

Evidence-Informed Employment Policy Decisions under Uncertainty: Regional Output, Minimum Wages, and Education in Lampung

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ARTICLE HISTORY

Submitted: Apr 10, 2026

Revised: June 02, 2026

Accepted: Jun 29, 2026

KEYWORD

Decision Sciences;
Evidence-informed policy;
Employment;
Minimum wages;
Educational attainment;
Regional uncertainty.

ABSTRACT

Background: Regional labor-market policy must balance job creation, wage protection, and workforce capability despite uncertain evidence.

Aims: To appraise reported associations between regional economic performance, minimum wages, educational attainment, and employment in Lampung and clarify their decision relevance.

Methods: A retrospective reappraisal used published regression results for 14 districts/municipalities over 2013–2015 (42 district-year observations). The original analysis employed multiple linear regression in SPSS 17; a qualitative decision-evidence matrix was subsequently developed without new estimation or policy optimization.

Results: Economic performance ($B = 0.172$, $p = .537$) and minimum wages ($B = -0.029$, $p = .958$) were not statistically significant, while education was positively associated with labor absorption ($B = 0.447$, $p < .001$). Model fit was $F(3, 38) = 13.277$, $p < .001$, $R^2 = .512$.

Conclusion: Education provides a historical diagnostic signal rather than evidence of program effectiveness. The matrix identifies missing information on measurement, causal effects, costs, and distributional trade-offs before policy choices can be assessed.

INTRODUCTION

Employment policy presents a persistent decision problem because governments must consider both the number and the quality of jobs while operating with incomplete knowledge of how firms and workers respond. Regional economic expansion may increase production without generating proportional hiring, particularly when the sectoral composition of activity changes. Wage regulation can protect earnings yet elicit adjustments in hiring, job turnover, prices, or informal employment, and these responses are not uniform across settings (Gopalan et al., 2021; Samutpradit, 2024; Wang, 2025). Educational attainment can improve workers' opportunities, but its relationship with total employment depends on the availability and quality of jobs, occupational matching, and complementary experience (Jedwab et al., 2023; Wiedner, 2024). Consequently, a regional coefficient is better treated as evidence about a measured association than as a rule prescribing a policy action. This distinction is central when public resources must be allocated among interventions whose effectiveness has not been directly established.

The historical Lampung case illustrates the problem in concrete terms. Provincial labor-force totals reported in the source study were 3,681,084 in 2013, 3,857,936 in 2014, and 3,832,108 in 2015, while employment increased in 2014 and fell in 2015 (Badan Pusat Statistik Provinsi Lampung, 2016). These figures describe a short period of changing labor-market conditions; they do not establish the causes of those changes. Indonesia-specific research published subsequently shows that employment vulnerability can differ by education, occupation, and regional circumstances, underscoring why aggregate movements are not equivalent to individual employment mechanisms (Putra et al., 2023). An important local measurement difficulty is that the source thesis labeled an economic indicator as "growth" even though its operational description referred to constant-price gross regional domestic product (GRDP) or GRDP per capita. If the indicator represents a level rather than an annual growth rate, its interpretation for decisions about growth-led hiring changes materially.

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The policy stakes extend beyond whether a regression coefficient reaches a conventional significance threshold. Regional authorities might consider supporting labor-intensive activity, monitoring wage implementation, improving educational pathways, or commissioning more targeted labor-market information. Each option involves possible consequences for employment, earnings, public costs, and the distribution of benefits, but the original dataset does not estimate these consequences. Evidence-informed policy research emphasizes that usable knowledge must be integrated with institutional capacities, deliberation, and decision processes rather than passed directly from a study into an intervention (Fussy, 2022; Kuchenmüller et al., 2022; Turner et al., 2023). Research on policy dialogues similarly distinguishes empirical evidence from procedural and ethical judgments about who participates and what outcomes matter (Mitchell et al., 2023). These considerations make the quality and limits of the available evidence part of the decision problem itself.

