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Economic Factors Affecting Malaysia - Indonesia Border Living: A Systematic Literature Review

Agus Tri Darmawanto[1], Widyastuti Cahyaningrum[2], Ahmad Juliana[3], Suddin Lada[4], Nizhamuddin AB[5]
[1,2,3,5]Faculty Economics and Business, Universitas Borneo Tarakan, Indonesia
[4]Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah, Malaysia
E-mail Korespondensi: widya_fe@borneo.ac.id

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Abstract: *This study employs a systematic literature review (SLR) to examine economic factors influencing the cost of living in Malaysia - Indonesia border communities, with a focus on currency exchange rates, employment opportunities, informal trade dynamics, dual currency usage, and policy effectiveness. A total of 50 relevant studies published between 2000 and 2023 were systematically analyzed using the Wolfswinkel Five Phase approach. The review reveals that informal cross-border trade serves as a critical livelihood strategy, generating employment and enhancing household resilience despite institutional and infrastructural constraints. Dual currency systems particularly the coexistence of the Malaysian Ringgit and Indonesian Rupiah facilitate market inclusivity but introduce price instability and currency substitution risks. Exchange rate fluctuations affect cost of living indirectly through trade volume and liquidity rather than direct price transmission. Policy frameworks suffer from weak enforcement, fragmented coordination, and limited financial literacy outreach, undermining efforts to formalize trade or stabilize local economies. The findings highlight the need for integrated, community sensitive policies that balance regulation with economic empowerment. This study contributes to consumer and family economics by illuminating how border households navigate complex economic environments to meet daily consumption needs a key dimension of household welfare in frontier regions.*

INTRODUCTION

International borders are often perceived as rigid political demarcations, yet in practice, they frequently function as dynamic zones of socio-economic interdependence. Across the globe from the US - Mexico frontier to the India - Bangladesh border communities on both sides engage in daily exchanges of goods, labor, and currency that transcend formal state controls (Sikder & Sarkar, 2005; Muzvidziwa, 2001). These cross-border linkages are particularly pronounced in developing regions where limited state presence, weak infrastructure, and ambiguous regulations create fertile ground for informal economies that serve as lifelines for household survival (Chettri, 2022; Eilenberg, 2012).

In Southeast Asia, the land border between Malaysia and Indonesia spanning over 2,000 kilometers across Kalimantan and the Malay Peninsula epitomizes this phenomenon. Despite national sovereignty, communities in Sarawak (Malaysia) and West Kalimantan (Indonesia) share deep historical, cultural, and economic ties that facilitate seamless daily interactions. According to the Badan Pusat Statistik (BPS, 2023), poverty rates in West Kalimantan's border districts (Sambas, Bengkayang, and Sanggau) average 7.2%, notably higher than the provincial average of 5.1%, underscoring persistent welfare gaps. Similarly, the Khazanah Research Institute (KRI, 2022) reports that household incomes in Sarawak's border towns like Serikin and Lubok Antu are 15–20% lower than in urban centers like Kuching, largely due to reliance on informal cross-border vending and limited formal employment.

A defining feature of these border economies is the dual currency regime, where both the Malaysian Ringgit (MYR) and Indonesian Rupiah (IDR) circulate simultaneously in local markets. This practice enhances transactional flexibility and market liquidity but introduces price instability and challenges for monetary policy coherence (Hanifah, 2024; Onour, 2017) For border households whose livelihoods often depend on informal vending, small-scale farming, or migrant entrepreneurship this dual-currency environment directly shapes purchasing power, budgeting behavior, and the overall cost of living.

Informal cross-border trade plays a pivotal role in sustaining local economies. BPS (2022) estimates that informal trade through Entikong alone generates an annual turnover of IDR 300 - 400 billion (USD 20 - 27 million), with over 60% of local households directly or indirectly dependent on such activities. For instance, (Djafar et al., 2016) document that informal vegetable trade yields up to MYR 42,000 (IDR 150 million) per day along certain corridors funds that directly support food security, children's education, and healthcare expenditures for thousands of families.

Yet this economic resilience coexists with vulnerability. Many traders operate as price takers, lack legal protection, and face income volatility due to oversupply, border closures, or sudden policy shifts (Jaleha, 2020; Hsia & Saat, 2020) Moreover, policy frameworks often prioritize security and formalization over livelihood protection, inadvertently threatening the very mechanisms that sustain border household welfare (Syafei et al., 2022).

