



## MINIMUM WAGES AND POVERTY: A CROSS-COUNTRY ANALYSIS



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### ABSTRACT

#### Article History

Received: 26 April 2021

Revised: 17 June 2021

Accepted: 19 July 2021

Published: 12 August 2021

#### Keywords

Education

Health

Lifestyle

Minimum wage

Ordinary least squares (OLS)

Poverty.

#### JEL Classification:

E24, I38, P36.

The concept of poverty is usually explained in terms of financial resources; however, it may also include deprivation in non-economic dimensions, such as education, health, and standard of living. These three dimensions of poverty or well-being have lacked attention from researchers in the past. At the start of the twentieth century, researchers explored whether non-economic poverty also drives people towards a lower quality of life and decreased well-being. In this regard, one of the popular instruments that can help to alleviate non-economic poverty is the minimum wage policy. It helps workers to maintain a stable standard of living required to avoid poverty. The prime objective of this research is to assess the importance of minimum wages in reducing social poverty in 11 selected Asian countries (Bangladesh, China, India, Iran, Indonesia, Japan, Korea, Nepal, Pakistan, the Philippines, and Thailand). This study used data ranging from 2000 to 2017. Using the ordinary least squares (OLS) estimation method, the results suggest that the minimum wage policy alone is not helpful unless supplementary policies are implemented to reduce non-economic poverty.

**Contribution/Originality:** This study is a rare initiative that developed a composite index of non-economic poverty, which includes health, education, and standard of living. This composite index was used to examine how minimum wage affects poverty in 11 Asian countries.

## 1. INTRODUCTION

Among the most persuasive reasons for implementing a minimum wage policy is to increase the incomes of individuals living near or below the poverty line. Politicians and policymakers consider minimum wage to be an effective instrument against poverty (Rani, 2017; Sabia & Burkhauser, 2010; Sotomayor, 2021; Wilson, Rebhun, & Rivas, 2011; Wilson, 2017). Yet, in the case of many underdeveloped countries, research shows that minimum wage policies have a very marginal impact on poverty reduction. This is because these policies mainly focus on workers who are associated with the formal sector and who are from affluent families (Burkhauser, Couch, & Wittenburg, 1996). Workers who are employed in large informal sectors are not usually considered for minimum wage (Pérez, 2020). Moreover, the effect of minimum wage on poor families depends on employment effects, distribution of wages, and how the household heads are affected by the minimum wage. Minimum wage increases may bring some people out of poverty while pushing some others into it. A minimum wage increase can be regarded as an important tool against poverty alleviation but should not be considered as the only policy instrument available. Other complementary policies should be devised to achieve the desired outcomes.

Considering the poverty-reducing effect of minimum wage, one can simply say that giving an additional amount to poorer workers helps them to fulfill their basic needs and they will be able to afford more of the necessities to survive. In theory, a wage increase would bring many poor people out of poverty (Dabla-Norris, Kochhar, Suphaphiphat, Ricka, & Tsounta, 2015). This rise in income can help to alleviate poverty in various aspects. People can use these resources to fulfill their educational needs (Jadoon & Sarwar, 2020), health care needs (Stoye & Zaranko, 2019), and maintain a reasonable overall standard of living. This is theoretically appealing but may not always be true in practice. Complex relationships exist among minimum wages, the income of workers and their employment status, the incidence of poverty, and the depth of poverty. First, the effect of minimum wage is not uniform across all workers (Cengiz, Dube, Lindner, & Zipperer, 2019). Therefore, it is important to determine which workers will benefit the most from the minimum wage and to what extent. Second, even if some workers experience an increase in their income due to minimum wage, it is not known whether this will increase the incomes of poverty-stricken households. In developing countries, a large number of workers who are employed in the informal sector, which exhibits widespread poverty, are included in minimum wage legislation (Katzkiewicz, Pedetti, Querejeta, & Bergolo, 2021). In the formal sector, minimum wage legislation exists but is not effectively enforced. Opponents, however, claim that the minimum wage increases poverty because it negatively affects employment (Neumark & Wascher, 2002). They also argue that the working poor may experience a reduction in poverty due to minimum wage, but in general, poverty increases for those who become unemployed because of increased minimum wage (Jones, 1998).

