

Three Deflation Traps in Estimating Poverty-Line Elasticities: Panel Evidence from Indonesia, 2004-2025

Athaillah Farrel Inandra¹, Gildan Erabbaani Putranto²

¹ Faculty of Science and Technology, Universitas Pelita Harapan

² Faculty of Economics and Business, Universitas Pelita Harapan

Corresponding Author e-mail: athaillahinandra@gmail.com, gildan.putranto@gmail.com

Article History:

Received: 02-08-2026

Revised: 05-08-2026

Accepted: 30-08-2026

Keywords:

Poverty
Measurement; Weakly Relative
Poverty Lines; Elasticity
Estimation

Abstract: The elasticity of a poverty line with respect to mean living standards is the parameter that distinguishes an absolute poverty line from a weakly relative one in the sense of Ravallion and Chen (2011). This paper shows that three deflation and measurement choices materially distort estimates of that parameter, quantifies each using Indonesian data, and then estimates the parameter itself on a provincial panel. Trap one is the nominal-on-nominal ratio, which recovers a weighted average of the true elasticity and unity and is biased upward whenever inflation is positive. Trap two is deflating a national-accounts aggregate with a consumer price index, which over 2004-2013 implies Indonesian real growth of 88 percent against a national-accounts figure of 48 percent. Trap three is the denominator concept: GDP per capita includes investment, government spending, and net trade, whereas a Cost of Basic Needs line is a consumption bundle. Estimating equation (3) on 390 province-by-area observations for 2013-2019, with province fixed effects and standard errors clustered by province, gives an elasticity of 0.64 (95 percent CI 0.57 to 0.71) in real terms, against 0.85 on the same data in nominal terms, representing trap one reproduced in panel form. The line is therefore weakly relative in Ravallion and Chen's sense, significantly bounded away from both zero and unity. Two further results follow. First, on disjoint windows built from a single BPS series, the elasticity rises from 0.05 (urban) and 0.51 (rural) over 2004-2010 to 1.02 and 1.25 over 2013-2022: Indonesia's poverty line was close to absolute before 2010 and at or beyond the strongly relative boundary afterwards. Second, adding year fixed effects drives the elasticity to zero and statistical insignificance, indicating that the mechanism operates through national annual re-basing rather than through province-specific responsiveness, a localization of the mechanism that the existing literature has not reported.

How to Cite: Athaillah Farrel Inandra, Gildan Erabbaani Putranto (2026). *Three Deflation Traps in Estimating Poverty-Line Elasticities: Panel Evidence from Indonesia, 2004-2025*. 1(3). pp. 205-211. <https://doi.org/10.61536/escalate.v4i3.620>



Introduction



Whether a poverty line is absolute or relative is, operationally, a question about a single parameter: the elasticity of the line with respect to the mean living standard of the population it measures. Ravallion and Chen (2011) formalize the weakly relative case as an elasticity strictly between zero and one, bounded below by an absolute floor, with zero corresponding to a line fixed in real terms and one to a line that moves in exact step with the mean. Estimating that elasticity is the natural empirical entry point into any argument about what a national poverty line actually measures. This paper does two things. Sections 3.3 to 3.5 show that the estimate is unusually sensitive to three choices about deflation and measurement, and quantify each; the sensitivity is not a matter of second-decimal precision, since the three together move a two-point Indonesian estimate from 0.23 to 0.54. The results then estimates the parameter properly, on a panel of Indonesian provinces, and finds an elasticity of 0.64. Indonesia is a useful case because the question is live there. On 1 May 2025, Statistics Indonesia (BPS) published a note reconciling two readings of Indonesian poverty for 2024: the World Bank's Macro Poverty Outlook, using an upper-middle-income threshold of US\$6.85 per person per day, roughly three times the national line in real terms (World Bank, 2025), placed more than 60 percent of Indonesians below the poverty line, while BPS's national line placed the figure at 8.57 percent. The level gap is arithmetic rather than a puzzle: two lines set roughly three times apart produce very different headcounts by construction. The informative quantity is the divergence in trend between the two series, documented by the World Bank (2024), and behind that divergence sits the elasticity estimated here. Figure 1 illustrates the year in which the level gap is starkest.

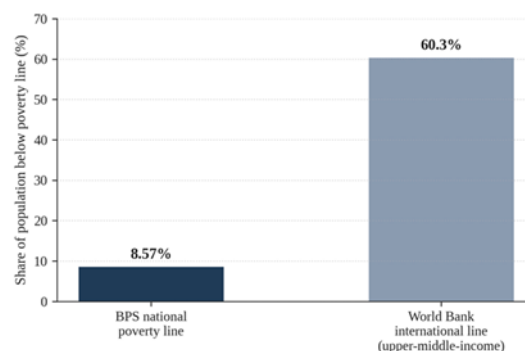


Figure 1. Indonesia's 2024 Poverty Rate; Two Methodologies

Source: BPS (2025) and World Bank data as reported in BPS's May 2025 reconciliation note

Indonesia's official poverty line belongs to a specific technical category. It is recalculated each year against a reference population defined by the previous year's line, so it moves with the standard of living it is measuring rather than staying fixed in real terms. Economists call such a threshold a weakly relative poverty line when it rises with the mean at less than one-for-one proportionality (Ravallion & Chen, 2011). The concept is a deliberate methodological contribution, not a defect, and this paper does not dispute its merit. The empirical question is where on the zero-to-one interval Indonesia's line actually sits, and that is a question about a number that has to be estimated carefully.

This paper has three components. The section Three Traps in Elasticity Estimation sets out three traps and quantifies each. Results estimates equation (3) on a provincial panel assembled from BPS's published provincial poverty lines and provincial mean per-capita expenditure, reports the disjoint-window comparison that dates the change in the line's behaviour, and shows that the mechanism is national rather than provincial. The section A Reconstruction Agenda sets out the wider agenda. The paper reports no microdata-level results; Susenas unit-record access was not pursued, a scope decision explained in status of data access.

The paper connects two literatures that have developed largely apart. The technical literature on Indonesian poverty measurement includes SMERU's work on consistent deflators for the 1996-2002 crisis window (Suryahadi, Sumarto, & Pritchett, 2000, 2003), Priebe's (2014) methodological review of



BPS practice since 1984, Hill's (2021) half-century survey of the official poverty and Gini series, and the World Bank's (2024) sub-national comparison of weakly relative and absolute lines for 2010-2022. None of these estimates the poverty-line elasticity directly. Separately, a long tradition of Indonesian political economy (Booth, 1992, 2000, 2016; Manning, 1998, 2014; Robison, 1986) examines the New Order and Reformasi regimes structurally without engaging the technical instrumentation of poverty measurement. A keyword and citation search across Google Scholar, RePEc/IDEAS, and the tables of contents of the Bulletin of Indonesian Economic Studies and the Asian Development Review, conducted without access to Scopus or Web of Science and therefore indicative rather than exhaustive, did not locate a published estimate of the elasticity of Indonesia's official poverty line with respect to mean income.