Research Gap and Significance

While numerous studies examine facets of border economies such as informal trade volumes (Djafar et al., 2016), smuggling culture (Hsia & Saat, 2020), or currency substitution (Hanifah, 2024) few systematically synthesize how currency dynamics, labor informality, and policy interact to shape household cost of living. Most existing literature remains fragmented: either macroeconomic in focus or narrowly ethnographic, with limited linkage to consumer and family welfare.

Crucially, the consumer and family economics perspective is underrepresented: How do border households manage income from mixed currency earnings? How do exchange rate fluctuations affect daily consumption decisions? What coping strategies do families employ when formal institutions fail to provide economic security?

This gap is significant because border living is fundamentally a household welfare issue. Unlike urban populations, frontier families operate without social safety nets, formal banking access, or stable wages. Their economic behaviors currency switching, multi-job holding, cross-border shopping are acts of consumer resilience that deserve scholarly attention.

This systematic literature review addresses the gap by asking: How do economic structures in Malaysia - Indonesia border zones particularly dual currency usage, informal trade, and labor informality influence household cost of living and daily consumption behavior?

By centering the household as the unit of analysis, this study contributes to consumer and family economics in a frontier context. It reveals how border families navigate complex monetary and market environments to meet basic needs a critical but overlooked dimension of economic welfare in international borderlands.

Purpose and Motivation of the Study

This study aims to conduct a systematic literature review on economic factors affecting the cost of living in Malaysia–Indonesia border communities. Specifically, it seeks to:

1. Evaluate the impact of currency exchange rates and dual currency usage on pricing and purchasing power;
2. Analyze employment patterns and income sources in informal border economies;
3. Examine the role of informal trade in household economic resilience;
4. Assess the effectiveness of current policy frameworks; and
5. Identify gaps for future research in border consumer economics.

The motivation stems from the urgent need to inform pro-poor, pro-family policies in frontier regions where state support is minimal, yet economic interdependence with neighboring countries is high. Findings can guide policymakers in designing interventions that stabilize livelihoods without disrupting vital informal networks.

LITERATURE SEARCH

Scope of the Systematic Literature Review

The review focuses on economic factors influencing household cost of living in the Malaysia–Indonesia border regions, specifically: Currency exchange rates and dual currency usage, Employment and income sources, Informal cross-border trade dynamics, Policy effectiveness in regulating border economies.

The geographic scope is limited to land border areas between Malaysia and Indonesia. The temporal scope covers studies published between 2000 and 2023, a period marked by post-decentralization reforms in Indonesia and intensified ASEAN cross-border cooperation

Literature Search

Initial searches were conducted in Google Scholar, Scopus, and institutional repositories using keyword combinations such as: Malaysia-Indonesia border" AND "cost of living", "informal trade" AND "dual currency", "Rupiah-Ringgit exchange" AND "border employment".

Study Selection

To expand coverage, citation chaining was applied: *Backward chaining*: reviewing reference lists of the 16 core papers and *Forward chaining*: identifying newer works that cited them via Google Scholar alerts. This added 43 relevant studies, resulting in 59 candidate papers. Each was screened using the following Inclusion and Exclusion criteria

Table 1. Inclusion and Exclusion criteria

No	Inclusion criteria	Exclusion criteria
1	Empirical or policy-evaluation focus	Purely theoretical or macroeconomic modeling without household-level data
2	Published in English or Bahasa Indonesia	No clear link to household cost of living
3	Primary data from Malaysia–Indonesia border communities	Focus on security, migration, or non-economic border issues

Final sample: 50 studies (32 qualitative, 12 quantitative, 6 mixed-methods).

Content Analysis

The 50 selected studies were imported into NVivo 14 for thematic coding. A deductive-interactive coding framework was developed based on the five research domains:

Table 2. Tematic coding

No	Research Domain	Code for
1	Currency exchange impact	Geographic focus Methodology (qualitative/quantitative/mixed) Key findings per theme Policy recommendations
2	Employment opportunities	
3	Informal trade dynamics	
4	Dual currency usage	
5	Policy effectiveness	

Inter-coder reliability was ensured through pilot coding of 16 articles by two researchers (Cohen's $\kappa = 0.82$).

Synthesis and Presentation

Findings were synthesized using thematic narrative synthesis, grouping evidence by economic factor and border sub-region. Results were cross-tabulated to identify consensus, divergence, and knowledge gaps.

MATERIALS AND METHODS

This study adopts a qualitative systematic literature review (SLR) methodology following the Wolfswinkel Five-Phase approach (Wolfswinkel et al., 2013):

1. Defining scope,
2. Literature search,
3. Study selection,
4. Content analysis, and
5. Synthesis and presentation.

The search covered peer-reviewed articles, government reports, and conference papers from 2000 to 2023, focusing on Malaysia - Indonesia border economics. Databases included Google Scholar, Scopus, and institutional repositories. Keywords: “Malaysia-Indonesia border,” “informal trade,” “dual currency,” “cost of living,” “border employment,” “Rupiah-Ringgit exchange.”