Employment evidence is particularly susceptible to mismatches between statistical measures and policy questions. Districts with larger populations may have both more employed residents and more tertiary-educated workers, even when individual educational attainment has no identified causal effect on hiring. A minimum wage expressed in nominal currency does not describe its real purchasing power, the proportion of affected workers, or enforcement differences, all of which may matter for labor-market responses. Recent research documents different adjustment margins, including reduced vacancies, changes in business exit, and sector-specific price responses (Ahn, 2024; Kudlyak et al., 2025; Kunaschk, 2024). Similarly, direct comparisons between education pathways show that formal employment, wages, and unemployment need not move together (Cahuc & Hervein, 2024; Kemper & Renold, 2024). The Lampung evidence therefore warrants a diagnostic reading that specifies which policy claims remain beyond the model's scope.

Earlier Indonesian studies considered associations between GRDP, wages, investment, education, and employment across particular regions (Buchari, 2016; Indradewa & Natha, 2015; Kamar, 2017; Trianto, 2017). More recent international work shows why the resulting conclusions should not be collapsed into a universal sign for any single predictor. Cengiz et al. (2022) found little evidence of employment change in their studied minimum-wage increases, whereas Samutpradit (2024) documented employment reallocation between covered and uncovered sectors in Thailand. Medrano-Adán and Salas-Fumás (2023) obtained different implications from an occupational-choice model, illustrating how theoretical assumptions and adjustment channels alter the policy interpretation. Education studies likewise report differences across vocational tracks, skill types, and national institutions (Choi et al., 2023; Dai & Martins, 2024; Jones et al., 2023). These studies concern other contexts and designs; they inform the plausibility of alternative explanations rather than validate the original Lampung estimates.

A related strand of Decision Sciences examines how analysts should organize choices when predictions and stakeholder preferences are uncertain. Multi-criteria applications make policy objectives and competing values explicit, while value-of-information reasoning asks whether further evidence could improve an eventual choice (Haag et al., 2022; Haag & Chennu, 2023; Jackson et al., 2022). However, these approaches require defined alternatives, outcomes, preferences, or probability distributions before an intervention can be formally ranked or optimized. Studies of evidence cultures and stakeholder processes reinforce that scientific information is interpreted within institutional and social settings rather than applied mechanically (Bandola-Gill et al., 2024; Kuller et al., 2023). The specific gap addressed here is narrower than the development of a new decision algorithm: historical regression studies can be reported in policy language without sufficiently separating measured signals, unresolved uncertainty, and requirements for further investigation. A transparent appraisal of those distinctions is possible even when the underlying historical dataset cannot be re-estimated.

This article therefore re-examines the reported relationships of regional economic performance, minimum wages, and educational attainment with labor absorption in 14 Lampung districts and municipalities during 2013–2015. It retains the four questions assessed by the original study: whether each of the three predictors has a statistically significant partial association with employment (H1–H3) and whether the predictors are jointly related to employment (H4). A separate decision-analytic question asks what those reported estimates can responsibly contribute to the selection of issues for future policy evaluation. The methodological contribution is an auditable evidence-to-decision appraisal that connects each coefficient to a policy-relevant question and its missing evidence, rather than treating statistical significance as an intervention ranking. The practical contribution is a disciplined interpretation of an existing regional study that avoids untested causal claims, and the conceptual contribution is the separation of evidence quality, stakeholder values, and policy choice. The article makes no claim to current forecasts, newly estimated coefficients, or a validated optimization procedure.

Theoretical and Decision-Science Framework

Regional production, wage protection, and worker capabilities are linked to labor-market outcomes through different theoretical channels. Development economics associates labor demand with productive activity, but output can expand through capital accumulation or productivity without a comparable increase in headcount (Tarigan, 2014; Todaro & Smith, 2011). The relationship between output and unemployment can also vary with institutional quality, as comparative evidence from emerging and developing economies indicates (Raies & Ben Mimoun, 2025). Minimum-wage models describe possible wage and labor-demand adjustments, while empirical work finds heterogeneous responses in firms, hiring, and employment (Kuncoro, 2002; Sulistiawati, 2012; Gopalan et al., 2021; Medrano-Adán & Salas-Fumás, 2023). Human-capital reasoning links learning and work experience to productive capacities, but occupational outcomes depend on the match between worker skills and available tasks (Mankiw, 2003; Girsberger et al., 2022; Jedwab et al., 2023). These mechanisms clarify the hypotheses without implying that the historical regression identifies any one of them.

