

# REGIONAL MINIMUM WAGE POLICY AND INFORMAL SECTOR EMPLOYMENT IN INDONESIA A CONCEPTUAL REVIEW

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## Abstract

**Purpose:** This conceptual article explains the relationship between minimum wage policy and informal employment in the Indonesian context. **Approach:** It integrates the theoretical arguments and prior studies cited in the manuscript through a structured narrative review. **Conceptual synthesis:** The framework identifies labor cost adjustment, enforcement differences, productivity, and firm formalization decisions as the principal explanatory channels. The strength and direction of these relationships depend on regional productivity, industrial structure, compliance capacity, and worker mobility. **Conclusion:** The proposed framework clarifies causal pathways, identifies practical decision points, and provides testable propositions for future empirical research. No primary survey, interview, experiment, or regression result is claimed in this article.

**Keywords:** Minimum Wage, Informal Employment, Labor Market, Panel Data, Decentralization, Indonesia

## Introduction

Minimum wage policy occupies a central place in Indonesian labor market debates. Every year, provincial governments announce the provincial minimum wage for the following year, and the decision is closely followed by trade unions, employers' associations and investors. Since decentralization, provincial and district governments have had authority to set minimum wages within a national framework. That framework has changed several times, most notably through the wage-setting formula introduced in 2015 and the Government Regulation on Wages issued as an implementing regulation of the Job Creation Law in 2021 (Government Regulation No. 36 of 2021; Government of the Republic of Indonesia, 2021), which was later amended in 2023 (Government of the Republic of Indonesia, 2023). Each change altered how inflation, economic growth and regional labor market conditions enter the calculation of the minimum wage.

The purpose of the minimum wage is to protect low-paid workers and ensure a decent standard of living. However, economists have long debated whether minimum wages reduce employment. In a competitive labor market, a binding minimum wage above the market-clearing wage reduces labor demand. In markets where employers have some wage-setting power, a moderate minimum wage can raise wages without reducing employment, as shown by the influential study of fast-food restaurants in New Jersey and Pennsylvania (Card & Krueger, 1994). The broad international literature reviewed by Neumark and Wascher (2008)

finds evidence of negative employment effects, particularly for young and less-skilled workers, but the magnitude remains contested.

In developing countries, the question takes a different form because a large proportion of workers are employed in the informal sector, where minimum wages are rarely enforced. Dual labor market models predict that workers who lose formal jobs due to a higher minimum wage may move into the uncovered informal sector, increasing the size of that sector and depressing informal wages (Harris & Todaro, 1970). In Indonesia, where informal employment accounts for more than half of total employment, this mechanism is of considerable policy relevance. If minimum wage increases enlarge the informal sector, they may reduce the coverage of social security, weaken tax bases and lower productivity growth.

Earlier studies on Indonesia provide important but mixed evidence. Rama (2001) found that the doubling of the real minimum wage in the early 1990s increased average wages and had a modest negative effect on wage employment. Alatas and Cameron (2008) used a quasi-natural experiment around the Jakarta border and found no significant employment effect for large firms but some evidence of negative effects for small domestic firms. Comola and de Mello (2011) found that higher minimum wages were associated with lower formal employment and higher informal employment, consistent with the dual labor market prediction. Magruder (2013) argued that minimum wages could support formal sector expansion through demand effects, while Hohberg and Lay (2015) found that minimum wages raised formal wages without clear evidence of shifting workers into informality.

Most of these studies rely on data from before the 2015 formula and the subsequent regulatory changes. The wage-setting environment after 2015 differs substantially, because the formula reduced the discretion of local wage councils and linked adjustments more closely to macroeconomic indicators. It is therefore appropriate to re-examine the relationship between minimum wages and informality using more recent provincial data. This study asks two questions: does a higher real minimum wage, or a higher minimum-to-median wage ratio, increase the share of informal employment in Indonesian provinces? And is the effect stronger in provinces where manufacturing, a sector with high minimum wage compliance, accounts for a larger share of employment?

## **Literature Review and Hypothesis Development**

### ***Competitive, monopsony and dual labor market models***

In the competitive model, a binding minimum wage increases the cost of labor above its marginal product for the least productive workers, and employers respond by reducing employment, substituting capital for labor, or reducing hours. In the monopsony model, employers face an upward-sloping labor supply curve and pay wages below the marginal product of labor; a minimum wage set moderately above the monopsony wage can increase both wages and employment. The empirical debate between these models has been central to labor economics since the early 1990s (Card & Krueger, 1994; Neumark & Wascher, 2008).

In developing economies, the labor market is better described as segmented. Lewis (1954) described economies in which a traditional sector with surplus labor coexists with a modern capitalist sector. Harris and Todaro (1970) formalized a two-sector model in which a wage floor in the modern sector creates unemployment and affects the allocation of labor across sectors. In the version most commonly applied to minimum wages, the formal sector is covered by the minimum wage and the informal sector is not. A higher minimum wage reduces formal employment, and displaced workers enter the informal sector, increasing informal employment and lowering informal wages.

### ***The nature of informality***

The dual labor market perspective has been challenged by research that treats informality not only as a residual for excluded workers but also as a voluntary choice. Maloney (2004) argued that in Latin America many informal workers, especially the self-employed, chose informality because it offered flexibility, independence and earnings comparable to formal jobs. La Porta and Shleifer (2014) described informality as a feature of low productivity and argued that informal firms are typically small, unproductive and run by less-educated entrepreneurs, and that informality declines as economies develop. These perspectives imply that the effect of minimum wages on informality depends on the structure of the economy and the motivations of informal workers.

