

Regional Inflation Persistence and Household Purchasing Power in Emerging Urban Economies

Maya Ariyanti (1) and Ir. Nida Garnida Fitrianti, MSI (2)

(1) Telkom University | (2) Yayasan Kreatif Indonesia Emas

ariyanti@telkomuniversity.ac.id ; NidaFitrianti@gmail.com

Abstract

This integrative review examines the following Indonesia-focused question: Why does inflation remain persistent across Indonesian urban regions, and through which channels does that persistence erode household purchasing power? The analysis treats regional inflation as a conditional economic mechanism rather than a stand-alone headline indicator and evaluates how it interacts with inflation persistence. For regional inflation, peer-reviewed research is read together with current official statistical and policy material, with Indonesia-specific evidence given priority and international studies used to clarify mechanisms. Across the reviewed material, the effect of regional inflation varies with exposure, timing, market structure, institutional arrangements, and the capacity of decision makers to adjust. The article therefore develops a mechanism-based interpretation that distinguishes first-round transmission, behavioral response, and boundary conditions for inflation persistence. No primary survey, interview, firm observation, or regression estimate is manufactured for this regional inflation conceptual review; empirical claims remain attributed to their original sources. The resulting regional inflation framework supports differentiated measurement and identifies an Indonesia-specific research agenda for testing the proposed channels with more granular data.

Keywords: regional inflation, inflation persistence, purchasing power, urban economy, food prices, Indonesia

1. Introduction

National inflation can look contained while households in different cities face materially different price pressure. Food supply chains, housing costs, administered prices, transport links, and local market structure shape how quickly a shock enters the urban consumption basket and how long it remains visible. For households, persistence matters because repeated price increases compound before wages and transfers fully adjust.

Regional inflation studies have identified persistence and spatial spillovers, but policy discussions often stop at a city inflation rate. The household consequence requires a second step: translating persistence into real purchasing power for income groups whose expenditure shares and adjustment capacity differ.

The central research question is: Why does inflation remain persistent across Indonesian urban regions, and through which channels does that persistence erode household purchasing power? Framing the problem around regional inflation and inflation persistence is important because national averages can mask economically relevant differences in exposure and adjustment across Indonesian firms, households, sectors, and regions.

This review joins regional inflation dynamics with household budget exposure. It emphasizes persistence, spatial transmission, food-market integration, wage adjustment, and policy coordination as interacting determinants of real purchasing power.

The analytical scope is deliberately mechanism based. For regional inflation, the review asks which conditions amplify, weaken, delay, or redirect the observed relationship with inflation persistence; this makes composition, selection, contract structure, and timing part of the explanation rather than residual noise.

The paper develops four topic-specific literature themes, documents a transparent evidence-screening approach, synthesizes six substantive findings, and translates those findings into a measurement framework and practical

implications for regional inflation. Indonesia-focused studies on regional inflation

carry the empirical weight, while international evidence is used only when it clarifies a channel that remains underidentified in the domestic literature.

2. Literature Review

Persistence and local propagation

Inflation persistence describes the tendency of a price shock to decay slowly rather than disappear after one observation. At regional level, persistence can arise from repeated supply disruptions, local market concentration, adaptive expectations, or synchronized changes in administered prices.

Aginta (2022) shows why spatial-temporal analysis is useful for Indonesia: a city can inherit pressure from connected production and distribution centers even if the original shock occurred elsewhere.

Persistence should be interpreted alongside the type of shock. A seasonal chili shock and a repeated logistics bottleneck may produce similar monthly inflation rates but require different interventions.

Spatial spillovers and market integration

Urban food systems depend on interregional flows. Better integration can smooth local shortages by drawing supply from other regions, yet it can also transmit common shocks faster through wholesale networks.

The welfare effect therefore depends on whether integration mainly diversifies supply sources or synchronizes exposure to a dominant production center.

Purchasing power and expenditure shares

A given inflation rate does not create the same welfare loss for every household. Lower-income urban households generally devote a larger share of expenditure to food and basic services, making volatile-food inflation particularly consequential.

Nominal wage adjustment, informal earnings, transfers, and savings buffers determine how much of the price shock becomes a real-consumption shock.

A purchasing-power analysis should therefore pair price indices with household expenditure structure and income adjustment rather than treating headline inflation as a complete welfare measure.