The education variable deserves particular analytical care because it records an aggregate count of diploma- or university-educated labor-force members, not skill quality or an individual educational treatment. Research on educational mismatch differentiates qualifications, occupation requirements, and the organization of hiring (Akgüç & Parasnis, 2023; Bauer, 2024; Beręsewicz et al., 2024; Bischof, 2024). More recent studies further illustrate that worker and job composition, firm practices, and pathways through vocational education can modify the relationship between schooling and labor-market outcomes (Berloff et al., 2026; Choi & Min, 2025; Decker, 2026; Tobler & Leesch, 2026). These developments offer reasons to interpret a district-level count relationship as a signal requiring disaggregation rather than as evidence of the effect of increasing educational expenditure. The same principle applies to wage and GRDP measures whose scales are not fully recoverable from the thesis tables.

The article uses a limited evidence-to-decision logic grounded in uncertainty-aware public decision making (Manski, 2013; OECD, 2020). For each predictor, it records the empirical signal, poses a decision-relevant question, and specifies the information needed before an action could be evaluated. International work on evidence synthesis and policy use suggests that institutionalization, timely information, and stakeholder participation can influence whether evidence is actually used (Aremu, 2024; Fussy, 2022; Nduku et al., 2024). Islamic economic principles of fair compensation, opportunity, and welfare may inform the criteria stakeholders choose to apply in a relevant institutional setting (Abidin, 2012; Beik & Arsiyanti, 2016; Ridwan, 2013). Such normative criteria are kept distinct from the unmeasured consequences of policy

alternatives and from the predictors in the original regression. The result is an organizing procedure rather than a numerical multi-criteria decision analysis.

METHOD

Research design and setting

This study was a retrospective reappraisal of an existing quantitative analysis, followed by a qualitative, non-optimizing decision-evidence synthesis. No current-period sampling, fresh data extraction, intervention, or regression re-estimation was conducted for this article because the underlying observation-level dataset was not available. The chosen design was appropriate for scrutinizing what the documented coefficients could, and could not, contribute to policy diagnosis. The decision-support component was a separate interpretive procedure, not an additional statistical model.

Study Setting and Unit Selection

The original analysis covered 14 districts and municipalities observed across three years, yielding 42 district-year records. These were administrative units rather than recruited human participants, and the original thesis characterized the selection as purposive because comparable published data were required. Pesisir Barat was excluded from the original dataset because its required comparable records were unavailable. The regional and temporal scope was therefore fixed by the historical study, and its coefficients refer to this short observational sample. The provincial aggregates shown in the results section provide descriptive context only and are not additional regression observations.

Sources and Operational Definitions

The source thesis compiled the variables from Badan Pusat Statistik publications and associated statistical tabulations (Badan Pusat Statistik Provinsi Lampung, 2016). The dependent measure, labor absorption, was the number of employed residents aged 15 years or above; educational attainment was a count of labor-force members with diploma or university qualifications; and minimum wage was the district/city nominal wage measure in rupiah. The economic indicator was described inconsistently as economic growth, constant-price GRDP, or GRDP per capita. This article therefore uses the neutral label regional economic performance and does not infer a growth-rate calculation, scaling transformation, standardized coefficient, or percentage interpretation that the documented tables do not establish. The operational measures are reproduced in Table 1. No questionnaires or psychometric instruments were used, so instrument reliability coefficients would not describe this administrative-data design.

Table 1. Operational measures in the source study

Variable	Reported indicator	Unit / interpretive note
Economic performance (X1)	Constant-price GRDP / GRDP per capita	Rupiah; not a directly reported growth rate
Minimum wage (X2)	District/city minimum wage	Rupiah
Educational attainment (X3)	Labor force with diploma/university education	Persons; count-based measure
Labor absorption (Y)	Residents aged 15+ who are employed	Persons; count-based measure

Regression Specification and Reported Diagnostics

The original fitted relationship was specified as $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$, where Y denotes the employed population, X_1 regional economic performance, X_2 minimum wages, and X_3 tertiary educational attainment. The thesis reported partial t tests, a joint F test, R^2 , and residual or collinearity diagnostics using a nominal significance threshold of .05. It also presented a Kolmogorov–Smirnov test, VIF/tolerance values, a runs test, and a visual heteroskedasticity assessment. The present paper reproduced these results without changing their values or computing unavailable standard errors, confidence intervals, counterfactual impacts, or

robustness tests. Given the repeated observations and district-size confounding risk, the historical pooled OLS specification should be viewed as associational rather than causally identified. Modern panel evaluation methods provide methodological context for possible follow-up work, not analyses performed here (Callaway & Sant'Anna, 2021; de Chaisemartin & D'Haultfœuille, 2023; Roth et al., 2023).