A further insight is the so-called "lighthouse effect", in which the minimum wage serves as a reference point for wages in the informal sector even though it is not legally enforced there. Boeri et al. (2011) showed that minimum wages can influence informal sector wages through bargaining norms and workers' outside options. If the lighthouse effect is strong, increases in the minimum wage may raise informal wages as well, reducing the incentive for workers to remain in the formal sector and complicating predictions about sectoral shifts.

### ***Evidence from Indonesia***

Indonesia provides a useful setting because minimum wages vary across provinces and districts and have been adjusted frequently. Rama (2001) found that the large minimum wage increase in the early 1990s raised average wages by about 5 to 15 percent and reduced wage employment by a small amount. Alatas and Cameron (2008) found no significant negative effects for large firms but warned that small firms could be more affected. Comola and de Mello (2011) used district-level data and found that increases in the minimum wage were associated with lower formal employment and higher informal employment. Magruder (2013) suggested a different mechanism, arguing that coordinated minimum wage increases could raise aggregate demand and encourage formal sector expansion. Hohberg and Lay (2015) used individual-level data and found that minimum wages affected formal wages but did not cause substantial movement into the informal sector.

The differences among these studies reflect differences in period, geographic level and methodology. They also reflect the fact that compliance with the minimum wage in Indonesia is incomplete, even in the formal sector. When compliance is low, the minimum wage may have only limited effects on either employment or informality. This makes the minimum-to-median wage ratio, commonly called the Kaitz index, an important variable, because it captures how binding the minimum wage is relative to the wage distribution in each province.

### ***Hypotheses***

H1: An increase in the real provincial minimum wage is associated with a higher share of informal employment in the following year.

H2: A higher ratio of the minimum wage to the median wage (Kaitz index) is associated with a higher share of informal employment.

H3: The positive effect of the minimum wage on informal employment is stronger in provinces with a higher share of manufacturing employment.

**Table 1. Theoretical predictions of the effect of minimum wages on informal employment**

| <b>Theoretical perspective</b>  | <b>Mechanism</b>                                       | <b>Predicted effect on informal share</b> |
|---------------------------------|--------------------------------------------------------|-------------------------------------------|
| Competitive / dual labor market | Displacement of low-productivity formal workers        | Positive                                  |
| Monopsony                       | Higher wages without employment loss                   | Neutral or negative                       |
| Lighthouse effect               | Informal wages follow minimum wage                     | Ambiguous                                 |
| Voluntary informality           | Informal choice driven by flexibility and productivity | Weak                                      |

### ***Research gap and conceptual framework***

Two gaps motivate this study. The first is temporal: the most cited Indonesian studies (Rama, 2001; Alatas & Cameron, 2008; Comola & de Mello, 2011) analyze periods in which local wage councils had considerable discretion, whereas the post-2015 regime links adjustments to a formula. The second is conceptual: most studies test whether minimum wages reduce formal employment, but fewer examine the informal share directly as the outcome, even though the dual labor market model makes informality the central margin of adjustment (Harris & Todaro, 1970). The conceptual framework of this study therefore places the informal employment share as the dependent variable, the real minimum wage and the Kaitz index as the policy variables, and the manufacturing share as the structural condition that determines how strongly the policy binds. Regional GDP, urbanization and education are treated as structural controls because the voluntary-informality literature suggests that they explain much of the cross-provincial variation in informality independently of wage policy (Maloney, 2004; La Porta & Shleifer, 2014).

### **Conceptual Review Method**

This article uses a structured narrative review to integrate the literature already identified in the manuscript. Sources are interpreted according to their contribution to the relationship between minimum wage policy and informal employment, the mechanisms they propose, and the conditions under which those mechanisms may strengthen, weaken, or change direction. The review does not present itself as a systematic review or meta-analysis, and it does not generate new numerical estimates. Instead, it organizes established concepts into an explicit framework that can guide later empirical testing.

### **Conceptual Synthesis**

The synthesis indicates that minimum wage policy and informal employment should not be treated as a single direct relationship. The first layer consists of labor cost adjustment, enforcement differences, productivity, and firm formalization decisions. These channels explain how an institutional, technological, managerial, or behavioral change is translated into an economic or organizational outcome. They also show why apparently similar actors may respond differently to the same intervention.

The second layer consists of boundary conditions: regional productivity, industrial structure, compliance capacity, and worker mobility. These conditions shape exposure, capability, incentives, and the capacity to respond. Accordingly, the conceptual model predicts conditional rather than universal effects. Future research should measure the mediating

mechanisms separately and test interactions with the identified boundary conditions instead of relying only on a single aggregate association.

## Conceptual Propositions

Proposition 1. The relationship between minimum wage policy and informal employment operates through the combined influence of labor cost adjustment, enforcement differences, productivity, and firm formalization decisions.

Proposition 2. The magnitude and direction of the relationship vary according to regional productivity, industrial structure, compliance capacity, and worker mobility.

Proposition 3. Outcomes are more sustainable when organizational capability, stakeholder trust, and governance safeguards develop together rather than independently.

## Practical and Research Implications

For practitioners and policymakers, the framework suggests that interventions concerning minimum wage policy and informal employment should be designed as coordinated packages. Technology or formal policy alone is unlikely to produce consistent results without capability development, credible communication, monitoring, and accessible support. For researchers, the framework provides a transparent basis for selecting constructs, specifying mediators and moderators, and comparing different Indonesian regions or organizational settings.

## Conclusion

This article reframes minimum wage policy and informal employment as a conditional process rather than a simple one-directional effect. The conceptual contribution is the integration of labor cost adjustment, enforcement differences, productivity, and firm formalization decisions with the boundary conditions of regional productivity, industrial structure, compliance capacity, and worker mobility. The framework offers testable propositions while avoiding unsupported empirical claims. Future studies can evaluate the propositions using verified survey, administrative, qualitative, or longitudinal evidence.

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