The remainder of the paper proceeds as follows. Weakly Relative Poverty Lines and Indonesia's Official Line sets out the concept and Indonesia's Cost of Basic Needs line. Three traps in elasticity estimation develops the three deflation traps and specifies the estimand and data. Results applies the corrected procedure to Indonesia and reports a grouped-data proxy for upper-tail concentration. Discussion covers interpretation and limits. A Reconstruction Agenda sets out the reconstruction agenda, and the Conclusion closes.

Weakly Relative Poverty Lines and Indonesia's Official Line

1. The Concept and Its Parameterization

The theoretical foundations of poverty-line construction were most systematically set out by Ravallion (1994, 1998), who distinguished absolute poverty lines, fixed in real terms and invariant to the overall standard of living, from relative poverty lines, which move with the average or median income of the reference society. A purely relative line with unit elasticity with respect to mean income, termed strongly relative by Ravallion and Chen (2011), carries a counterintuitive property: measured poverty cannot fall even if every household's real income rises by the same proportion, because the line rises in exact step. Ravallion and Chen (2011) proposed an intermediate solution, the weakly relative poverty line, which rises with the mean or median but at an elasticity strictly between zero and one, and which is bounded below by an absolute floor. Calibrating this schedule against national poverty lines from 116 developing countries, they found that measured relative poverty in the developing world rose between 1981 and 2005 even as absolute poverty fell, a phenomenon they described as the “other side of the coin” to the success of absolute poverty reduction.

$$Z = \max(Z_{\text{abs}}, \alpha + \beta \cdot M), \quad \text{or, in the log-log approximation used throughout this paper, } \ln Z = c + \varepsilon \cdot \ln M \quad (1)$$

where Z is the poverty line, Z_{abs} is an absolute floor, M is mean income or expenditure, and α , β , and ε are parameters; $\varepsilon = 0$ corresponds to an absolute line, $\varepsilon = 1$ to a strongly relative line, and $0 < \varepsilon < 1$ to Ravallion and Chen's (2011) weakly relative case. Equation (1) is a kinked, not a globally log-linear, function: below the point where $\alpha + \beta \cdot M$ crosses Z_{abs} , the true elasticity is zero regardless of ε . This paper follows the applied convention of estimating a single constant-elasticity approximation over ranges of the data plausibly above that kink, rather than estimating $(\alpha, \beta, Z_{\text{abs}})$ jointly; Trap one two-point calculations and A Reconstruction Agenda proposed panel specification both estimate ε in this approximate sense, and this simplification should be borne in mind when interpreting the point estimates that follow.

The weakly relative poverty line was proposed by its originators as a methodological improvement, not as a problem to be corrected, and this paper does not dispute its theoretical merit. The concern here is narrower and purely empirical: estimating where a given national line sits on the zero-to-one interval requires deflation choices that turn out to matter a great deal.

2. Indonesia's Cost of Basic Needs Line

BPS constructs its national poverty line using the Cost of Basic Needs (CBN) method, which estimates the minimum expenditure required to meet a 2,100-kilocalorie daily intake plus a modest allowance for non-food essentials, calculated separately for 67 urban and rural strata across Indonesia's provinces (Priebe, 2014; Hill, 2021). Critically, unlike international poverty lines, which hold their reference basket fixed and adjust only for inflation, BPS recalculates its reference population and basket composition each year, drawing on the household nearest above the previous year's poverty line in the Susenas survey (Johar et al., 2019). In Ravallion and Chen's (2011)

technical vocabulary, this construction is consistent with a weakly relative poverty line. Whether it behaves that way in practice, and how strongly, is an empirical question; Sections 3.3 and 4 estimate the relevant elasticity for two windows and find it materially different between them.

This is not a novel observation in isolation. SMERU Research Institute economists Suryahadi, Sumarto, and Pritchett produced a body of technical work in the late 1990s and early 2000s specifically to allow valid poverty comparisons across the 1996-2002 Asian Financial Crisis period, constructing consistent deflators precisely because they recognized that naive nominal or inconsistently deflated comparisons would misstate the crisis's welfare impact. Their work remains an important methodological benchmark for deflation-consistent poverty measurement in Indonesia, but its temporal scope is narrow, covering roughly six years around a single crisis rather than the full post-independence record. Priebe (2014) provides the most systematic methodological review of BPS poverty measurement available, tracing changes in survey design, basket composition, and regional price adjustment since 1984, and concludes that only since 2007 has BPS's poverty measurement been relatively consistent and comparable over time, a finding that bears directly on how much weight any pre-2007 comparison in the present paper's proposed series can safely bear.

More recently, the World Bank's 2023 Indonesia Poverty Assessment and its companion blog post (World Bank, 2024) explicitly examined the weakly relative character of BPS's poverty line, comparing sub-national poverty trends under the official line against trends under a fixed international line (US\$1.90 in 2011 PPP terms) for the period 2010-2022. They found that the official, weakly relative line shows a stagnating trend in which lagging provinces never catch up to richer ones, while the absolute international line shows continued convergence. Even expressed in constant 2011 prices, the official poverty line itself rose from IDR 228,310 in 2010 to IDR 333,713 in 2022, an increase of roughly 46 percent in real terms driven by the line's weakly relative construction rather than by inflation alone. This is a highly relevant precedent for the present paper, but it is restricted to a twelve-year window and to sub-national rather than long-run historical comparison.

3. *Policy and Institutional Context*

Beyond the technical economics literature, Indonesian policy researchers and officials have voiced increasingly pointed criticism of BPS's methodology in recent years. Pierre Bernardo Ballo, a social policy researcher at The Prakarsa, a Jakarta-based policy research institute, stated in early August 2025 that the CBN approach is outdated and has not been revised in nearly three decades, even as household consumption patterns and the underlying drivers of deprivation have changed (The Prakarsa, 2025; reported in Tempo, 2025a). Importantly, these are not merely outside critiques. Arief Anshory Yusuf, a member of Indonesia's National Economic Council and professor of economics at Universitas Padjadjaran, confirmed in an interview published in mid-June 2025 that a formal revision process was already under way in collaboration with Bappenas, BPS, and the World Bank (Tempo, 2025b). BPS's own Director of Social Resilience Statistics, Nurma Midayanti, separately and publicly acknowledged in July 2025 that the poverty line's basket composition has not been updated since 1998 and needs revision to reflect current consumption patterns (Tempo, 2025c). This confirms that the paper's central methodological concern is shared, in substance, by BPS itself, not only by outside critics. These acknowledgments are valuable and largely consonant with the argument developed here, but they have so far been articulated in press statements and policy briefs rather than through a systematic, long-run empirical reconstruction of the kind this paper proposes.