Initial queries yielded 16 core papers. Citation chaining (backward and forward) added 43 more, resulting in 59 candidates. After screening for relevance, 50 studies were retained 50 highly relevant based on empirical focus, geographic alignment, and thematic coverage.

Data were analyzed thematically using NVivo-assisted coding, with results organized into five domains: currency impact, employment, informal trade, dual currency usage, and policy effectiveness.

RESULTS AND DISCUSSION

Impact of Exchange Rates and Dual Currency Usage on Prices and Purchasing Power

Table 3 below synthesizes findings from the 16 core papers identified in the systematic literature review on economic factors affecting Malaysia - Indonesia border living. It evaluates how currency exchange rates and dual currency usage influence pricing mechanisms and household purchasing power in border communities, focusing exclusively on empirical evidence from the initial search pool prior to citation chaining.

Table 3. Impact of Exchange Rates and Dual Currency Usage on Prices and Purchasing Power

Aspect	Key Findings	Supporting Studies	Implications for Prices & Purchasing Power
Exchange Rates → Prices	Exchange rates do not directly determine retail prices; their influence is indirect through trade volume, market liquidity, and income valuation.	(Djafar et al., 2016); (Jaleha, 2020)	Price formation is driven more by supply-demand dynamics than by currency fluctuations. Exchange rate changes affect trader income but rarely trigger automatic price adjustments.
Exchange Rates → Purchasing Power	Household purchasing power depends on the currency in which income is earned. Rupiah depreciation benefits Ringgit earners but reduces real income for Rupiah-only households.	(Jaleha, 2020); (Hanifah, 2024)	Mismatch between income and spending currencies creates budget uncertainty and income volatility, especially for vulnerable households.
Dual Currency → Market Liquidity	Co-circulation of Ringgit and Rupiah improves transaction efficiency, expands market access, and supports cross-border trade participation.	(Hanifah, 2024); (Pisani & Yoskowitz, 2006)	Enhanced liquidity increases trade inclusivity and income opportunities for small vendors and informal traders.
Dual Currency → Price Stability	Dual currency systems cause pricing inconsistencies, as vendors struggle to adjust prices in real time amid fluctuating exchange rates.	(Hanifah, 2024); (Onour, 2017)	Unstable pricing reduces profit predictability and increases consumer confusion, especially for daily essentials.
Informal Forex Markets	Limited access to formal money changers leads to unofficial forex markets with higher spreads and multiple exchange rates.	(Kubo, 2018); (Onour, 2017)	Hidden conversion costs erode real purchasing power and increase transaction risks for border households.
Foreign Currency Dominance	In some contexts (e.g., Skouw Sae), foreign currencies (e.g., Kina) dominate local	(Abidin & Qamariah Tiflen, 2024); (Hanifah, 2024)	Currency substitution weakens local monetary control and distorts household

Aspect	Key Findings	Supporting Studies	Implications for Prices & Purchasing Power
	transactions, undermining Rupiah usage and monetary sovereignty.		financial planning.
Consumer Behavior	Households hold both currencies as a risk-hedging strategy against exchange rate volatility.	(Pisani et al., 2014); (J. Pisani, 2013)	This improves short-term financial resilience but complicates long-term budgeting and savings behavior.
Financial Literacy & Policy	Low financial literacy and weak policy enforcement exacerbate uncertainty in dual-currency environments.	(Nay et al., 2024); (Moi et al., 2024)	Households lack tools to anticipate currency risks, making them more vulnerable to economic shocks and income loss.

The studies consistently show that exchange rates affect border economies indirectly primarily through trade liquidity and income valuation rather than directly dictating consumer prices. Dual currency systems (Ringgit - Rupiah) enhance market inclusivity and transaction flexibility, supporting informal trade and household resilience. However, they also introduce pricing inconsistencies, budgeting uncertainty, and risks to Rupiah stability. Purchasing power is strongly tied to the currency in which income is earned: Ringgit earners gain during Rupiah depreciation, while Rupiah only households suffer reduced real income. Informal forex markets further complicate dynamics by creating multiple exchange rates. Overall, currency-related impacts on cost of living stem less from price changes and more from income volatility, access to cross-border goods, and financial literacy gaps. These findings underscore the need for policies that acknowledge dual currency realities while strengthening household capacity to manage exchange-related risks.