More recently, the minimum wage has been linked with a broader concept of “decent living” than mere survival (Müller & Schulten, 2020). This includes supporting one’s family, maintaining self-respect, and participating in civic life. Minimum wage affects non-economic aspects of living standards, such as high levels of education and health attainment. Minimum wage increases affect wage distribution and skills prices which change preferences for educational attainment. It affects incentives and choices for educational attainment not only at the bottom but also at the top of the wage distribution (Bárány, 2016). Many researchers believe that minimum wage increases people’s incomes and improves their living standards. This helps poor families to improve their health status through improvements in diet and being able to access better health facilities and health investment (Komro, Livingston, Markowitz, & Wagenaar, 2016). On the other hand, if minimum wage results in job losses, then the income of poor families will decrease causing their standard of living to fall further. In such cases, the health status of poor families will deteriorate (Andreyeva & Ukert, 2018).

Most of the available research mainly focused on the economic aspect of poverty in determining the effects of minimum wage. Since minimum wage can influence poverty in either direction, this study aims to investigate the effect of minimum wage on various other dimensions of poverty that are ignored in the literature.

### 1.1. Objectives

Since there is no comprehensive index to measure the non-economic dimension of poverty, especially for a group of countries, this aims to construct a comprehensive index to measure non-economic poverty and then use this index to capture the effect of minimum wage on the non-economic aspect of poverty. To fulfill these objectives, the following hypotheses were formulated:

*H<sub>0</sub>: Minimum wage does not reduce the poverty level.*

*H<sub>1</sub>: Minimum wage reduces the poverty level.*

## 2. LITERATURE REVIEW

Ample literature exists on the link between changes in the minimum wage and the level of poverty. However, the results of existing studies present contradictory conclusions. Some suggest that minimum wage helps to reduce poverty, while others declare that minimum wage increases poverty, and some studies maintain that there is no

relation between the two. The impact of minimum wage on poverty reduction varies based on different points on the wage distribution. For policy purposes, however, it is important to consider which wage group is targeted and the mechanism of how minimum wage is set. It is observed that when the minimum wage is below the average wage then it tends to benefit workers whose wages are at the lowest part of the wage distribution. On the other hand, if the minimum wage is higher than the average wage, then workers in the middle of the wage distribution benefit. This relationship also varies in relation to the coverage and compliance with minimum wage laws. An important aspect of non-economic poverty has been ignored in the literature but its significance is well acknowledged by the researchers (Mansi, Hysa, Panait, & Voica, 2020; Nurasyiah, Miyasto, Mariyanti, & Beik, 2020; Nwaka, Saint Akadiri, & Uma, 2020). The effects of minimum wage on poverty reduction in developing countries are also determined by labor market characteristics. Minimum wage usually affects workers employed in the formal sector who usually do not belong to poor families. Therefore, while assessing the effects of minimum wage, it is also worth considering whether the workers who have lost jobs belong to poor families or not. Other factors, such as the implementation mechanism of minimum wage policies, employment in the informal sector, and cash transfer programs in the country, also determine the impact of minimum wage on poverty reduction (Gindling, 2018).