Decision-Evidence Appraisal Procedure

The qualitative appraisal applied three linked questions to every reported empirical result: what association was observed, what policy question might it motivate, and what evidence would be required before selecting an intervention. First, the article extracted the reported signs, *t* statistics, *p* values, and aggregate model fit from the 2019 thesis. Second, it treated statistically non-significant coefficients as inconclusive rather than zero policy effects and treated the positive education coefficient as an association rather than a program evaluation. Third, it connected each predictor to a feasible category of policy inquiry and named the missing information on measurement, causal identification, costs, implementation, and distributional effects. Fourth, the results were organized in an evidence-evaluation matrix (Table 5) to communicate the limits of the available information. Neither utility weights, stakeholder surveys, uncertainty probabilities, fiscal budgets, impact simulations, nor formal option rankings were estimated; the flow is summarized in Figure 1. The logic is compatible with uncertainty-aware appraisal while remaining less ambitious than a quantitative multi-criteria or value-of-information model (Haag & Chennu, 2023; Jackson et al., 2022).

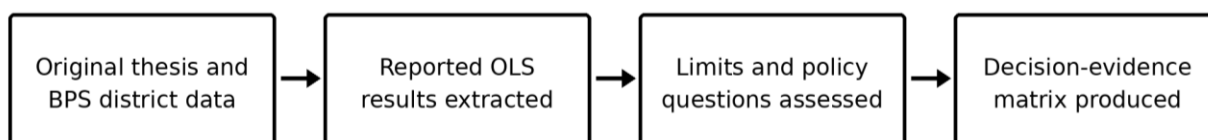


Figure 1. Retrospective evidence-to-decision appraisal procedure

RESULTS AND DISCUSSION

Results

Provincial aggregates describe the conditions surrounding the original district-level observations. The employed population increased from 3,471,602 in 2013 to 3,673,158 in 2014, then decreased to 3,635,258 in 2015 (Table 2). Unemployment declined between 2013 and 2014 and increased to 196,850 in 2015. These totals document changes in the regional labor market over the study period but provide no identification of their causes.

Table 2. Labor-market conditions in Lampung Province, 2013–2015

Indicator	2013	2014	2015
Labor force	3,681,084	3,857,936	3,832,108
Employed population	3,471,602	3,673,158	3,635,258
Unemployed population	209,482	184,778	196,850

The thesis reported a significant joint regression result, $F(3, 38) = 13.277$, $p < .001$, with $R^2 = .512$ and adjusted $R^2 = .473$. Thus, the regressors jointly had statistically detectable associations with the dependent measure within the observed sample, and the fitted model accounted for 51.2% of its variation. This figure is an in-sample goodness-of-fit measure, not an attributable share of employment created by the predictors. Table 3 reproduces the regression coefficients and individual tests as reported, without re-estimation.

Table 3. Original multiple-regression estimates for labor absorption

Predictor	Coefficient (B)	t statistic	p value	Decision at .05
Constant	5.536	0.669	.507	—
Economic performance (X1)	0.172	0.623	.537	Not significant
Minimum wage (X2)	-0.029	-0.053	.958	Not significant
Educational attainment (X3)	0.447	6.046	< .001	Significant (+)

Regional economic performance had a positive but non-significant reported coefficient ($B = 0.172$, $t = 0.623$, $p = .537$), and the minimum-wage coefficient was negative but non-significant ($B = -0.029$, $t = -0.053$, $p = .958$). Educational attainment was positively and significantly associated with labor absorption ($B = 0.447$, $t = 6.046$, $p < .001$). On the original .05 decision rule, H1 and H2 did not show statistically detectable partial associations; H3 showed a positive partial association, and the joint model test supported H4. Coefficient values are reproduced in their reported scale, which cannot be independently reconstructed from the summary output. Neither the positive education result nor the null-test outcomes identify how a specific policy intervention would change employment.

