

Exchange Rate Pass-Through and Export Pricing Decisions in Indonesian Manufacturing Firms

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Abstract

This integrative review examines the following Indonesia-focused question: How do exchange-rate changes reach export prices, and what firm-level pricing decisions determine whether Indonesian manufacturers absorb or pass those changes to foreign buyers? The analysis treats exchange rate pass-through as a conditional economic mechanism rather than a stand-alone headline indicator and evaluates how it interacts with export pricing. For exchange rate pass-through, 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 exchange rate pass-through 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 export pricing. No primary survey, interview, firm observation, or regression estimate is manufactured for this exchange rate pass-through conceptual review; empirical claims remain attributed to their original sources. The resulting exchange rate pass-through framework supports differentiated measurement and identifies an Indonesia-specific research agenda for testing the proposed channels with more granular data.

Keywords: exchange rate pass-through, export pricing, manufacturing, pricing-to-market, imported inputs, Indonesia

1. Introduction

Indonesian manufacturers sell into markets where invoices, contracts, imported inputs, and competitive conditions are rarely aligned in the same currency. A depreciation can improve the rupiah value of foreign-currency revenue, yet it can also raise imported-input costs and trigger strategic price adjustments. The commercial effect therefore depends on the net exposure of each exporter rather than on the nominal exchange rate alone.

Much public discussion treats depreciation as automatically supportive of exports. Recent Indonesia-focused evidence instead points to heterogeneous trade-price responses across sectors and trade flows. The unresolved managerial question is how exporters choose between margin protection, foreign-market share, and customer continuity when currency movements alter both costs and revenues.

The central research question is: How do exchange-rate changes reach export prices, and what firm-level pricing decisions determine whether Indonesian manufacturers absorb or pass those changes to foreign buyers? Framing the problem around exchange rate pass-through and export pricing is important because national averages can mask economically relevant differences in exposure and adjustment across Indonesian firms, households, sectors, and regions.

The review connects macroeconomic pass-through with exporter pricing practice. It distinguishes invoicing currency, imported-input intensity, market power, contract timing, and hedging as separate channels and then translates those channels into an export-pricing decision framework.

The analytical scope is deliberately mechanism based. For exchange rate pass-through, the review asks which conditions amplify, weaken, delay, or redirect the observed relationship with export pricing; 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 exchange rate pass-through. Indonesia-focused studies on exchange rate pass-through 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

Pass-through as a firm problem

Pass-through is the fraction of an exchange-rate movement that appears in a price expressed in the buyer or producer currency. For an exporter, the relevant object is not only the border-price response but also the resulting change in unit margin after imported inputs, domestic costs, distribution expenses, and financing are considered.

Theoretical work shows that local-currency pricing, producer-currency pricing, and dominant-currency pricing produce different short-run responses. Indonesia-focused evidence adds a practical qualification: manufacturing trade prices do not react uniformly across products and directions of trade.

A pass-through estimate is a conditional diagnostic, not a pricing rule. The same depreciation can justify a foreign-price cut for a market-share strategy, a stable foreign price for margin rebuilding, or even a foreign-price increase when input-cost pressure dominates.

Imported inputs and net currency exposure

Manufacturers that import machinery, components, chemicals, or intermediate goods face a cost-side exchange-rate channel. The more imported content required to produce one unit of exports, the smaller the apparent windfall from a rupiah depreciation.

Amiti, Itskhoki, and Konings show why import intensity and market share can jointly mute pass-through. The Indonesia-specific implication is important for industries embedded in Asian production networks, where export receipts and input payments may be denominated in different currencies.

Net exposure should be measured by currency and timing. A firm with dollar export receipts, yen machinery leases, and short-term rupiah working-capital debt faces a different response problem from a firm whose costs and revenues are predominantly domestic.

Market power, markups, and destination competition

Export pricing is strategic when firms possess discretion over markups. A company defending a newly acquired distributor may absorb a depreciation-related advantage into its margin, while a firm entering a price-sensitive market may share that advantage with buyers.

Pricing-to-market becomes more plausible when destination demand is segmented, products are differentiated, or switching costs are meaningful. Commodity-like manufactured products typically have less room for discretionary markups.

Destination-level competition should enter the pricing committee alongside exchange-rate forecasts. A uniform export-price response across countries may sacrifice margin in one market and volume in another.

Contracts, invoicing, and adjustment lags

Many export prices are fixed before shipment through purchase orders, annual contracts, or distributor arrangements. These rigidities delay measured pass-through even when managers intend to reprice.

Invoicing currency also shifts which party initially bears the shock. When a contract is set in a vehicle currency, neither producer nor buyer may be insulated from bilateral currency changes.