One group of researchers propagates that an increase in minimum wage can reduce poverty at all levels (Addison & Blackburn, 1999; Arango & Pachón, 2004; Card, 1992; Gindling & Terrell, 2010; Mincy, 1990). In Brazil, where the minimum wage is frequently revised, poverty and inequality have reduced by 2.8% and 2.4%, respectively. However, this positive impact is eliminated over time, especially when it affects workers at the bottom of the wage distribution. Furthermore, the positive impact of a higher minimum wage is also eliminated when the minimum wage is higher than the average wage (Sotomayor, 2021). In the UK, the impact of minimum wage on poverty and inequality was found to be modest, as 22% of households experienced an income gain. However, this impact depends on the position of the households in income distribution, and other ongoing cash transfer programs (Atkinson, Leventi, Nolan, Sutherland, & Tasseva, 2017; Van Parijs & Vanderborght, 2017). The implementation of minimum wage is very important for success in reducing all dimensions of poverty (Gindling, 2018). Minimum wage is reducing the poverty gap in those sectors where laws are implemented effectively compared to the sectors where these laws are inappropriately executed (Gindling & Terrell, 2010; Mincy, 1990). Results of the microsimulation model indicate that an increase in minimum wage reduces poverty in the absence of the unemployment effect (Giannarelli, Wheaton, & Morton, 2015).

Some researchers believe that there is little or no impact of minimum wage on poverty alleviation (Burkhauser & Sabia, 2007; Müller & Steiner, 2009; Neumark, Cunningham, & Siga, 2006; Sabia & Burkhauser, 2010). While checking the effects of the 1990 federal minimum wage increase on the level of poverty, using firm-level data in the case of New Jersey, it was found that the relationship between a minimum wage increase and poverty reduction was insignificant (Card & Krueger, 1993). An analysis of the trends of poverty in the USA using the Current Population Survey (CPS), suggested that minimum wage policy may increase the chances for marginalized families to break the cycle of poverty. However, it also increases the probability of families who do not live in poverty to be driven towards poverty because of increased unemployment. Thus, the results did not confirm the hypothesis that the minimum wage rise reduces poverty (Neumark & Wascher, 2002; Sabia & Burkhauser, 2010). The minimum wage has an insignificant impact on poverty reduction due to unemployment and high inflation rates (Overstreet, 2021). Minimum wage can have short-run effects on several macroeconomic outcomes, including hours of work and employment (dependent and self-employment), inequalities in earnings and wages, and reservation wages and work satisfaction. In the case of low-wage earners, increased hourly wages resulted in negative employment effects, while poverty and inequality could not be eradicated in the short run. Instead, it reduced the working hours which alleviated any positive impact of a minimum wage increase (Caliendo, Wittbrodt, & Schröder, 2019).

The impact of minimum wage also varies across skill distribution and other social aspects. Women, low-skilled workers, and young workers whose wages are relatively lower face the worst employment losses due to increased

minimum wages (Lin & Yun, 2016). A similar analysis on low-wage workers in the US concluded that minimum wage does not strongly affect poverty reduction in the cases of individuals with low levels of education and experience (Sabia & Nielsen, 2012). An increase in the minimum wage increased the poverty rates of junior high school dropouts (Addison & Blackburn, 1999). In Indonesia, minimum wage has increased poverty at the household level. In Germany, the distribution effects of the legal minimum wage were computed by applying a micro simulation model, and the results proved the ineffectiveness of the minimum wage policy in reducing poverty. Minimum wages proved unproductive and showed negative effects on the level of employment (Müller & Steiner, 2009).