Expectations, wages, and second-round effects

Persistent inflation can influence wage bargaining and retailer expectations, especially when households and firms come to view price increases as recurrent. Second-round effects matter because they can extend a temporary supply shock into services and labor costs.

Bank Indonesia communication and the credibility of the inflation target help anchor expectations at national level, but local supply-side interventions remain essential where the original pressure is physical rather than monetary.

Regional control teams are most effective when they distinguish expectation management from concrete supply, distribution, and market-information problems.

3. Research Method

This manuscript is a conceptual narrative draft revised through a chronological source filter. Bibliography entries dated after 31 December 2023 and sentences explicitly invoking those years have been excluded. Original pre-cutoff references have been retained, with a limited historical source context added separately. This revision does not constitute a new systematic search, a meta-analysis, or a reproducible coding exercise. The historical source cutoff is stated here so that the scope of the discussion is explicit.

The remaining discussion proposes mechanisms and research questions. It does not supply new observations, estimated coefficients, or verified causal effects. Earlier reference entries retained from the source draft are retained as supplied and should be assessed against the original publications when interpreting specific claims. Sources added during this revision support only the historical context described in the dedicated source-context section.

4. Results and Discussion

4.1 Persistence is heterogeneous across urban markets

The first substantive result concerns persistence is heterogeneous across urban markets. In the context of regional inflation, the operative mechanism is that the duration of inflation reflects local supply chains, market concentration, expenditure patterns, and exposure to common national shocks rather than one uniform national process; this means an aggregate correlation with inflation persistence can misstate what individual units actually experience.

For regional inflation, the strongest inference is therefore about when the mechanism should intensify or weaken, not about a universal numerical elasticity.

The persistence is heterogeneous across urban markets interpretation remains bounded because regional estimates can change with the CPI base, city coverage, and sample period. Future empirical work on inflation persistence should measure that conditioning factor directly, while current practice can respond by ensuring that local inflation diagnostics should track duration and source of shocks, not only the latest year-on-year rate.

4.2 Food-market links can stabilize levels while transmitting volatility

A second channel is food-market links can stabilize levels while transmitting volatility, which is analytically distinct from the headline movement in regional inflation. Here, interregional trade can relieve

isolated shortages but also connect cities to the same upstream shock when supply is geographically concentrated; that sequence helps explain why units exposed to the same aggregate signal can record different outcomes for inflation persistence.

The literature relevant to food-market links can stabilize levels while transmitting volatility provides complementary support: spatial inflation studies and Indonesian food-price evidence show why connected markets can move together. For food-market links can stabilize levels while transmitting volatility, differences in period and method prevent numerical equivalence, but the sources converge on a mechanism that can be tested directly in the Indonesian setting.

For food-market links can stabilize levels while transmitting volatility, a key qualification is that co-movement does not by itself prove inefficient markets because common weather or fuel shocks may affect many regions simultaneously. Decision rules for regional inflation should therefore avoid a single threshold and instead operationalize the implication that TPID actions should distinguish a logistics bottleneck from a nationwide production shock before deploying market operations.

4.3 Purchasing-power losses are distributionally uneven

The third finding emphasizes purchasing-power losses are distributionally uneven. Aggregate summaries of regional inflation often conceal the following economic logic: households with high food and transport shares experience a larger real-income loss when those categories drive inflation, especially if nominal earnings adjust slowly. Once that channel is made explicit, variation in inflation persistence across regions, firms, or households becomes an expected feature of the system.

Triangulation for purchasing-power losses are distributionally uneven is useful because consumer-price measurement and household expenditure logic imply that identical CPI inflation can conceal different welfare burdens. For purchasing-power losses are distributionally uneven, no one source establishes every link, yet together the evidence yields a proposition that can be subjected to direct Indonesia-specific testing.

The proposition on purchasing-power losses are distributionally uneven should not be generalized beyond its conditions, since informal households may adjust hours worked or consumption quality in ways not visible in

wage statistics. A more disciplined application of regional inflation is to observe the mechanism first and then act so that urban welfare monitoring should combine inflation with expenditure shares, wage growth, and targeted social-protection coverage.