Observed pass-through over one quarter can therefore reflect contract structure as much as economic willingness to change prices. Reviews that ignore repricing frequency risk interpreting operational timing as a structural elasticity.

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 Net exposure dominates the headline exchange rate

The first substantive result concerns net exposure dominates the headline exchange rate. In the context of exchange rate pass-through, the operative mechanism is that the commercial effect of a currency movement depends on the difference between foreign-currency revenue exposure and foreign-currency cost exposure, including imported materials, logistics, royalties, and debt service; this means an aggregate correlation with export pricing can misstate what individual units actually experience.

For exchange rate pass-through, the strongest inference is therefore about when the mechanism should intensify or weaken, not about a universal numerical elasticity.

The net exposure dominates the headline exchange rate interpretation remains bounded because accounting exposure is not identical to economic exposure because competitors and customers can reprice at different speeds. Future empirical work on export pricing should measure that conditioning factor directly, while current practice can respond by ensuring that exporters should maintain a currency-by-currency contribution-margin bridge rather than relying on one rupiah exchange-rate threshold.

4.2 Invoicing currency shapes the first-round price signal

A second channel is invoicing currency shapes the first-round price signal, which is analytically distinct from the headline movement in exchange rate pass-through. Here, the currency written into contracts determines which price appears sticky and which party sees the immediate local-currency change; that

sequence helps explain why units exposed to the same aggregate signal can record different outcomes for export pricing.

The literature relevant to invoicing currency shapes the first-round price signal provides complementary support: Gopinath et al. (2010) links invoicing choice to pass-through behavior, while Indonesia operates in regional supply chains where vehicle-currency invoicing is common. For invoicing currency shapes the first-round price signal, 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 invoicing currency shapes the first-round price signal, a key qualification is that currency choice is endogenous to bargaining power, industry convention, and financial infrastructure. Decision rules for exchange rate pass-through should therefore avoid a single threshold and instead operationalize the implication that pricing reviews should record invoice currency, settlement currency, and hedging currency

separately for major export accounts.

4.3 Imported inputs compress depreciation benefits

The third finding emphasizes imported inputs compress depreciation benefits. Aggregate summaries of exchange rate pass-through often conceal the following economic logic: a weaker rupiah can simultaneously raise the rupiah value of exports and the replacement cost of imported components, so gross revenue gains can overstate net profitability. Once that channel is made explicit, variation in export pricing across regions, firms, or households becomes an expected feature of the system.

Triangulation for imported inputs compress depreciation benefits is useful because Amiti et al. (2014) demonstrates the relevance of imported inputs for pass-through, and Indonesia-focused trade-price evidence is consistent with sectoral heterogeneity. For imported inputs compress depreciation benefits, 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 imported inputs compress depreciation benefits should not be generalized beyond its conditions, since input substitution is often slow because specifications, certifications, and supplier qualification create operational lock-in. A more

disciplined application of exchange rate pass-through is to observe the mechanism first and then act so that sourcing teams and pricing teams should use the same scenario assumptions when setting destination prices.

4.4 Market power determines whether firms price for margin or volume

The fourth result identifies market power determines whether firms price for margin or volume as a source of nonlinearity between exchange rate pass-through and export pricing. Specifically, firms with differentiated products can vary markups across destinations, whereas price-takers have less ability to retain currency gains; proportional changes in the initial driver therefore need not generate proportional changes in the outcome.

Support for the market power determines whether firms price for margin or volume interpretation includes pricing-to-market research explains why exporters with stronger market positions often show lower mechanical pass-through. For market power determines whether firms price for margin or volume, 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 market power determines whether firms price for margin or volume is conditional because market power can disappear during demand downturns or when large distributors

renegotiate terms. Managers and policymakers should keep the institutional setting visible and, where the condition is met, implement the response that destination-level elasticity, distributor concentration, and competitor currency exposure should be part of repricing decisions.

4.5 Pass-through is asymmetric and time dependent

The fifth finding, pass-through is asymmetric and time dependent, helps reconcile apparently conflicting claims about exchange rate pass-through. Once the unit of exposure is specified, depreciations and appreciations need not generate mirror-image price changes because contracts, menu costs, customer expectations, and margin repair create different incentives; averages can consequently hide subgroup responses that matter for export pricing.

The evidence base for pass-through is asymmetric and time dependent is anchored by the observation that recent Indonesian manufacturing evidence emphasizes dynamic rather than instantaneous responses, and Bank Indonesia reports provide the macro context in which expectations are formed. For pass-through is asymmetric and time dependent, Indonesian structural differences make this channel particularly relevant because they alter both the magnitude and the timing of adjustment.