In this study, along with the minimum wage variable, other socioeconomic variables, such as expenditure on health and education, inflation, and trade, were used to see how they contribute towards poverty reduction, and a positive effect of health expenditure on poverty was found (Bloom & Canning, 2003; Gupta & Mitra, 2004). Health care expenditure was found to have a significant impact on poverty reduction, especially in developing and underdeveloped countries. Poverty, measured by the poverty headcount index, poverty gap index, and poverty gap squared index, exhibited a significant reduction following increased spend on health care in developing countries over the period from 2000 to 2017 (Sirag & Nor, 2021). It was also found that countries that ensure high health coverage and have a sound health care provision system have less catastrophic health expenditure and a lower level of household poverty (Kumara & Samaratunge, 2019). Regarding the relationship between education expenditure and poverty, a significant positive impact of the former was observed on poverty reduction (Jung & Thorbecke, 2003). Education provides opportunities for the masses to generate income and increase their standard of living. It also helps to develop relevant skills and enhance one's potentials and increase empowerment (Omodera & Dandago, 2019). By allocating more funds to human capital development, which essentially includes education and health, the government can boost economic growth and reduce poverty (Omodero, 2019). Inflation and poverty are two important macroeconomic indicators that determine economic stability. Many studies have established a significant link between inflation and poverty (Easterly & Fischer, 2001; Yolanda, 2017). Inflation has a positive and significant impact on poverty but also has severe consequences for the poor because it harms low income groups more than high income groups (Easterly, 1999). There is a contradiction among researchers regarding the relationship between trade and poverty. Trade openness promotes economic growth and hence acts as a force to reduce poverty. In this regard, many other researchers observed a positive relationship between trade and poverty reduction (Bhagwati & Srinivasan, 2002; Dollar & Kraay, 2002; Jadoon & Sarwar, 2020; Topalova, 2007). In Pakistan, trade liberalization has shown to reduce poverty (Jadoon & Sarwar, 2020), but some researchers have concluded that trade liberalization does not play a significant role in reducing poverty and may even increase it (Pacheco-López & Thirlwall, 2009). The channel through which trade can affect household income in a country is the cost of goods and services. The extent to which households will be affected by the cost of goods and services depends on many factors, including integration of markets, exchange rates, world prices, transportation costs, and taxes levied by the government. The impact of price changes also depends on whether poor families are the net consumers or net producers of these goods and services; price changes are beneficial if poor households are the net producers. If poor households are net consumers, these price changes will cause their income to fall and poverty to rise (McCulloch, Winters, & Cirera, 2001).

A review of past literature highlighted that the concept of poverty is measured only in the economic sense and many studies have ignored the social aspect. Problems such as lack of education, poor health, environmental hazards, and inadequate living standards are ignored while studying poverty concepts. Furthermore, to the best of our knowledge, no study exists that captures the effect of minimum wage policy on non-economic poverty in the cases of selected Asian countries.

### 3. MODEL SPECIFICATION AND DATA SOURCES

#### 3.1. Model Specification

In this study, we developed two models to examine how minimum wage affects non-economic poverty. Model 1 takes minimum wage as an independent variable and non-economic poverty as a dependent variable, while Model 2 includes some socioeconomic control variables along with minimum wage for the robustness of the model. The two models are presented as follows:

$$\text{Model 1: Social Poverty Index} = \beta_1 + \beta_2 \text{RMW}_{it} + \epsilon_{it}$$

$$\text{Model 2: Social Poverty Index} = \beta_1 + \beta_2 \text{RMW}_{it} + \beta_3 \text{EdExp}_{it} + \beta_4 \text{Trade}_{it} + \beta_5 \text{Healthexp}_{it} + \beta_6 \text{Inflation}_{it} + \mu_{it}$$

Here, RMW = real minimum wage, EdExp = education expenditure, Healthexp = health expenditure, the  $\beta$ s represent the coefficients of the model,  $i$  represents the cross section unit, and  $t$  represents time.

#### 3.2. Data Sources

The present study used 11 Asian countries for analysis, namely Bangladesh, China, India, Iran, Indonesia, Japan, Korea, Nepal, Pakistan, the Philippines, and Thailand, based on the availability of data from 2000 to 2017. The data on minimum wage were obtained from the International Labor Organization (ILO), but the values in the data for each country were taken from various sources (see Table 1).