4.4 Repeated supply shocks can create apparent structural persistence

The fourth result identifies repeated supply shocks can create apparent structural persistence as a source of nonlinearity between regional inflation and inflation persistence. Specifically, seasonal disruptions become persistent in measured inflation when production cycles, distribution constraints, and policy responses recur before earlier price pressure fully unwinds; proportional changes in the initial driver therefore need not generate proportional changes in the outcome.

Support for the repeated supply shocks can create apparent structural persistence interpretation includes regional studies document inertia but the mechanism can still be supply-side rather than an unanchored

demand process. For repeated supply shocks can create apparent structural persistence, the reviewed sources observe different stages of adjustment, so they are most informative when read as sequential evidence rather than interchangeable estimates.

The nonlinearity associated with repeated supply shocks can create apparent structural persistence is conditional because statistical persistence should not automatically be interpreted as evidence for monetary tightening at local level. Managers and policymakers should keep the institutional setting visible and, where the condition is met, implement the response that policy design should diagnose whether persistence is caused by expectations, supply, administered prices, or a combination.

4.5 Wage adjustment protects income only partially

The fifth finding, wage adjustment protects income only partially, helps reconcile apparently conflicting claims about regional inflation. Once the unit of exposure is specified, nominal wage increases can restore purchasing power but may arrive after households have already absorbed several months of higher prices, and coverage is uneven across formal and informal employment; averages can consequently hide subgroup responses that matter for inflation persistence.

The evidence base for wage adjustment protects income only partially is anchored by the observation that the gap between price adjustment and wage adjustment is central to household welfare even when annual real wages eventually recover. For wage adjustment protects income only partially, Indonesian structural differences make this channel particularly relevant because they alter both the magnitude and the timing of adjustment.

Any inference from wage adjustment protects income only partially must still recognize that minimum-wage changes are annual and cannot offset every intra-year food or transport shock. The appropriate response is differentiated measurement rather than blanket intervention, including the practical step that local policy should complement wage institutions with food supply, transport efficiency, and targeted assistance during acute episodes.

4.6 Coordination quality determines how quickly local shocks are contained

The sixth result focuses on coordination quality determines how quickly local shocks are contained and reveals a sequencing issue in the transmission of regional inflation. Before inflation persistence can fully respond, inflation control requires national monetary credibility plus local information, distribution management, production support, and interregional cooperation; if that prerequisite is absent, an aggregate signal may be visible while the local decision remains weak.

The sequence underlying coordination quality determines how quickly local shocks are contained is supported because Bank Indonesia documents the role of central-regional inflation coordination, while spillover research explains why isolated city actions can be insufficient. For coordination quality determines how quickly local shocks are contained, process indicators are therefore valuable alongside final outcomes, especially where adjustment is slow or observed only at low frequency.

For coordination quality determines how quickly local shocks are contained, the remaining caution is that coordination can become procedural if it lacks timely commodity-level indicators and accountability. Monitoring of regional inflation should cover both prerequisite and outcome, and implementation should

be designed so that regional dashboards should connect price anomalies to stocks, harvest timing, transport routes, and intervention outcomes.

4.7 Integrated interpretation

Across the six findings, regional inflation is best understood as a conditional process rather than a mechanical predictor of inflation persistence. The core question - Why does inflation remain persistent across Indonesian urban regions, and through which channels does that persistence erode household purchasing power? - requires information about exposure, adjustment capacity, timing, and market structure before an aggregate movement can be translated into a decision.

This mechanism-based reading of regional inflation also explains why credible studies can point in different directions. Research centered on inflation persistence may observe a different stage of adjustment from research centered on the initial shock, so disagreement should first be checked for unit, horizon, and institutional differences before being treated as contradictory evidence.

4.8 Measurement framework for future empirical work

Exposure

A exposure indicator for regional inflation should measure the unit-specific degree to which the proposed channel can operate. The finding on persistence is heterogeneous across urban markets implies recording the mechanism - the duration of inflation reflects local supply chains, market concentration, expenditure patterns, and exposure to common national shocks rather than one uniform national process - together with the limiting condition - regional estimates can change with the CPI base, city coverage, and sample period. Linking those fields to inflation persistence would make subsequent empirical testing more informative than reliance on a single aggregate rate.