4. *Related Literature*

Two further literatures bear on the interpretation of any estimate reported below. The first is the political economy of official statistics. Jerven's (2013) study of economic statistics in Sub-Saharan Africa documents how weak statistical capacity produces figures unreliable enough to mislead donors and policymakers. The Indonesian case is analytically distinct: Susenas has been fielded with reasonable consistency since the 1960s and is not capacity-constrained in the way Jerven describes. What is at issue here is a sustained methodological choice rather than a capacity failure. Whether that choice has served the legitimacy needs of successive Indonesian regimes, as opposed to being a defensible technical convention with no political function, is a substantive claim that this paper raises but does not evidence; establishing it would require archival or elite-interview



work of the kind found in Robison (1986) and Booth (2016), and the claim should be read as a motivating hypothesis rather than a finding.

5. *The Mainstream Indonesian Poverty and Inequality Literature*

Anne Booth's work spans four decades and remains the standard reference, from her assessments of income distribution in the Soeharto era (Booth, 1992, 2000) through her economic history of modern Indonesia (Booth, 2016) to her methodological survey of poverty and income distribution measurement in Southeast Asia (Booth, 2019). Chris Manning's research on Indonesian labour markets (Manning, 1998, 2014) provides context for how growth has and has not translated into welfare gains. Hal Hill's (2021) survey offers the most complete single account of Indonesia's official poverty and inequality series and supplies the urban and rural poverty-line figures used in The results. Hill documents that the 1996 and 1998 poverty-line revisions inflated the official poverty count by roughly 50 percent relative to the prior series, stating that "the actual incidence of poverty remained unchanged" (Hill, 2021, p. 74) across that revision.

The scope of that evidence should be stated precisely, because it bears on what this paper does and does not claim. Hill's overall conclusion is that Indonesia's growth has translated into genuine and substantial poverty reduction, a view he holds after considering the 1996/1998 revisions (Hill, 2021, p. 74). He and Priebe (2014) treat those revisions as discrete, known, and correctable: BPS published overlap-year estimates under both baskets so that a consistent spliced series could be constructed. The elasticity this paper estimates is a different object. A discrete revision is a flagged, correctable level-jump; a weakly relative line's annual re-basing is a continuous drift that is not announced as a revision and that no single year's statistics would mark as anomalous. The two are related, both arising from a line that moves with living standards, but they have different empirical signatures, and correcting the first does not resolve the second.

Three Traps in Elasticity Estimation

1. *The Estimand and Approach*

The estimand throughout is ϵ in equation (1): the elasticity of the poverty line with respect to mean living standards, in real terms. This paper takes a documentary, quantitative approach using secondary statistical series published by BPS, the World Bank, and peer-reviewed sources; it collects no primary data from human subjects. Two principles govern the corrected procedure. Numerator and denominator must be deflated on a consistent basis, and the income concept in the denominator must match the welfare concept embodied in the poverty line. Sections 3.3 to 3.5 show what happens when either principle is violated. The preferred denominator throughout is real household final consumption expenditure per capita, for reasons set out in Trap three; estimates using real GDP per capita are reported alongside so that the difference is visible.

2. *Data Sources*

- A. Poverty lines. BPS, Garis Kemiskinan (Rupiah/Kapita/Bulan) Menurut Daerah, 2004-2025, giving the national urban and rural lines (annual figures to 2010, semester figures from 2011); and BPS, Garis Kemiskinan (Rupiah/Kapita/Bulan) Menurut Provinsi dan Daerah, 2013-2025, giving provincial lines by area. The 2004 urban value of IDR 143,455 and the March 2013 value of IDR 289,042 reproduce Hill (2021), Table 1, exactly, confirming that the two sources draw on the same underlying series. Provincial exports for 2018 and 2020-2022 returned no data and are missing.
- B. Mean expenditure. BPS, Rata-rata Pengeluaran per Kapita Sebulan Menurut Provinsi, 2011-2025, food and non-food combined, used as the denominator in the panel reported under Panel Estimates of the Elasticity. Prices and national income. World Bank WDI series FP.CPI.TOTL (consumer price index, 2010 = 100); NE.CON.PRVT.PC.KD (household final consumption expenditure per capita, constant 2015 US\$); NY.GDP.PCAP.KD (GDP per capita, constant 2015 US\$); SP.URB.TOTL.IN.ZS (urban population share). WDI series retrieved via the World Bank API in July 2026, vintage 13 July 2026. Because an elasticity is a ratio of log differences, the constant-US-dollar base of the volume series does not affect any estimate.
- C. Distributional context. BPS (2026a), Distribusi Pembagian Pengeluaran per Kapita dan Indeks Gini, 2010-2025, for the proxy reported under A Grouped-Data Proxy for the Upper Tail; World Bank WDI series SI.POV.GINI for the Gini series plotted in Figure 2.
- D. Susenas Kor and Modul unit-record microdata, required only for the distributional analysis

proposed in A Reconstruction Agenda, were not obtained; see status of data access.

A note on data vintage. The World Bank's Gini series for Indonesia is revised periodically as the Poverty and Inequality Platform methodology is updated, so different public mirrors of the same indicator disagree; the estimates here were accessed via FRED in April 2026, and at least one other mirror reports a 2013 peak of 40.0 rather than 38.9. Gini values are used for context only and are not load-bearing for any estimate in this paper.

3. *Trap One: The Nominal-on-Nominal Ratio*

The first trap is the most direct. Faced with a nominal poverty line and a nominal income series, it is tempting to divide one log change by the other and report the result as an elasticity. It is not one.

$$\Delta \ln Z_{nom} / \Delta \ln M_{nom} = (\varepsilon \cdot g + \pi) / (g + \pi) \quad (2)$$

where g is real income growth and π is inflation, both in log-difference terms, over the window being compared. Equation (2) shows why a nominal-on-nominal ratio recovers a weighted average of the true elasticity ε and 1 rather than ε itself, with the weight on 1 rising as π/g rises; this is the source of the bias corrected in the calculation immediately below.

Hill (2021, Table 1) reports Indonesia's nominal urban poverty line at IDR 143,455 per capita per month in 2004 and IDR 289,042 in 2013, an ln-difference of 0.701. Nominal GDP per capita rose over the same window by an ln-difference of 1.293 (BPS national accounts, as reported in CNBC Indonesia, 2024; these nominal figures serve only to illustrate equation 2 and enter no corrected estimate). Their ratio is 0.54. By equation (2) this is a weighted average of ε and unity, and Indonesian consumer price inflation over the window was an ln-difference of 0.631, or 88.0 percent (FP.CPI.TOTL), so the weight on unity is substantial. The corrected urban figure, derived in Trap Three, is 0.23. The nominal ratio therefore overstates the elasticity by more than a factor of two, in the direction that makes a largely absolute line look weakly relative. The bias is signed and predictable: whenever ε is below one and inflation is positive, the nominal ratio is biased upward, and the bias grows with π/g .