Table 1. Source of minimum wage data

Country	Source of missing data
Bangladesh	Bangladesh Yearbook.
China	Beijing Municipal Bureau of Human Resources and Social Security.
India	(CEIC, Trading Economics) <sup>1</sup> . The data available was daily, which was converted into monthly data by multiplying the values by $6*52/12$ .
Iran	Annual Yearbook published by the Central Bank of Iran.
Indonesia	Statistics Indonesia. In this case, the minimum wage for each province is computed as a weighted average based on the number of employees in each province.
Japan	Japan Labour Review. In Japan, minimum wage rates are pre-calculated as the national weighted average amount per hour.
Korea	Korea Ministry of Labour. The data available was hourly, which was converted into monthly values.
Nepal	In Nepal, minimum wage data was available for unskilled laborers in the non-agricultural sector.
Pakistan	The data was retrieved from the Finance acts published by the government of Pakistan.
Philippines	National Wages and Productivity Commission. The data was available on a daily basis, which was multiplied by $313/12$ to obtain monthly figures.
Thailand	Ministry of Labour. The available daily values were multiplied by $6*52/12$ to get the monthly wage rate.

The data for the construction of the non-economic poverty index is taken from various sources and the data for survival to the age of 65 and expected years of schooling are taken from the United Nations Development Programme (UNDP) database. The World Health Organization/United Nations International Children's Emergency Fund Joint Monitoring Programme (JMP) datasets are used to retrieve data on water availability, sanitation services, and hygiene. The data for nourishment is taken from the Food and Agriculture Organization website, and the data for the remaining variables are taken from the World Bank database.

<sup>1</sup>CEIC stands for Census and Economic Information Center. Trading economics and CEIC are platforms that provide historic economic data.

## 4. ECONOMETRIC METHODOLOGY

### 4.1. Social Poverty Index

We developed a social poverty index in this study due to the unavailability of data on non-economic poverty by taking inspiration from the multidimensional poverty index. The index generated for this study includes three dimensions of poverty – living standard, education, and health. Standard of living is measured with the help of two variables – the percentage of people utilizing at least elementary water facilities and the prevalence of malnutrition. Education is measured by the expected number of years of schooling, while health is measured by the probability of survival to the age of 65. At the first stage, all three indicators of non-economic poverty are standardized as follows:

$$X \text{ index} = \frac{X - \text{Min}}{\text{Max} - \text{Min}}$$

Where X represents the variable to be standardized, Min is the minimum value of the indicator, and Max is the maximum value of the indicator. The three indexes (standard of living index, education index, and poverty index) are developed at the first stage and then a composite index for non-economic poverty is obtained by taking the geometric mean of all three indexes. The maximum value of the expected years of schooling is 18, while the minimum value is zero. The maximum value of chances of survival to the age 65 is 100, while the minimum value is zero. Since both variables used to measure the standard of living are in percentages, the maximum value for both indicators is 100 and the minimum value is zero. The final index of non-economic poverty is obtained by taking the geometric mean of all three developed indexes.

$$\text{Social Poverty Index} = \sqrt[3]{EI.HI.SOLI}$$

The value of the non-economic poverty index ranges between zero and one, where zero represents high poverty and one represents no social poverty. This index helps to define the level of poverty.

### 4.2. Ordinary Least Squares Method

This study used the ordinary least squares (OLS) method of estimation. This method also helps to minimize the sum of squares of the difference between the actual and expected values of the dependent variable. The outliers in the data were removed before the estimation as the OLS method is very sensitive to outliers. After the estimation, diagnostic tests were applied to check for multicollinearity and heteroskedasticity problems.

## 5. RESULTS AND DISCUSSION

### 5.1. Stationarity of Variables

Before estimating the models, the stationarity of the data set must be determined. The present study used the Levin–Lin–Chu unit root test to check the stationarity of the data. The null and alternative hypotheses of the tests are:

$H_0$ : Presence of unit root.

$H_1$ : No unit root.

The Levin, Lin, & Chu (2002) unit root test performs well when the number of countries (N) is between the range of ten to 250 and the number of years (T) is between the range of five and 250. For the present study, N is 11 and T is 18. The results are given in Table 2.

