45925	19698	15000	150000

The table above shows that the average age of respondents is 44 years (in the ranging from 21 to 83 years). The average respondent income is Rp2,040,740.00, with BPJS Health contributions ranging from Rp42,000.00 to Rp150,000.00. In terms of ability to pay, the average is Rp50,000.00 (ranging from Rp25,000.00 to Rp150,000.00). Meanwhile, the average willingness to pay is Rp45,925.00 (ranging from Rp15,000.00 to Rp150,000.00), which indicates that in general the level of respondents' willingness to pay is classified as low to moderate.

Table 1.3 Frequency distribution ability to pay

ATP	F	%
Capable	66	61.7%
Unable	41	38.3%
Amount	107	100%

The ability-to-pay research table above shows that 61.7% of respondents have a high ability to pay, while 38.3% have a low ability to pay.

Table 1.4 Frequency distribution willingness to pay

WTP	F	%
Want to	54	50.5%
Don't want to	53	49.5%
Amount	107	100%

Based on the frequency distribution table of willingness to pay above, 50.5% of respondents were willing to pay. Meanwhile, 49.5% were unwilling to pay. This indicates a relatively balanced level of willingness to pay.

Table 1.5 Cross-tabulation of relationships ability to pay with payment compliance

ATP	Compliance		OR	CI 95%		P Value
	Obedient	Not obey		Lower	Upper	
Capable	49	17	5,559	0.294	0.720	0.001
Unable	14	27				
Amount	63	44				

The statistical analysis results showed a significant relationship between ability to pay and payment compliance. Respondents with high ability to pay were 5.559 times more likely to comply than respondents with low ability (OR=5.559; 95% CI: 0.294–0.720; p=0.001). Of the 66 respondents with high ability to pay, 49 had high compliance and 17 had low compliance. Conversely, of the 41 respondents with low ability to pay, 14 had high compliance and 27 had low compliance. These findings indicate that ability to pay is an important factor in improving payment compliance.

Table 1.6 Cross-tabulation of relationships willingness to pay with payment compliance

WTP	Compliance		OR	CI 95%		P Value
	Obedient	Not obey		Lower	Upper	
Want to	45	9	9,772	0.275	0.604	0.001
Don't want to	18	35				
Amount	63	44				

The analysis results in the table above show a significant relationship between willingness to pay and payment compliance (OR=9.772; 95% CI: 0.275–0.604; p=0.001). Of the 54

respondents with high willingness to pay, 45 had high compliance and 9 had low compliance. Meanwhile, of the 53 respondents with low willingness to pay, 18 had high compliance and 35 had low compliance. These findings confirm that willingness to pay is an important factor in improving community payment compliance.

Table 1.7 Multivariate logistic regression

Independent	Exp(B)	CI 95%		P Value
		Lower	Upper	
Ability to pay	3,156	1,224	8,137	0.017
Willingness to pay	6,902	2,649	17,980	0.001

The results of the study on the ability to pay variable showed a positive and significant effect on payment compliance (B = 3.156; 95% CI: 1.224–8.137; p = 0.017). A positive coefficient value indicates that an increase in the ability to pay increases the likelihood of compliance by 3.156 times. This confirms that financial capability is an important factor in compliance with BPJS Kesehatan contribution payments. The willingness to pay variable showed a positive and significant effect (B = 6.902; 95% CI: 2.649–17.980; p = 0.001). Each increase in willingness to pay increases the likelihood of compliance by 6.902 times. These findings indicate that willingness to pay is a dominant factor in shaping contribution payment compliance.

Discussion

The results of the logistic regression analysis showed that ability to pay (ATP) and willingness to pay (WTP) significantly influenced BPJS premium compliance (p<0.005). Specifically, the ATP variable had an OR of 3.156 (p=0.017), statistically confirming its significant effect. This was driven by the selection of a service class appropriate to the respondent's income level and age, which generally had economic stability, enabling them to consistently pay premiums.

This study is consistent with (18), who state that the ability to pay high premiums is influenced by the public's need for access to health care. This is also supported by the study by (19), which states that an individual's ability to pay health insurance premiums is strongly influenced by their income level.

This finding is in line with (20) which states that ATP is determined by socioeconomic conditions, particularly income and health spending priorities. ATP reflects a household's capacity to allocate health insurance funds after basic needs are met. Although stable income and low non-food expenditures increase financial capacity to maintain membership, this does not always guarantee payment compliance due to the influence of other external factors.

ATP is a key factor in contribution compliance, driven by stable income and expenditure. While stable income increases payment capacity, financial sufficiency does not automatically guarantee compliance. This is because payment decisions are also simultaneously influenced by perceived benefits, the urgency of medical needs, and the participant's service experience (21).

Study (22) stated that WTP had a positive and significant effect on BPJS premium compliance (p<0.001). The analysis results showed that WTP was the most dominant factor compared to ability to pay, with the largest coefficient value (B = 6.902; p = 0.001). This finding confirms that participant motivation or willingness to pay plays a stronger role in determining premium payment discipline. This study is supported by (23), who showed that participants with high WTP are 4.19 times more likely to comply with BPJS Health premium payments.

WTP is a crucial factor for premium compliance, primarily driven by medical experience and awareness of health risks. WTP tends to increase among respondents who have previously used JKN services or have family members with serious illnesses. Although positive perceptions and insurance literacy strengthen willingness to pay, multivariate analysis shows that high WTP does not guarantee compliance without the support of economic stability (20).

This study confirms that WTP and ATP are the main determinants of BPJS Kesehatan contribution compliance (24) showed that individuals with adequate payment capacity had an 8.5-fold greater chance of compliance (OR = 8.53; $p = 0.006$). Meanwhile, (25) found that a higher average WTP than ATP reflects a higher public perception of the utility and health risks. Researchers concluded that the synergy between financial stability and strong WTP is crucial in encouraging regular premium payments. Conversely, a deficit in either of these factors will decrease participant compliance.

Conclusion and Suggestions

This research can be concluded that the influence of ATP and WTP on compliance with BPJS premium payments in the community in Mojosoongo Village, Surakarta, shows that the influence of ATP increases compliance with BPJS premium payments by (OR = 3.156; CI 95%; 1.224 – 8.137, $p = 0.017$) was proven to be statistically significant and the influence of WTP on increasing compliance in paying BPJS premiums by (OR = 6.902, CI 95% = 2.649 – 17.980, $p = 0.001$) was proven to be statistically significant. The most dominant influencing variable was willingness to pay (OR = 6.902, CI 95% = 2.649 – 17.980, $p = 0.001$).

The research conducted by the researchers recommends that the public increase awareness and commitment to regularly paying BPJS Kesehatan premiums to ensure the sustainability of national health protection. In line with this, educational institutions are expected to strengthen their educational role through community service and outreach activities to improve health literacy, both for students and the general public. Academically, students need to deepen their understanding of the concepts of ability and willingness to pay as references in health financing studies. Finally, for future researchers, it is recommended to explore other factors that influence premium payment compliance in order to provide more comprehensive policy recommendations for the government and BPJS Kesehatan.

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