4. *Trap Two: Deflating a National-Accounts Aggregate with a Consumer Price Index*

The second trap is subtler. Having recognized the first problem, the natural correction is to deflate both series and take the ratio of real log changes. But the deflator chosen for the income series is not innocuous. Deflating a GDP aggregate with a consumer price index is not equivalent to using national-accounts real GDP, because the GDP deflator covers investment, government purchases, and exports as well as household consumption. Over 2004-2013 Indonesia experienced a commodities boom in which those prices ran well ahead of consumer prices. CPI-deflating nominal GDP per capita over this window implies real growth of approximately 88 percent; the national-accounts figure from NY.GDP.PCAP.KD is 47.9 percent, an ln-difference of 0.391. The CPI-deflated denominator is thus close to twice the correct one, and because the denominator enters inversely, the resulting elasticity is understated by roughly half. A related failure is to difference the endpoints of a constant-price US dollar series without checking the base year: Indonesia's GDP per capita in 2010 is approximately US\$3,178 in current dollars but US\$2,671 in constant 2015 dollars, and pairing the former with a constant-dollar terminal value understates real growth by roughly a third.

5. *Trap Three: The Denominator Concept*

The third trap is conceptual rather than arithmetic, and in the Indonesian case it is decisive. Equation (1) defines ε against the mean living standard of the reference population. A Cost of Basic Needs poverty line is a consumption bundle, priced against the consumption of households near the threshold. GDP per capita is not a consumption measure: it includes gross fixed capital formation, government consumption, and net exports, and in a commodity exporter these components are both large and volatile. The conceptually matched denominator is real household final consumption expenditure per capita, published by the World Bank as NE.CON.PRVT.PC.KD and by BPS in its national accounts, and requiring no special data access. The substitution is not cosmetic. Over 2004-2013 real GDP per capita grew by an ln-difference of 0.391 while real household consumption per capita grew by 0.305; over 2010-2022 the figures are 0.410 and 0.371. Household consumption grew more slowly than output in both windows, as the consumption share of GDP fell, so using GDP per capita systematically understates the elasticity. For Indonesia's urban line over 2004-2013



the corrected real numerator is an ln-difference of 0.069, giving 0.18 against a GDP denominator and 0.23 against a consumption denominator. For the national line over 2010-2022, reported in Table 3, the two denominators give 0.93 and 1.02 respectively. The second pair straddles unity, which is the boundary between a weakly relative and a strongly relative line in Ravallion and Chen's (2011) sense. A denominator chosen for convenience rather than concept therefore determines the qualitative conclusion, not merely the second decimal.

6. The Panel Specification

The two-point calculations above illustrate the traps but cannot deliver an identified parameter. The estimating equation used in Panel Estimates of the Elasticity is a panel regression of the log provincial poverty line on log provincial mean per-capita expenditure:

$$\ln Z_{it} = \alpha_i + \delta_t + \varepsilon_0 \cdot \ln M_{it} + \varepsilon_1 \cdot (Era_t \times \ln M_{it}) + u_{it} \quad (3)$$

where i indexes province-by-area units, t indexes years, α_i are unit fixed effects, δ_t are year fixed effects, ε_0 is the baseline elasticity, and Era_t is a set of political-era indicators interacted with $\ln M_{it}$. Both series are deflated by the national consumer price index. Standard errors are clustered by province. Panel Estimates of the Elasticity estimates this specification on BPS's published provincial poverty lines and provincial mean per-capita expenditure, neither of which requires Susenas microdata. Two features of the available data shape the estimated specification. First, the era-interaction term ε_1 is not identified: BPS publishes provincial mean expenditure only from 2011, so the entire panel falls within the post-2007 period that Priebe (2014) identifies as internally consistent, and there is no earlier-era variation to interact with. ε_1 is therefore omitted from estimation, and change over time is addressed instead through the disjoint-window comparison of Disjoint Windows: Dating the change. Second, the year fixed effects δ_t absorb all variation common to provinces within a year, so including them identifies ε_0 purely from cross-provincial deviations; The mechanism is national, not provincial shows that this distinction is substantive rather than technical, and reports both specifications.

7. Status of Data Access

Susenas unit-record microdata access was not pursued for this paper: the cost and administrative lead time of BPS's dissemination process, which requires a formal data-use agreement and a per-round fee under Government Regulation No. 13/2024, are material relative to the scope of this study. Nothing in Sections 3 or 4 requires unit records. The panel of The results is built entirely from BPS's openly published provincial tables, and the national series from BPS's published poverty lines by area.

Results

This section reports four results. Panel Estimates of the Elasticity estimates equation (3) on a provincial panel and gives the paper's primary elasticity. Disjoint Windows: Dating the Change uses disjoint windows on a single national series to date the change in the line's behaviour. The Mechanism Is National, Not Provincial shows that the mechanism operates nationally rather than across provinces. A Grouped-Data Proxy for the Upper Tail adds a proxy for upper-tail concentration. Table 1 collects published point estimates used for context, in three panels so that series with different geographic coverage, reference populations, and price bases are not read across; Figures 2 and 3 plot the Gini and nominal poverty-line series.

Table 1 Published Point Estimates on Indonesian Poverty and Inequality, 1970-2024

Year	Indicator	Value	Source
Panel A. Poverty headcount rate			
1970	National line (BPS)	≈ 60%	Hill (2021), Table 1
1996	National line, original basket	11.3%	Hill (2021), Table 1
1996	National line, revised basket (overlap year)	17.5%	Hill (2021), Table 1

Year	Indicator	Value	Source
1998	National line (financial crisis)	24.2%	Hill (2021), Table 1
2018	National line	9.8%	Hill (2021), Table 1
2024	National line	8.57%	BPS (2025)
2024	International line, US\$6.85/day (2017 PPP)	60.3%	World Bank, cited in BPS (2025)
Panel B. Official national poverty line, IDR per capita per month (nominal)			
2004	Urban (Kota) / Rural (Desa)	143,455 / 108,725	BPS, Garis Kemiskinan menurut Daerah
2010	Urban / Rural	232,989 / 192,354	BPS, Garis Kemiskinan menurut Daerah
2013	Urban / Rural (March)	289,042 / 253,273	BPS, Garis Kemiskinan menurut Daerah
2022	Urban / Rural (March)	521,494 / 484,209	BPS, Garis Kemiskinan menurut Daerah
Panel C. Gini index (World Bank WDI, SI.POV.GINI; see vintage note, Data Source)			
1984	Gini index	32.3	World Bank WDI, via FRED, April 2026
2013	Gini index (series peak)	38.9	World Bank WDI, via FRED, April 2026
2024	Gini index	34.9	World Bank WDI, via FRED, April 2026

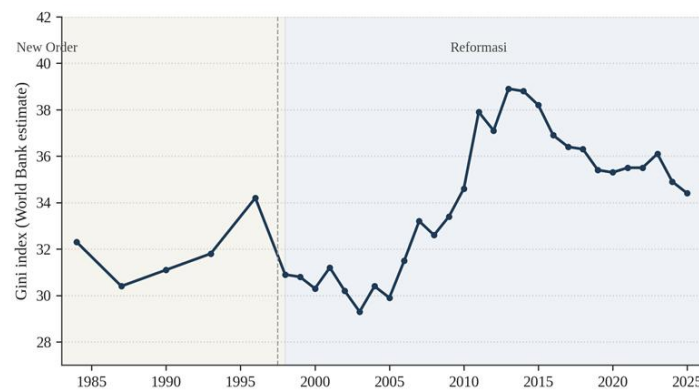


Figure 2 Indonesia's Gini Index, Annual Series, 1984-2025

Source: World Bank, World Development Indicators, series SI.POV.GINI, accessed via FRED (Federal Reserve Bank of St. Louis), April 2026.