The original diagnostic reports included a Kolmogorov–Smirnov residual test with $Z = 0.791$ and $p = .559$, a runs-test p value of .435, and predictor VIF values near one (Table 4). These statistics did not indicate a rejection of residual normality, a departure from the tested runs pattern, or a high degree of measured collinearity under the original checks. Heteroskedasticity was assessed graphically and no formal test estimate was reported. More importantly, the reported checks do not address all threats to inference arising from repeated district observations, omitted district characteristics, time variation, or count-based measures. No further diagnostic results are implied.

Table 4. Diagnostic statistics reported in the original thesis

Test / indicator	Reported statistic	Reading
Kolmogorov–Smirnov residual test	$Z = 0.791$; $p = .559$	No normality rejection
Economic performance: VIF / tolerance	1.060 / .943	No high VIF
Minimum wage: VIF / tolerance	1.023 / .977	No high VIF
Education: VIF / tolerance	1.038 / .963	No high VIF
Runs test	$p = .435$	No evidence of non-random runs
Model fit	$R^2 = .512$; adjusted $R^2 = .473$	Moderate sample fit

Discussion

The non-significant regional economic-performance estimate is informative principally because it limits, rather than resolves, an apparent policy claim. A coefficient of $B = 0.172$ with $p = .537$ does not supply evidence that additional regional output reliably creates jobs in the observed specification, but it also cannot establish that productive expansion is unrelated to labor demand. Development theory permits employment responses to differ with the sectoral distribution of output, technology, and productivity (Tarigan, 2014; Todaro & Smith, 2011). Comparative analysis of the growth–unemployment relationship has found variation associated with institutional quality, although its findings cannot be transferred directly to Lampung (Raies & Ben Mimoun, 2025). The measurement ambiguity is equally consequential: a GRDP level, GRDP per capita, and a year-on-year GRDP growth rate answer different questions. The result is therefore a reason to specify the economic variable and investigate sector-level hiring before interpreting output support as an employment strategy.

The historical wage coefficient likewise cannot settle the debate about the employment consequences of minimum-wage changes. Its reported negative sign ($B = -0.029$) is accompanied by $p = .958$, which provides little evidence of a distinguishable partial association within this sample rather than proof of a negative wage effect. Recent research finds heterogeneous wage-policy adjustment across settings: Cengiz et al. (2022) observed little employment change in the

studied increases, whereas Samutpradit (2024) documented movement between covered and uncovered sectors in Thailand. Firm-level and sector-specific studies have additionally examined hiring, business exit, vacancies, and prices (Ahn, 2024; Gopalan et al., 2021; Kudlyak et al., 2025; Kunaschk, 2024). These findings illustrate why a district-level wage coefficient omits important margins, including the number of workers directly affected and actual compliance with wage rules. Minimum-wage decisions require evidence about earnings protection, costs, productivity, and employment transitions rather than a deterministic reading of this non-significant estimate.

The positive educational-attainment association is the clearest statistical signal in the original regression, yet its meaning depends on the level of measurement. Educational attainment was operationalized as a count of tertiary-educated labor-force members, while labor absorption was also a count, making both quantities sensitive to the scale of districts. Human-capital research explains why education and workplace learning may be valuable for labor-market trajectories, but does not establish that these district counts measure the effect of schooling (Jedwab et al., 2023; Jones et al., 2023). Indonesian research on vocational education indicates differences in job quality and outcomes across gender or skills, strengthening the case for more differentiated indicators (Choi et al., 2023; Choi & Min, 2025). The coefficient $B = 0.447$ is thus not interpretable as a change in the employment rate caused by increasing the education budget. A defensible next step would distinguish population scale, attainment shares, qualifications, vacancies, and employers' requirements before testing any education–employment intervention.