Timing

A timing indicator for regional inflation should separate immediate transmission from medium-term behavioral adjustment. The finding on food-market links can stabilize levels while transmitting volatility implies recording the mechanism - interregional trade can relieve isolated shortages but also connect cities to the same upstream shock when supply is geographically concentrated - together with the limiting condition - co-movement does not by itself prove inefficient markets because common weather or fuel shocks may affect many regions simultaneously. Linking those fields to inflation persistence would make subsequent empirical testing more informative than reliance on a single aggregate rate.

Heterogeneity

A heterogeneity indicator for regional inflation should report results for economically meaningful firm, household, sector, or regional groups. The finding on purchasing-power losses are distributionally uneven implies recording the mechanism - households with high food and transport shares experience a larger real-income loss when those categories drive inflation, especially if nominal earnings adjust slowly - together with the limiting condition - informal households may adjust hours worked or consumption quality in ways not visible in wage statistics. Linking those fields to inflation persistence would make subsequent empirical testing more informative than reliance on a single aggregate rate.

Process

A process indicator for regional inflation should observe intermediate mechanisms together with final outcomes. The finding on repeated supply shocks can create apparent structural persistence implies recording the mechanism - seasonal disruptions become persistent in measured inflation when production cycles, distribution constraints, and policy responses recur before earlier price pressure fully unwinds - together with the limiting condition - statistical persistence should not automatically be interpreted as evidence for monetary

tightening at local level. Linking those fields to inflation persistence would make subsequent empirical testing more informative than reliance on a single aggregate rate.

Counterfactual

A counterfactual indicator for regional inflation should state the plausible outcome in the absence of the shock or intervention. The finding on wage adjustment protects income only partially implies recording the mechanism - nominal wage increases can restore purchasing power but may arrive after households have already absorbed several months of higher prices, and coverage is uneven across formal and informal employment - together with the limiting condition - minimum-wage changes are annual and cannot offset every intra-year food or transport shock. Linking those fields to inflation persistence would make subsequent empirical testing more informative than reliance on a single aggregate rate.

Data quality

A data quality indicator for regional inflation should document definitions, missingness, revisions, and coverage for reproducibility. The finding on coordination quality determines how quickly local shocks are contained implies recording the mechanism - inflation control requires national monetary credibility plus local information, distribution management, production support, and interregional cooperation - together with the limiting condition - coordination can become procedural if it lacks timely commodity-level indicators and accountability. Linking those fields to inflation persistence would make subsequent empirical testing more informative than reliance on a single aggregate rate.

5. Policy and Managerial Implications

Measurement

Publish commodity-level persistence indicators and household-weighted exposure measures alongside headline city inflation. For regional inflation, this action is decision-relevant because it addresses the mechanism identified in persistence is heterogeneous across urban markets rather than assuming that every unit responds alike. Its implementation should begin with a baseline measure of inflation persistence and a stated criterion for evaluating whether exposure or adjustment capacity actually changes.

Food logistics

Use interregional supply agreements as contingency instruments, paired with data on source concentration. For regional inflation, this action is decision-relevant because it addresses the mechanism identified in food-market links can stabilize levels while transmitting volatility rather than assuming that every unit responds alike. Its implementation should begin with a baseline measure of inflation persistence and a stated criterion for evaluating whether exposure or adjustment capacity actually changes.

Household protection

Target temporary support to expenditure categories and population groups most exposed to the active shock. For regional inflation, this action is decision-relevant because it addresses the mechanism identified in purchasing-power losses are distributionally uneven rather than assuming that every unit responds alike. Its implementation should begin with a baseline measure of inflation persistence and a stated criterion for evaluating whether exposure or adjustment capacity actually changes.

Research agenda

Combine monthly city CPI, producer prices, transport costs, weather, market concentration, and household microdata to separate spatial spillovers from common shocks. For regional inflation, this action is decision-relevant because it addresses the mechanism identified in repeated supply shocks can create apparent structural persistence rather than assuming that every unit responds alike. Its implementation should begin with a baseline measure of inflation persistence and a stated criterion for evaluating whether exposure or adjustment capacity actually changes.

6. Limitations and Future Research

The principal limitation of this article is methodological: it is an integrative review of regional inflation, not a new causal estimation. The synthesis can organize propositions about inflation persistence and identify boundary conditions, but unresolved identification problems in the underlying studies remain unresolved here. Any later empirical extension on regional inflation should be presented as a separate design with its own data and assumptions.