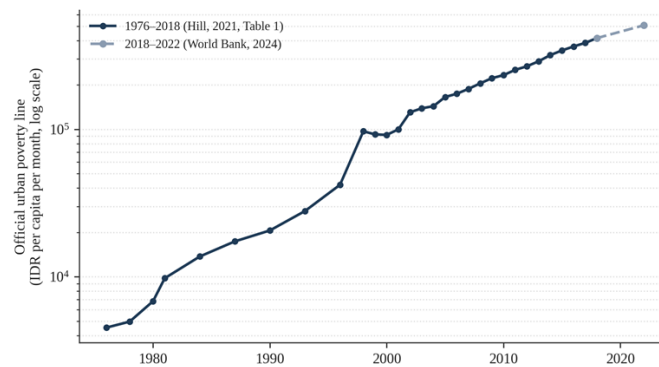


Figure 3 Nominal Official Poverty Line, 1976-2022

Source: 1976–2018, urban poverty line, Hill (2021), Table 1, citing unpublished BPS estimates; 2018–2022, World Bank (2024). The 2004 and March 2013 values reproduce BPS, Garis Kemiskinan menurut Daerah, exactly.

1. Panel Estimates of the Elasticity

The panel merges BPS's provincial poverty lines by area (Kota and Perdesaan) with BPS's provincial mean per-capita monthly expenditure. Mean expenditure is the conceptually appropriate denominator identified in Trap Three: it is a consumption measure drawn from the same Susenas rounds that generate the poverty line itself, and is therefore closer to the estimand than either GDP per capita or national household final consumption expenditure. Provincial poverty lines are published for 2013–2017, 2019, and 2023–2025; four years (2018, 2020, 2021, 2022) returned empty exports and are missing. Merging on province and year and restricting to years for which a consumer price index is available gives 390 observations across 65 province-by-area units for 2013–2019. Estimating equation (3) with province fixed effects and standard errors clustered by province gives an elasticity of 0.64, with a 95 percent confidence interval of 0.57 to 0.71 (Table 2, column 3). Estimated separately, the urban line gives 0.57 and the rural line 0.71. The estimate is significantly bounded away from both zero and unity, which places Indonesia's poverty line unambiguously in Ravallion and Chen's (2011) weakly relative interior rather than at either boundary. This is the paper's primary estimate, and it is the first to our knowledge reported with a standard error. Column 4 of Table 2 repeats the estimation on the same data without deflating either series. The coefficient rises to 0.85. That gap of 0.21 is trap one reproduced in panel form: by equation (2), a nominal-on-nominal specification recovers a weighted average of ϵ and unity, and with Indonesian inflation over 2013–2019 the weight on unity is substantial. A researcher who ran this panel on nominal series would conclude the line was close to strongly relative when in fact it is not.

Table 2 Panel estimates of the poverty-line elasticity, equation (3)

	(1) Urban, year FE	(2) Rural, year FE	(3) Pooled, real	(4) Pooled, nominal
In mean expenditure (ϵ)	0.023	-0.085	0.641	0.850
Standard error	(0.066)	(0.079)	(0.035)	(0.022)
p-value	0.731	0.281	<0.001	<0.001
95% confidence interval	[-0.107, 0.152]	[-0.240, 0.070]	[0.571, 0.710]	[0.807, 0.894]
Province fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	No	No
Variables deflated	Yes	Yes	Yes	No
Observations	305	296	390	390
Units	37	36	65	65
Years	2013-2025	2013-2025	2013-2019	2013-2019

Dependent variable: log provincial poverty line. Standard errors clustered by province. Columns 1-2 include year fixed effects and identify ε from cross-provincial variation only. Column 3 is the paper's primary estimate. Column 4 repeats column 3 on undeflated series and reproduces trap one. Estimated separately, the deflated urban and rural elasticities are 0.567 (0.045) and 0.714 (0.051).

2. Disjoint Windows: Dating the Change

The panel covers 2013-2019 and cannot speak to earlier periods. BPS's national poverty line by area extends back to 2004, which permits a comparison on two disjoint windows built from a single consistent series, avoiding the overlap that would invalidate any inference from adjacent periods. Deflating by the consumer price index and using real household final consumption expenditure per capita as the denominator gives the results in Table 3. The pattern is sharp. Over 2004-2010 the urban poverty line rose by 1.0 percent in real terms against real consumption growth of 20.6 percent, an elasticity of 0.05: over that window the line was, to a close approximation, absolute. Over 2013-2022 the same series rose 25.7 percent in real terms against 28.7 percent, an elasticity of 1.02. The rural line moves in the same direction, from 0.51 to 1.25. Figure 4 plots all three series in real terms. On a single series, with disjoint windows and a consumption denominator, Indonesia's official poverty line changed from behaving as a near-absolute threshold before 2010 to behaving as a strongly relative one after 2013. The panel estimate of 0.64 for 2013-2019 sits between these, as it should, since it is identified partly from within-province variation over a shorter window. Two qualifications apply. BPS reported an annual figure through 2010 and semester figures from 2011, so the earlier window uses the annual series and the later window the March series; each window is internally consistent, but the reference month differs across them. And a two-window comparison, even a disjoint one, identifies a change in average behaviour rather than a datable structural break; the panel cannot test for a break because provincial mean expenditure is published only from 2011, so the entire panel falls within the post-2007 period that Priebe (2014) identifies as internally consistent.

Table 3 Disjoint-window elasticities, national poverty line by area

Series	Window	$\Delta \ln$ line (real)	$\Delta \ln$ real consumption p.c.	ε
Urban (Kota)	2004-2010	0.010	0.187	0.05
Urban (Kota)	2013-2022	0.257	0.252	1.02
Rural (Desa)	2004-2010	0.095	0.187	0.51
Rural (Desa)	2013-2022	0.315	0.252	1.25

Poverty lines: BPS, *Garis Kemiskinan menurut Daerah* (annual figures to 2010, March figures from 2011). Deflator: *WDI FP.CPI.TOTL*. Denominator: *WDI NE.CON.PRVT.PC.KD*. Windows are disjoint. Using real GDP per capita instead gives 0.04, 0.93, 0.37 and 1.14 respectively.