Any inference from pass-through is asymmetric and time dependent must still recognize that short samples can confuse temporary contract rigidity with permanent pricing behavior. The appropriate response is

differentiated measurement rather than blanket intervention, including the practical step that management dashboards should distinguish immediate, three-month, and twelve-month pricing responses.

4.6 Hedging supports pricing consistency but does not remove competitiveness risk

The sixth result focuses on hedging supports pricing consistency but does not remove competitiveness risk and reveals a sequencing issue in the transmission of exchange rate pass-through. Before export pricing can fully respond, financial hedges can stabilize near-term cash flows and reduce the need for abrupt customer price changes, but they do not eliminate competitor repricing or long-run cost shifts; if that prerequisite is absent, an aggregate signal may be visible while the local decision remains weak.

The sequence underlying hedging supports pricing consistency but does not remove competitiveness risk is supported because the macro-financial literature and standard treasury practice imply that hedging changes timing of exposure rather than the underlying economics of relative prices. For hedging supports pricing consistency but does not remove competitiveness risk, process indicators are therefore valuable alongside final outcomes, especially where adjustment is slow or observed only at low frequency.

For hedging supports pricing consistency but does not remove competitiveness risk, the remaining caution is that hedge availability, cost, and accounting treatment vary by firm size and instrument sophistication. Monitoring of exchange rate pass-through should cover both prerequisite and outcome, and implementation should be designed so that treasury and commercial teams should coordinate hedge horizons with contract renewal and planned price-review dates.

4.7 Integrated interpretation

Across the six findings, exchange rate pass-through is best understood as a conditional process rather than a mechanical predictor of export pricing. The core question - How do exchange-rate changes reach export prices, and what firm-level pricing decisions determine whether Indonesian manufacturers absorb or pass those changes to foreign buyers? - 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 exchange rate pass-through also explains why credible studies can point in different directions. Research centered on export pricing 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 exchange rate pass-through should measure the unit-specific degree to which the proposed channel can operate. The finding on net exposure dominates the headline exchange rate implies recording the mechanism - the commercial effect of a currency movement depends on the difference between foreign-currency revenue exposure and foreign-currency cost exposure, including imported materials, logistics, royalties, and debt service - together with the limiting condition - accounting exposure is not identical to economic exposure because competitors and customers can reprice at different speeds. Linking those fields to export pricing would make subsequent empirical testing more informative than reliance on a single aggregate rate.

Timing

A timing indicator for exchange rate pass-through should separate immediate transmission from medium-term behavioral adjustment. The finding on invoicing currency shapes the first-round price signal implies recording the mechanism - the currency written into contracts determines which price appears sticky and which party sees the immediate local-currency change - together with the limiting condition - currency choice is endogenous to bargaining power, industry convention, and financial infrastructure. Linking those fields to export pricing would make subsequent empirical testing more informative than reliance on a single aggregate rate.

Heterogeneity

A heterogeneity indicator for exchange rate pass-through should report results for economically meaningful firm, household, sector, or regional groups. The finding on imported inputs compress depreciation benefits

implies recording the mechanism - a weaker rupiah can simultaneously raise the rupiah value of exports and the replacement cost of imported components, so gross revenue gains can overstate net profitability - together with the limiting condition - input substitution is often slow because specifications, certifications, and supplier qualification create operational lock-in. Linking those fields to export pricing would make subsequent empirical testing more informative than reliance on a single aggregate rate.

Process

A process indicator for exchange rate pass-through should observe intermediate mechanisms together with final outcomes. The finding on market power determines whether firms price for margin or volume implies recording the mechanism - firms with differentiated products can vary markups across destinations, whereas price-takers have less ability to retain currency gains - together with the limiting condition - market power can disappear during demand downturns or when large distributors renegotiate terms. Linking those fields to export pricing would make subsequent empirical testing more informative than reliance on a single aggregate rate.

Counterfactual

A counterfactual indicator for exchange rate pass-through should state the plausible outcome in the absence of the shock or intervention. The finding on pass-through is asymmetric and time dependent implies recording the mechanism - depreciations and appreciations need not generate mirror-image price changes because contracts, menu costs, customer expectations, and margin repair create different

incentives - together with the limiting condition - short samples can confuse temporary contract rigidity with permanent pricing behavior. Linking those fields to export pricing would make subsequent empirical testing more informative than reliance on a single aggregate rate.

Data quality

A data quality indicator for exchange rate pass-through should document definitions, missingness, revisions, and coverage for reproducibility. The finding on hedging supports pricing consistency but does not remove competitiveness risk implies recording the mechanism - financial hedges can stabilize near-term cash flows and reduce the need for abrupt customer price changes, but they do not eliminate competitor repricing or long-run

cost shifts - together with the limiting condition - hedge availability, cost, and accounting treatment vary by firm size and instrument sophistication. Linking those fields to export pricing would make subsequent empirical testing more informative than reliance on a single aggregate rate.