Research on skill mismatch reveals why expanding education should not be equated with improving the employment match. Work using qualification requirements, online vacancies, and direct skill measurement has shown that educational categories can conceal mismatches between labor supply and job tasks (Bauer, 2024; Beręsewicz et al., 2024; Bischof, 2024). Differences across job composition and firm human-resource practices may also influence mismatch, rather than education alone (Berloff et al., 2026; Tobler & Leesch, 2026; Wiedner, 2024). Studies of vocational learning further distinguish employment access, wage progression, and the experience gained during training (Cahuc & Hervein, 2024; Decker, 2026; Oswald-Egg & Renold, 2021). This body of work neither confirms nor contradicts the Lampung coefficient directly, because the measures and research designs are different. It instead clarifies the key unresolved question: which specific skill–job gaps, if any, could be addressed through an evaluable local program.

The joint model test and R^2 should be interpreted as properties of a fitted historical relationship rather than as comparisons among competing policies. In particular, a significant F test cannot rank the welfare consequences of output support, wage regulation, and educational investment, because no policy alternative, cost, or counterfactual outcome was estimated. Quantitative decision models require explicit alternatives and relevant consequences; where stakeholders differ, their preferences and weights also need attention (Haag et al., 2022; Kuller et al., 2023). Value-of-information methods go further by considering the expected benefit of reducing specific uncertainties, but need inputs that are absent from the source regression (Haag & Chennu, 2023; Jackson et al., 2022). The decision-evidence matrix in Table 5 therefore provides a transparent list of questions and evidence needs without assigning numerical utility or expected benefit. Its intended utility is procedural: it clarifies the sequence between recognizing a signal and deciding what must be learned before acting.

The interpretation is also constrained by the original data structure and the limits of reanalysis. Repeated observations for 14 districts or municipalities over three years may share persistent district characteristics, common shocks, or trends that a pooled model does not explicitly isolate. Modern difference-in-differences and panel evaluation literature emphasizes the assumptions needed for causal comparisons, including treatment definition, time structure, and appropriate comparisons (Callaway & Sant'Anna, 2021; de Chaisemartin & D'Haultfœuille, 2023; Roth et al., 2023). Those methods cannot be retroactively claimed on the basis of the thesis

tables, and adding them without observation-level data would invent an analysis. Moreover, the study predates changes in labor-market conditions illustrated by later Indonesian evidence (Putra et al., 2023). For present-day decisions, updated district panels and a clearly defined employment outcome would be needed before any comparison of intervention effects.

A structured evidence discussion also has institutional and ethical dimensions that the regression alone cannot settle. Research on evidence-informed policymaking finds that knowledge use depends on organizational capacities, evidence cultures, and opportunities for deliberation (Bandola-Gill et al., 2024; Fussy, 2022; Kuchenmüller et al., 2022). Policy-dialogue scholarship highlights procedural fairness and the inclusion of affected stakeholders, while review protocols and sectoral syntheses describe ways to organize evidence relevant to policy choices (Aremu, 2024; Mitchell et al., 2023; Nduku et al., 2024). In an Islamic economic setting, fairness in compensation, opportunities to work, and social welfare can supply legitimate evaluative objectives (Abidin, 2012; Beik & Arsiyanti, 2016; Ridwan, 2013). They are not measured predictors here and should not be presented as empirically validated by a significant education coefficient. The same separation between values and evidence permits application in non-Islamic institutions with different but explicitly stated policy objectives.

The article's contribution lies in making the boundary between historical evidence and actionable choices visible. Studies of training and education in China, Egypt, and France demonstrate that outcomes depend on program type, employment definition, and context, rather than on a generic education label (Dai & Martins, 2024; Kemper & Renold, 2024; Li et al., 2025). Evidence on evolving skill acquisition and school-based versus work-based learning reinforces the importance of specifying a mechanism before evaluation (Girsberger et al., 2022; Tobback et al., 2025). Similarly, minimum-wage models with multiple adjustment channels illustrate why a single net-employment statistic cannot exhaust policy trade-offs (Medrano-Adán & Salas-Fumás, 2023; Wang, 2025). Adaptive-policy work suggests an iterative approach in which better evidence is produced as decision questions become more precise (Turner et al., 2023). Against that literature, the Lampung matrix is a modest but coherent first-stage appraisal: it clarifies what is known, what remains unmeasured, and which questions need credible evaluation before resources are committed. It should not be described as a validated ranking system or a demonstration that one specific intervention is superior.