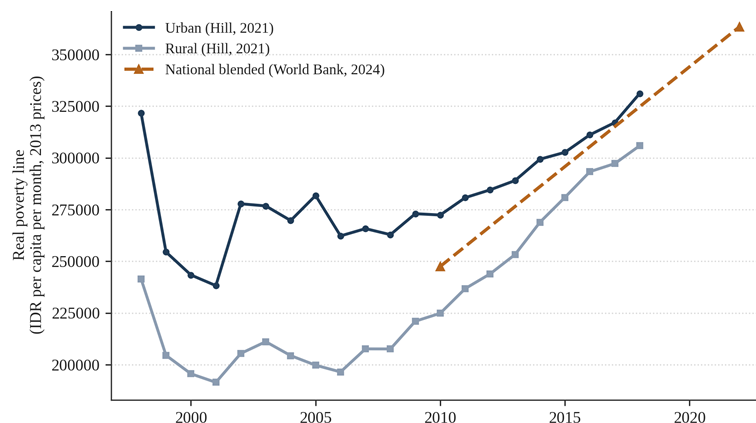


Figure 4. Urban, Rural, and National Poverty Line in Real Terms, 1998-2022

Source: urban and rural series, Hill (2021), Table 1; national blended series, World Bank (2024). All series deflated to constant 2013 prices by the authors using World Bank WDI series FP.CPI.TOTL

3. The Mechanism Is National, Not Provincial

Adding year fixed effects to equation (3) changes the result completely. The elasticity falls to 0.02 for the urban line, -0.09 for the rural line, and -0.03 pooled, and in every case is statistically indistinguishable from zero (Table 2, columns 1 and 2 report the urban and rural cases). A long-difference regression of provincial real poverty-line growth on provincial real expenditure growth over 2013-2019 gives the same answer: a coefficient of 0.08 (standard error 0.14) for urban and -0.05 (0.12) for rural, both insignificant, even though the aggregate ratio of mean growth rates over the same period is 0.76 and 0.94 respectively. The interpretation is direct. Year fixed effects absorb everything common to all provinces in a given year and identify ϵ purely from cross-provincial deviations. That this yields zero, while the aggregate co-movement is strong, means the poverty line's responsiveness to living standards in Indonesia is almost entirely a national, time-series phenomenon. A province whose mean expenditure grows unusually fast in a given year does not receive a proportionally higher poverty line. This is what one would expect if the weakly relative property arises from BPS's annual national re-basing of the reference basket rather than from province-specific recalculation, and it localizes the mechanism in a way the existing literature has not reported. It also implies that the year-fixed-effects specification, though it looks like the more demanding one, is the wrong test of this paper's hypothesis: it differences away precisely the variation the hypothesis concerns.

4. A Grouped-Data Proxy for the Upper Tail, 2010-2025

The distributional measures discussed in A Reconstruction Agenda require unit-record data and cannot be computed from published aggregates. Short of that, BPS publishes an annually updated table, Distribusi Pembagian Pengeluaran per Kapita dan Indeks Gini, reporting the expenditure share held by the bottom 40 percent, middle 40 percent, and top 20 percent of the population, alongside the Gini index, for urban (Kota), rural (Desa), and combined national areas from 2010 to 2025 (BPS, 2026a). The top-20-percent share is a coarse but already-published proxy for upper-tail concentration, and Figure 5 plots it for all three strata.

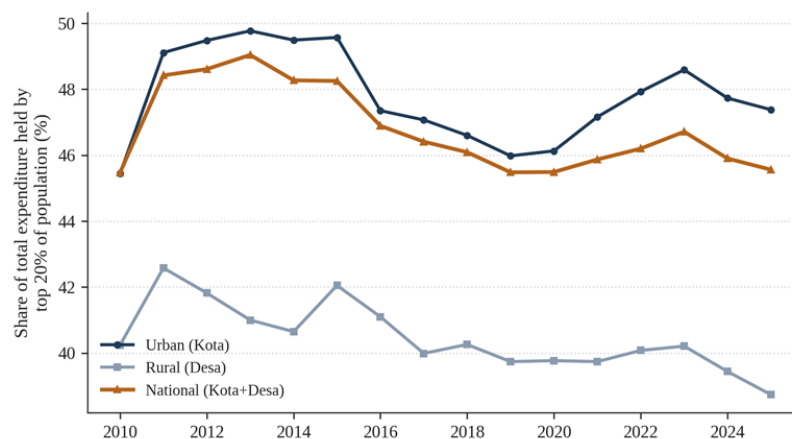


Figure 5. Top-20% Expenditure Share, Indonesia, 2010-2025

Source: BPS (2026a), Distribusi Pembagian Pengeluaran per Kapita dan Indeks Gini, 2010-2025.

Two observations follow. First, the national top-20-percent share rose from 45.5 percent in 2010 to a plateau near 48-49 percent between 2012 and 2015, coinciding with the Gini peak in Figure 2, before easing toward 45-46 percent from 2016 onward. Second, the urban series sits persistently 6 to 9 percentage points above the rural series throughout the window, indicating that upper-tail concentration in Indonesia has remained a predominantly urban phenomenon. This proxy is a coarse three-group approximation and cannot distinguish a change concentrated in the top 5 percent

from one spread across the top 20 percent. It bears on the distributional questions raised in the discussion but not on the elasticity estimates above, and should not be read as corroborating them.

The same published table also contains a data-provenance note directly relevant to this paper's central argument: BPS states that its Gini and distribution figures for 2010-2025 are computed from individual-level data, in explicit contrast to 1996-1999, when the equivalent figures were computed from grouped expenditure data rather than individual records (BPS, 2026a). This is an official, source-level confirmation, independent of Hill (2021) and Priebe (2014), that BPS's own computational methodology, not only its poverty-line basket, changed discontinuously across exactly the crisis period this paper treats as a boundary case in the mainstream Indonesia poverty and inequality literature. It does not extend far enough back to inform the New Order period proper, and it says nothing about the years before 2010 or after 1999 within its own series, but it is a second, independent line of evidence that Indonesia's official distributional statistics are not built on a single, unbroken methodology across the periods this paper compares.

Discussion

Three points of interpretation follow.

The first concerns what an elasticity at or above unity means in practice. A line with ε near one rises almost in step with mean living standards, so measured poverty becomes close to a relative statistic even though it is presented and used as an absolute one. Indonesia's principal social assistance programmes, including its conditional and unconditional cash transfer schemes, rely in part on proximity to the official poverty line for targeting. If the line's reference standard rises with mean consumption in ways not transparent to policymakers or the public, targeting thresholds drift from their original policy intent without any single year's statistics appearing anomalous. This is not an argument that BPS's headcount series is wrong; it is an argument that a headcount measured against a moving line answers a different question from the one most readers assume it answers.

The second concerns the relationship between this estimate and the existing Indonesian record. Hill (2021) describes the growth incidence curve for 2000-2017 as upward-sloping across most of the distribution, and the grouped-data proxy in A Grouped-Data Proxy for the Upper Tail shows upper-tail concentration rising through the early 2010s. Neither establishes anything about the poverty line's elasticity, and neither is offered as corroboration. The point is narrower: a line with an elasticity near unity and a distribution with a thickening upper tail would together obscure material stagnation among households near the threshold, and separating the two effects requires holding the line's own drift constant, which no published Indonesian study has yet done.