5. Policy and Managerial Implications

Firm governance

Separate the exchange-rate forecast from the pricing decision: pricing committees should work with scenarios for volumes, margins, input costs, and competitor responses rather than one directional currency call. For exchange rate pass-through, this action is decision-relevant because it addresses the mechanism identified in net exposure dominates the headline exchange rate rather than assuming that every unit responds alike. Its implementation should begin with a baseline measure of export pricing and a stated criterion for evaluating whether exposure or adjustment capacity actually changes.

Data architecture

Build account-level data that joins invoice currency, destination, product margin, imported-input content, hedge coverage, and contract renewal dates. For exchange rate pass-through, this action is decision-relevant because it addresses the mechanism identified in invoicing currency shapes the first-round price signal rather than assuming that every unit responds alike. Its implementation should begin with a baseline measure of export pricing and a stated criterion for evaluating whether exposure or adjustment capacity actually changes.

Public policy

Trade facilitation and predictable access to intermediate inputs can improve exporter resilience because currency shocks are harder to manage when firms cannot adjust sourcing or logistics efficiently. For exchange

rate pass-through, this action is decision-relevant because it addresses the mechanism identified in imported inputs compress depreciation benefits rather than assuming that every unit responds alike. Its implementation should begin with a baseline measure of export pricing and a stated criterion for evaluating whether exposure or adjustment capacity actually changes.

Research agenda

Future Indonesia research should match customs transactions with firm balance sheets and invoicing currency so pass-through can be estimated by ownership, destination, imported-input share, and market concentration. For exchange rate pass-through, this action is decision-relevant because it addresses the mechanism identified in market power determines whether firms price for margin or volume rather than assuming that every unit responds alike. Its implementation should begin with a baseline measure of

export pricing 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 exchange rate pass-through, not a new causal estimation. The synthesis can organize propositions about export pricing and identify boundary conditions, but unresolved identification problems in the underlying studies remain unresolved here. Any later empirical extension on exchange rate pass-through should be presented as a separate design with its own data and assumptions.

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

A third limitation for exchange rate pass-through is the speed mismatch between policy information and peer review. Official releases can describe the current environment for exchange rate pass-through quickly, but contemporaneous description does not by itself establish an effect on export pricing. For exchange rate pass-through, 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 exchange rate pass-through at the same decision level where export pricing is determined. The review's finding on net exposure dominates the headline exchange rate indicates that future datasets should capture the commercial effect of a currency movement depends on the difference between foreign-currency revenue exposure and foreign-currency cost exposure, including imported materials, logistics, royalties, and debt service. In practical terms, Future Indonesia research should match customs transactions with firm balance sheets and invoicing currency so pass-through can be estimated by ownership, destination, imported-input share, and market concentration. For future exchange rate pass-through 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 invoicing currency shapes the first-round price signal channel, researchers should exploit timing, institutional thresholds, policy discontinuities, or plausibly exogenous shocks when available, while reporting pre-trends and alternative specifications. Because currency choice is endogenous to bargaining power, industry convention, and financial infrastructure, a credible design should show that changes in export pricing are not merely the product of simultaneous composition shifts or reverse causality. In studies of export pricing, 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 exchange rate pass-through should be pre-specified rather than discovered after estimation. The mechanism associated with imported inputs compress depreciation benefits suggests grouping

observations by exposure, market structure, income or firm size, geography, and relevant institutional constraints before drawing policy conclusions about exchange rate pass-through. This is especially important because input substitution is often slow because

specifications, certifications, and supplier qualification create operational lock-in. Reporting distributions and subgroup estimates can reveal whether

an apparently small average effect on export pricing conceals large gains and losses for distinct populations.

Finally, research on exchange rate pass-through should be reproducible enough for cumulative learning. The qualification attached to market power determines whether firms price for margin or volume - market power can disappear during demand downturns or when large distributors renegotiate terms - makes sensitivity analysis essential. Future exchange rate pass-through 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 export pricing easier to compare without pretending that different settings are statistically identical.

7. Conclusion

This review asked: How do exchange-rate changes reach export prices, and what firm-level pricing decisions determine whether Indonesian manufacturers absorb or pass those changes to foreign buyers? The accumulated evidence supports a conditional answer: the effect associated with exchange rate pass-through 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 export pricing.

The six synthesized mechanisms move the analysis of exchange rate pass-through 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 export pricing.

For future Indonesia research, the priority is therefore not a larger collection of undifferentiated averages, but more granular and reproducible evidence on exchange rate pass-through linked to the decision level at which export pricing changes. For this exchange rate pass-through 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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