The results of the unit root test showed that none of the variables contains a unit root. The values of the t-statistics for all the variables are greater than two and the p-value of all the variables is less than 0.01. Therefore, it can be concluded that all the variables of the models are significant at the 1% level. It is a prerequisite to applying the OLS method that all the variables of the model should be stationary at level.

Table 2. Levin-Lin-Chu unit root test results (at level).

Variable	Adjusted t-statistic	P-value
Poverty Index	-10.85	0.000
Real Minimum Wage	-4.44	0.000
Trade (% of GDP)	-2.56	0.0052
Education Expenditure	-3.49	0.0002
Health Expenditure	-3.08	0.001
Inflation	-2.56	0.0052

### 5.2. Ordinary Least Squares Results

The two models developed in the earlier section of the study were estimated using the OLS method. The first model was estimated using the simple OLS method as it only included a single independent variable, while the second model was estimated using the multiple linear regression method as five independent variables were included in the model. The results of the OLS estimation are shown in Table 3.

Table 3. Ordinary least squares results.

Social Poverty Index	Model 1	Model 2
Real Minimum Wage	0.00011 (0.000)	0.000035 (0.062)
Trade		0.0009 (0.000)
Health Expenditure		0.02 (0.000)
Education Expenditure		-0.0026 (0.649)
Inflation		0.00063 (0.466)
Intercept	0.59 (0.000)	0.48 (0.000)
Number of Observations	198	198

Note: The values in parenthesis are P-values.

The estimated positive coefficients in Model 1 show that minimum wage significantly reduces non-economic poverty, as the non-economic poverty index developed in this study ranges from zero to one, where a value closer to one indicates a low level of non-economic poverty. A 1% increase in real wage reduces poverty by 0.00011 units. An increase in minimum wage gives a boost to the income of poor families but the effect is minimal, which suggests that solely increasing the minimum wage will not be helpful in reducing non-economic poverty in the selected Asian countries. The impact is minimal because only a small proportion of the rise in minimum wage goes to the poor, while a major proportion is held by the people above the poverty line. Adverse impacts in the form of job losses are also substantially incurred by the poor which makes the positive impact of minimum wage rises relatively weaker (Campolieti, Gunderson, & Lee, 2012). In Model 2, other control variables (trade, health expenditure, education expenditure, and inflation) were included. The results after the inclusion of some control variables suggest that minimum wage still positively affects non-economic poverty.

After the inclusion of other control variables, the coefficient of minimum wage becomes smaller but is still significant at a 6% level of significance; health spending significantly and positively affects non-economic poverty; and the health expenditure coefficient suggests that a 1% change in health expenditure reduces non-economic poverty by 0.02 units. This finding is consistent with that of many researchers who suggested that increased health spending by the government, especially in the form of mandatory transfers, help to reduce multidimensional poverty (Mohanty et al., 2017; Wagstaff et al., 2018). Health spending by governments also reduces catastrophic expenditure on health by poor families and hence makes finances available for other pro-poor ventures. Health is an important determinant of human capital formation, and increased government spending on health increases human