The third concerns interpretive posture. The argument here is a methodological critique of estimation practice and of a widely used statistical convention, not an allegation that BPS has manipulated its figures. BPS operates a well-documented Cost of Basic Needs methodology consistent with international practice in many developing countries, and has itself publicly acknowledged that the basket requires revision (policy and institutional context). What a weakly relative measure does not, by construction, reveal when applied without interruption across long periods of economic change is a limitation inherent to the class of measure, not a defect specific to Indonesia's statistical institutions.

A final scope note. All empirical content in this paper falls within the Reformasi period. Nothing reported here speaks to the New Order, and the regime periodization set out in A Reconstruction Agenda applies to the proposed reconstruction rather than to any estimate above.

A Reconstruction Agenda

The panel estimate replaces the two-point calculations of earlier drafts, but three extensions remain. First, obtain BPS's provincial poverty lines for 2018 and 2020-2022, which returned empty exports during preparation of this paper; a complete 2013-2025 panel would permit a within-window break test around the COVID-19 disruption. Second, extend provincial mean per-capita expenditure back before 2011, which is what currently prevents any test of whether the elasticity differs across political eras: the entire panel falls within the post-2007 period. Third, construct a fixed-basket counterfactual headcount series from the World Bank's Poverty and Inequality Platform together with BPS's CPI, comparing Indonesia's official poverty trend against a line held fixed in real terms. Beyond these, Susenas microdata would permit estimation of the generalized entropy family $GE(0)$, $GE(1)$, and $GE(2)$ together with a



Datt-Ravallion growth-redistribution decomposition, to test whether the distributional changes of the Reformasi period are better characterized as a translation of the distribution or a change in its shape. Skewness, specified for this purpose in an earlier version of this protocol, is withdrawn: as a third moment it is dominated by the extreme upper tail, precisely the region Susenas is documented to under-record (Surbakti, 1995, discussed in Priebe, 2014).

Such a reconstruction would be periodized by Indonesia's political transitions and would carry two distinct evidentiary standards. The period 1970-1977 can serve only as a secondary historical anchor: Susenas recorded household expenditure but not income before 1978, data before 1976 are incomplete at the subnational level (Hill, 2021), and rounds before 1982 excluded Irian Jaya/Papua and East Timor (Priebe, 2014). The consolidated New Order (1978-1997) and the Reformasi era (1998-2024) can both form part of a primary reconstructable series, subject to Priebe's finding that BPS measurement became internally consistent only from 2007, and to documented under-recording of higher expenditures in Susenas rounds before 1993, which makes any upper-tail estimate for 1978-1992 a lower bound. All monetary series would be rebased to a single constant-price year using BPS's CPI, chain-linked across BPS's own CPI rebasings rather than spliced on levels, following the consistent-deflator logic developed by Suryahadi, Sumarto, and Pritchett for the 1996-2002 window.

Conclusion

This paper has shown that estimating the elasticity of a poverty line with respect to mean living standards is unusually sensitive to three choices, and has then estimated the parameter on Indonesian data. Dividing nominal by nominal recovers a weighted average of the elasticity and unity and is biased upward; in the provincial panel this raises the estimate from 0.64 to 0.85. Deflating a national-accounts aggregate with a consumer price index during a terms-of-trade boom overstates real income growth and understates the elasticity correspondingly. And using GDP per capita rather than a consumption measure mismatches the denominator against a poverty line that is, by construction, a consumption bundle. Estimating equation (3) on 390 province-by-area observations for 2013-2019, with province fixed effects and standard errors clustered by province, gives an elasticity of 0.64 with a confidence interval of 0.57 to 0.71. Indonesia's official poverty line is therefore weakly relative in Ravallion and Chen's (2011) sense, significantly bounded away from both the absolute and the strongly relative boundary. Two further findings sharpen this. On disjoint windows from a single BPS series, the elasticity rises from 0.05 (urban) and 0.51 (rural) over 2004-2010 to 1.02 and 1.25 over 2013-2022, so the line changed from behaving as a near-absolute threshold to behaving as a strongly relative one. And the elasticity vanishes once year fixed effects are included, which locates the mechanism in BPS's national annual re-basing rather than in province-specific recalculation. The policy implication is narrow but concrete. A line with an elasticity near unity rises almost in step with mean living standards, so a headcount measured against it answers a different question from the one most readers assume. Indonesia's principal social assistance programmes use proximity to the official line for targeting, and BPS has publicly acknowledged that the Cost of Basic Needs basket requires revision. The estimates here indicate how much the line has been moving, and when the movement began.

Several limitations should be stated. First, provincial poverty lines were unavailable for 2018 and 2020-2022, so the panel is unbalanced and covers 2013-2019 in the deflated specification. Second, provincial mean expenditure is published only from 2011, so the entire panel lies within a single political era and the era-interaction term of equation (3) is not identified; the disjoint-window comparison of Disjoint windows: Dating the change is the paper's only evidence on change over time, and it compares two periods rather than testing a break. Third, provincial mean expenditure is reported for urban and rural areas combined, so the same denominator is used for both area-specific poverty lines; province-by-area fixed effects absorb level differences but the specification cannot exploit area-specific income variation. Fourth, BPS reported annual poverty lines through 2010 and semester figures thereafter, so the two disjoint windows differ in reference month. Fifth, national consumer price inflation is used to deflate provincial series, which abstracts from provincial price differences; province fixed effects absorb persistent differences in price levels but not in inflation rates. Sixth, the grouped-data proxy of A Grouped-Data Proxy for the Upper Tail is a coarse three-group approximation bearing on the discussion in the discussion rather than on the elasticity estimates. Seventh, verification of Susenas's earliest survey rounds against Surbakti's (1995) BPS monograph, relevant to the reconstruction proposed in A Reconstruction Agenda, has not been completed.