Table 5. Decision-evidence appraisal of historical employment estimates

Empirical signal	Decision-relevant question	Evidence needed before action
Output/GRDP: $B = 0.172$; $p = .537$ (not detected)	Does sectoral expansion create additional local jobs?	GRDP growth rates; sector-level hiring, investment, and causal employment responses.
Minimum wage: $B = -0.029$; $p = .958$ (not detected)	How can wage protection and employment objectives be balanced?	Real wage costs; sectoral heterogeneity; worker welfare; credible evaluation of wage changes.
Education: $B = 0.447$; $p < .001$ (positive association)	Which education–employment mismatch deserves evaluation?	Education shares, skills demand, intervention costs, and controlled program outcomes.
Overall model: $R^2 = .512$; $F p < .001$	Is the available model sufficient to select a policy?	No: external validation, district effects, current data, feasible options and outcome trade-offs.

Implications

For provincial and district labor offices, the evidence-evaluation matrix can function as an agenda-setting instrument. Education-related associations justify a closer examination of qualification shares, sector demand, and training-to-job pathways, not immediate endorsement of a specific program. Wage and GRDP estimates justify sharper measurement and more context-specific investigation rather than either automatic policy reversal or inaction. Stakeholder

consultations can explicitly distinguish empirical evidence, feasibility, affordability, and distributive objectives before comparing feasible options. This approach is compatible with decision-science principles but cannot replace a contemporary causal evaluation or a quantified policy appraisal.

Limitations

This work relies on regression summaries reported in an undergraduate thesis rather than a reproducible district-year data file, and no original observations were reprocessed. The 2013–2015 period, the purposive selection of 14 districts/municipalities, and the exclusion of Pesisir Barat limit the empirical scope. The pooled specification does not document district or year effects, and the count-based education and employment indicators may both reflect district scale. Variable units and transformations are not fully recoverable, especially for the indicator originally labeled economic growth, while available diagnostics do not cover all possible departures from model assumptions. The appraisal contains no causal program impacts, estimated intervention costs, stated stakeholder weights, uncertainty distributions, or external validation, and consequently cannot select an optimal policy. The analysis is a historical methodological interpretation, not evidence of current labor-market conditions.

Suggestions for Further Research

A more decision-relevant follow-up could combine updated district panels with clearly defined GRDP growth rates, employment rates, skill and education shares, real minimum wages, and sector characteristics. If specific policies and credible comparison groups were available, future researchers could select suitable causal designs rather than assume that an associational regression provides intervention effects (Callaway & Sant’Anna, 2021; Roth et al., 2023). Program alternatives could then be evaluated against transparent criteria concerning expected employment, worker welfare, affordability, and equity. Where predictions and preferences are elicited, sensitivity analysis or formal value-of-information methods could indicate which additional evidence is worth collecting (Haag & Chennu, 2023; Jackson et al., 2022). None of these prospective analyses is represented as completed in this paper.

CONCLUSION

This article reappraised a historical Lampung labor-absorption regression and translated its reported results into a cautious decision-evidence matrix. For 42 district-year observations from 2013–2015, regional economic performance ($B = 0.172$, $p = .537$) and minimum wages ($B = -0.029$, $p = .958$) did not show statistically detected partial associations, whereas tertiary educational attainment was positively associated with employment ($B = 0.447$, $p < .001$). The model’s joint test was significant, $F(3, 38) = 13.277$, $p < .001$, with $R^2 = .512$. These findings concern a historical associational model and do not estimate the effects, costs, or comparative value of employment interventions. The proposed matrix contributes a transparent way of separating empirical signals from decision questions and evidence gaps, with ethical and distributional considerations treated as potential policy criteria rather than regression results. Contemporary choices require updated measures, credible evaluation designs, and explicit comparison of policy alternatives.

ACKNOWLEDGMENT

The original thesis acknowledged Badan Pusat Statistik Provinsi Lampung as a source of statistical information. No separate research funding information was reported in the underlying study.

AUTHOR CONTRIBUTIONS STATEMENT

Sulistiyono: Conceptualization, methodology, data compilation, formal analysis, and writing of the underlying 2019 thesis. The present article is a retrospective interpretive adaptation of that reported work; additional contributor roles are not attributed without supporting information.

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