capital and enhances the growth potential of a country. Through this channel of economic growth, health spending helps to alleviate poverty. The effects of education expenditure and inflation on poverty were quite interesting as they both have unexpected signs and were also found to be insignificant. Education spending has a positive but insignificant effect on non-economic poverty. The impact of education spending can be insignificant due to the insufficiency of educational expenditure in these countries. If educational spending is less than the requirement then it may not enhance economic growth or income-generating opportunities for poor people. Poor households will not be able to develop the skills and potential needed by the market and will remain unable to generate income (Omodera & Dandago, 2019). Moreover, expenditure on education alone is not enough to reduce poverty and there is a need for a supplementary fund policy and stable economic and political situations in the country (Hidalgo-Hidalgo & Iturbe-Ormaetxe, 2018). Literature shows that inflation increases poverty by reducing the real income of the poor, but the results of this study show that the impact of inflation is insignificant. This can be because households' characteristics define how they are affected by price hikes. Inflation can have a different impact on different families depending on whether they are net consumers or net producers of goods and services. Overall, inflation can positively impact firms and producers, while it can negatively affect consumers (Cudjoe, Breisinger, & Diao, 2010). The trade variable also has a significant contribution in reducing non-economic poverty, although the coefficient is small. A 1% increase in the trade-to-GDP ratio reduces non-economic poverty by 0.0009 units. The impact of trade openness on poverty comes from the increase in real wages of unskilled workers. Trade may also reduce the prices of imported consumer goods for the poor, which increases their real income and also increases the availability of new products and enhances the welfare of the poor (Bhagwati & Srinivasan, 2002).

### 5.3. Diagnostic Tests

#### 5.3.1. Heteroskedasticity

A heteroskedasticity problem arises in the data when the variance of the variable becomes unequal across the observations. This study used the Breusch–Pagan test to check for a heteroskedasticity problem. The hypotheses of the test are:

$H_0$ : The variance of the error term is constant.

$H_1$ : The variance of the error term is not constant.

Table 4. Breusch–Pagan Test Results.

Model	Chi-square Value	P-value
Model 1	2.94	0.0863
Model 2	0.00	0.9930

The results of the Breusch–Pagan test for both models are reported in Table 4 and show that the p-values for both models is greater than 0.05. Therefore, we fail to reject the null hypothesis of constant variance in the error term.

#### 5.3.2. Multicollinearity

The problem of multicollinearity arises in a regression model when independent variables of the regression model are correlated. Multicollinearity reduces the precision of estimated coefficients and makes interpretations difficult. The variance inflation factor (VIF) is used to detect the problem of multicollinearity. The regression model has a multicollinearity issue when the VIF is greater than ten. Table 5 presents the results.

Table 5. Variance inflation factor results.

Model	Mean VIF
Model 1	1
Model 2	2.18



The results of the multicollinearity test shows that the values of the VIF for both models are less than the maximum value of ten, which confirms the absence of a multicollinearity problem.

## 6. CONCLUSION AND POLICY RECOMMENDATIONS

The present study is an attempt to measure the effectiveness of the minimum wage policy on non-economic poverty reduction in selected Asian countries. In this regard, a comprehensive index was developed to measure non-economic poverty. In doing so, the three dimensions considered are standard of living, education, and health. The results suggest that the main hypothesis of the study "There is no relation between real minimum wage and non-economic poverty" is rejected. However, the results showed a minimal effect of minimum wage policy on non-economic poverty reduction, and that expenditure on health and trade contribute positively to non-economic poverty reduction. The roles of education expenditure and inflation were found to be insignificant in reducing non-economic poverty.

Based on these results, we can make some policy recommendations for the selected countries used in this research. The minimum wage policy can help to alleviate non-economic poverty if the markets in the selected countries efficiently apply the minimum wage policy. Many countries selected in this study efficiently regulate their labor markets, but countries such as India, Nepal, and Pakistan are not able to regulate the labor market efficiently. More effective policies should focus on improving compliance with minimum wage laws, improving incomes in the non-minimum informal sector, increasing the productivity of the workers in low-income groups, and improving social safety nets for the workers who lose their job due to minimum wage increases. This suggests that while minimum wages can be included in the policy framework for reducing non-economic poverty, it should not be the sole or even the main policy variable in this context.

## 7. LIMITATIONS OF THE STUDY

The lack of data availability forces researchers to study a small number of countries and limited data over time. Moreover, a small number of indicators were used to build the non-economic poverty index due to data issues.

**Funding:** This study received no specific financial support.

**Competing Interests:** The authors declare that they have no competing interests.

**Acknowledgement:** All authors contributed equally to the conception and design of the study.

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