Bibliography

- Asra, A. (1989). Inequality trends in Indonesia, 1969-1981: A re-examination. *Bulletin of Indonesian Economic Studies*, 25(2), 100-110.
- Asra, A. (2000). Poverty and inequality in Indonesia: Estimates, decomposition and key issues. *Journal of the Asia Pacific Economy*, 5(1-2), 91-111.
- Atkinson, A. B., Hasell, J., Morelli, S., & Roser, M. (2017). *The Chartbook of Economic Inequality*. INET Oxford, University of Oxford. <https://www.chartbookofeconomicinequality.com/>
- Booth, A. (1992). Income distribution and poverty. In A. Booth (Ed.), *The oil boom and after: Indonesian economic policy and performance in the Soeharto era* (pp. 323-362). Oxford University Press.
- Booth, A. (2000). Poverty and inequality in the Soeharto era: An assessment. *Bulletin of Indonesian Economic Studies*, 36(1), 73-104.
- Booth, A. (2016). *Economic change in modern Indonesia: Colonial and post-colonial comparisons*. Cambridge University Press.
- Booth, A. (2019). Measuring poverty and income distribution in Southeast Asia. *Asian-Pacific Economic Literature*, 33(1), 3-20.
- BPS-Statistics Indonesia. (2025, May 1). Understanding the differences in poverty rates reported by the World Bank and Statistics Indonesia (BPS). <https://www.bps.go.id/en/news/2025/05/02/702/understanding-the-differences-in-poverty-rates-reported-by-the-world-bank-and-statistics-indonesia--bps-.html>
- BPS-Statistics Indonesia. (2026a). Distribusi pembagian pengeluaran per kapita dan Indeks Gini, 2010-2025 [Data set]. <https://www.bps.go.id/en/statistics-table/1/OTQ2IzE=/distribusi-pembagian-pengeluaran-per-kapita-dan-indeks-gini--2010-2017.html>
- BPS-Statistics Indonesia. (2026b). Garis kemiskinan (rupiah/kapita/bulan) menurut daerah, 2004-2025 [Data set]. <https://www.bps.go.id/id/statistics-table/2/MTgyIzI=/>
- BPS-Statistics Indonesia. (2026c). Garis kemiskinan (rupiah/kapita/bulan) menurut provinsi dan daerah, 2013-2025 [Data set]. <https://www.bps.go.id/id/statistics-table/2/MTk1IzI=/>
- BPS-Statistics Indonesia. (2026d). Rata-rata pengeluaran per kapita sebulan untuk makanan dan bukan makanan di daerah perkotaan dan perdesaan menurut provinsi (rupiah), 2011-2025 [Data set]. <https://www.bps.go.id/>
- CNBC Indonesia. (2024, February 5). PDB per kapita RI: Era Jokowi naik 78%, SBY lompat 264%. <https://www.cnbcindonesia.com/research/20240205120705-128-511919/pdb-per-kapita-ri-era-jokowi-naik-78-sby-lompat-264>
- Hill, H. (2021). What's happened to poverty and inequality in Indonesia over half a century? *Asian Development Review*, 38(1), 68-97. https://doi.org/10.1162/adev_a_00158
- Jerven, M. (2013). *Poor numbers: How we are misled by African development statistics and what to do about it*. Cornell University Press.
- Johar, M., Soewondo, P., Pujisubekti, R., Satrio, H. K., Adji, A., & Wibisono, I. D. (2019). "Tahukah kamu?": Analisis set data Survei Sosial Ekonomi Nasional (Susenas). *Jurnal Ekonomi dan Pembangunan Indonesia*, 19(2), 191-208. <https://doi.org/10.21002/jepi.2019.12>
- Manning, C. (1998). *Indonesian labour in transition: An East Asian success story?* Cambridge University Press.
- Manning, C. (2014). Labour market regulation and employment during the Yudhoyono years in Indonesia. In P. Athukorala, A. A. Patunru, & B. P. Resosudarmo (Eds.), *Trade, development and political economy in East Asia* (pp. 153-172). Institute of Southeast Asian Studies.
- Priebe, J. (2014). Official poverty measurement in Indonesia since 1984: A methodological review. *Bulletin of Indonesian Economic Studies*, 50(2), 185-205.
- Rao, V. V. B. (1988). Income distribution in East Asian developing countries. *Asian-Pacific Economic Literature*, 2(1), 26-45.
- Ravallion, M. (1994). *Poverty comparisons*. Harwood Academic Press.
- Ravallion, M. (1998). *Poverty lines in theory and practice (Living Standards Measurement Study Paper No. 133)*. World Bank.
- Ravallion, M. (2016). *The economics of poverty: History, measurement, and policy*. Oxford University



- Press.
- Ravallion, M., & Chen, S. (2011). Weakly relative poverty. *Review of Economics and Statistics*, 93(4), 1251-1261. https://doi.org/10.1162/REST_a_00127
- Robison, R. (1986). *Indonesia: The rise of capital*. Allen & Unwin.
- Sundrum, R. M. (1979). Income distribution, 1970-76. *Bulletin of Indonesian Economic Studies*, 15(1), 137-141.
- Surbakti, P. (1995). *Indonesia's national socio-economic survey: A continual data source for analysis on welfare development*. Central Bureau of Statistics.
- Suryahadi, A., Sumarto, S., & Pritchett, L. (2000). The evolution of poverty during the crisis in Indonesia, 1996 to 1999 (SMERU Working Paper). SMERU Research Institute.
- Suryahadi, A., Sumarto, S., & Pritchett, L. (2003). Quantifying vulnerability to poverty: A proposed measure, applied to Indonesia. SMERU Research Institute.
- Tempo. (2025a, August 7). The Prakarsa: Metode penghitungan garis kemiskinan BPS perlu direvisi. <https://www.tempo.co/ekonomi/the-prakarsa-metode-penghitungan-garis-kemiskinan-bps-perlu-direvisi-2056248>
- Tempo. (2025b, June 15). Kok bisa metode penghitungan kemiskinan BPS dan Bank Dunia beda? <https://www.tempo.co/ekonomi/kok-bisa-metode-penghitungan-kemiskinan-bps-dan-bank-dunia-beda-1705446>
- Tempo. (2025c, July 25). BPS mengkaji revisi standar kemiskinan. Kapan rampung? <https://www.tempo.co/ekonomi/bps-mengkaji-revisi-standar-kemiskinan-kapan-rampung--2050907>
- The Prakarsa. (2025, August 7). BPS diminta ubah metodologi perhitungan garis kemiskinan. <https://theprakarsa.org/bps-diminta-ubah-metodologi-perhitungan-garis-kemiskinan/>
- World Bank. (2024, March 16). Stagnation or impressive poverty reduction in Indonesia? A choice between weakly relative and absolute poverty lines. World Bank Blogs. <https://blogs.worldbank.org/en/eastasiapacific/stagnation-or-impressive-poverty-reduction-indonesia-choice-between-weakly-relative>
- World Bank. (2025, June 13). The World Bank's updated global poverty lines: Indonesia. <https://www.worldbank.org/en/news/factsheet/2025/06/13/updated-global-poverty-lines-indonesia>
- World Bank. World Development Indicators [Data sets]: FP.CPI.TOTL (consumer price index, 2010 = 100); NY.GDP.PCAP.KD (GDP per capita, constant 2015 US\$); NE.CON.PRVT.PC.KD (households and NPISHs final consumption expenditure per capita, constant 2015 US\$); SP.URB.TOTL.IN.ZS (urban population, % of total). Indonesia. Retrieved from the World Bank API, July 2026; series vintage 13 July 2026. <https://api.worldbank.org/v2/country/IDN>
- World Bank. World Development Indicators, series SI.POV.GINI: GINI index for Indonesia [Data set]. Accessed via FRED, Federal Reserve Bank of St. Louis, April 2026. <https://fred.stlouisfed.org/series/SIPOVGINIIDN>