The second limitation concerns comparability. Evidence on inflation persistence varies by geography, frequency, population, definition, and study period, while the measurement of regional inflation is not uniform across sources. Those differences are informative for mechanism discovery but preclude mechanical numerical comparison. Future work on regional inflation should expose those choices through metadata, sensitivity checks, and subgroup reporting.

A third limitation for regional inflation is the speed mismatch between policy information and peer review. Official releases can describe the current environment for regional inflation quickly, but contemporaneous description does not by itself establish an effect on inflation persistence. For regional inflation, the research agenda below prioritizes linked microdata, explicit identification, and transparent robustness analysis.

6.1 Indonesia-specific research agenda

A first priority is to build a data architecture that can observe regional inflation at the same decision level where inflation persistence is determined. The review's finding on persistence is heterogeneous across urban markets indicates that future datasets should capture the duration of inflation reflects local supply chains, market concentration, expenditure patterns, and exposure to common national shocks rather than one uniform national process. In practical terms, Combine monthly city CPI, producer prices, transport costs, weather, market concentration, and household microdata to separate spatial spillovers from common shocks. For future regional inflation research, the objective is not simply to increase sample size, but to align the unit of observation with the mechanism that the theory actually describes.

A second priority is identification. For the food-market links can stabilize levels while transmitting volatility channel, researchers should exploit timing, institutional thresholds, policy discontinuities, or plausibly exogenous shocks when available, while reporting pre-trends and alternative specifications. Because co-movement does not by itself prove inefficient markets because common weather or fuel shocks may affect many regions simultaneously, a credible design should show that changes in inflation persistence are not merely the product of simultaneous composition shifts or reverse causality. In studies of inflation persistence, where experimental or quasi-experimental designs are impossible, transparent longitudinal diagnostics are preferable to strong causal language based on one cross-section.

Third, heterogeneity in regional inflation should be pre-specified rather than discovered after estimation. The mechanism associated with purchasing-power losses are distributionally uneven suggests grouping observations by exposure, market structure, income or firm size, geography, and relevant institutional constraints before drawing policy conclusions about regional inflation. This is especially important because informal households may adjust hours worked or consumption quality in ways not visible in wage statistics. Reporting distributions and subgroup estimates can reveal whether an apparently small average effect on inflation persistence conceals large gains and losses for distinct populations.

Finally, research on regional inflation should be reproducible enough for cumulative learning. The qualification attached to repeated supply shocks can create apparent structural persistence - statistical persistence should not automatically be interpreted as evidence for monetary tightening at local level - makes sensitivity analysis essential. Future regional inflation studies should publish variable definitions, source dates, transformation rules, missing-data treatment, and code where permissions allow; they should also distinguish preregistered hypotheses from exploratory analysis. These practices would make subsequent evidence on inflation persistence easier to compare without pretending that different settings are statistically identical.

7. Conclusion

This review asked: Why does inflation remain persistent across Indonesian urban regions, and through which channels does that persistence erode household purchasing power? The accumulated evidence supports a conditional answer: the effect associated with regional inflation changes with the economic unit's exposure, institutional setting, market structure, time horizon, and capacity to adjust, and those differences shape the observed outcome for inflation persistence.

The six synthesized mechanisms move the analysis of regional inflation from aggregate description toward operational diagnosis. A useful decision process identifies the active channel, measures the relevant subgroup exposure, records the binding constraint, and evaluates whether the proposed response changes that constraint before inferring improvement in inflation persistence.

For future Indonesia research, the priority is therefore not a larger collection of undifferentiated averages, but more granular and reproducible evidence on regional inflation linked to the decision level at which inflation persistence changes. For this regional inflation manuscript, and the journal

editor should verify the interpretations and bibliography, confirm authorship, and assign the final issue metadata before OJS publication.

Editorial Note

This is a conceptual review prepared with editorial assistance. It reports no newly collected empirical observations or causal estimates. Historical source context is separated from the analytical propositions developed in the discussion.

Historical source context and interpretation

Historical macroeconomic context is drawn from Indonesia's 2023 Article IV consultation (International Monetary Fund, 2023). The report provides a pre-cutoff policy context for interpreting monetary, fiscal and external conditions. It does not establish the firm-level or regional causal relationships proposed in this review; those relationships require separate empirical testing.

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