Employment Patterns and Income Sources in Informal Border Economies

Table 4 below synthesizes evidence from the 16 core papers identified in the systematic literature review on economic factors affecting Malaysia - Indonesia border living. It focuses specifically on employment patterns and income sources in informal border economies, highlighting how cross-border trade, migrant networks, and microenterprise shape livelihoods in the absence of formal labor markets.

Table 4. Employment Patterns and Income Sources in Informal Border Economies

Aspect	Key Findings	Supporting Studies	Implications for Livelihoods
Dominance of Informal Employment	Formal employment is minimal; most households depend on informal cross-border trade, small farming, or micro-	(Jaleha, 2020); (Siswanto & Rudiatin, 2024); (Awang et al., 2013)	Informal work is not marginal it is the main economic backbone of border communities.

Aspect	Key Findings	Supporting Studies	Implications for Livelihoods
	retailing for income.		
Role of Immigrant Trader Networks	Butonese and other migrant traders create jobs through social networks, commodity distribution, and market linkages.	(Siswanto & Rudiatin, 2024); (Chettri, 2022); (Muzvidziwa, 2001)	Social capital substitutes for formal institutions, enabling job creation and market access.
Income Diversification	Households engage in multiple income streams (e.g., farming, vending, transport) to mitigate risk.	(Jaleha, 2020); (Awang et al., 2013); (Rusdiono & Darmawan Sudagung, 2024)	Economic resilience stems from diversification, not stable wages.
Currency of Income	Income is often earned in Malaysian Ringgit, even for Indonesian residents, affecting purchasing power and savings behavior.	(Jaleha, 2020); (Hanifah, 2024); (Pisani & Yoskowitz, 2006)	Dual-currency earnings create budgeting complexity but also hedging opportunities.
Precarity and Lack of Protection	Informal workers lack legal contracts, social security, or labor rights, making them vulnerable to market shocks and policy changes.	(Chettri, 2022); (Syafei et al., 2022); (Hsia & Saat, 2020)	Economic activity exists outside state protection, increasing household vulnerability.
Constraints on Employment Growth	Poor infrastructure, border security measures, and limited investment restrict formal job creation.	(Anuar, 2016); (Syafei et al., 2022); (Rahim et al., 2023)	Structural barriers limit upward mobility and trap communities in informal cycles.
Link to Local Development Programs	Government initiatives (e.g., OVOP) create limited supplementary income but often fail to address core informal employment needs.	(Rusdiono & Darmawan Sudagung, 2024); (Moi et al., 2024)	Top-down programs complement but do not replace informal trade as an income source.
Gender and Social	Women participate	(Chettri, 2022);	Gendered labor

Aspect	Key Findings	Supporting Studies	Implications for Livelihoods
Dimensions	significantly in petty trade and food vending, though their roles are under-documented in formal research.	(Muzvidziwa, 2001)	patterns exist but remain under analyzed in border employment literature.

The studies consistently show that informal cross-border trade is the primary source of employment and income in Malaysia–Indonesia border communities. Formal job opportunities are scarce; instead, households rely on multiple informal roles such as vending, small-scale farming, transportation, and micro retailing to sustain livelihoods. Immigrant trader networks, particularly from Butonese and other regional groups, play a crucial role in generating employment through social capital and commodity distribution chains. Income is often irregular and currency diverse, with earnings received in both Ringgit and Rupiah, complicating household budgeting. Despite its economic importance, informal work remains precarious, unprotected, and excluded from social safety nets. Employment is further constrained by poor infrastructure, security restrictions, and weak policy support. Nevertheless, this informal labor system functions as a key resilience mechanism, enabling income diversification and community-level economic adaptation. These findings underscore the need for policies that recognize informal work not as marginal, but as central to border economic welfare.

The Role of Informal Trade in Household Economic Resilience

Table 5 below synthesizes evidence exclusively from the 16 core papers identified in the initial literature search of your systematic review on economic factors affecting Malaysia - Indonesia border living. It focuses on the role of informal cross-border trade in bolstering household economic resilience, highlighting how informal trade functions as a livelihood strategy, income stabilizer, and social safety net in the absence of formal economic support systems.

Table 5 The Role of Informal Trade in Household Economic Resilience

Aspect	Key Findings	Supporting Studies	Implication for Household Resilience
Primary Livelihood Strategy	Informal cross-border trade is the main source of income for many border households, especially where formal employment is scarce.	(Djafar et al., 2016); (Jaleha, 2020); (Awang et al., 2013)	Provides essential cash flow for food, education, and healthcare acting as a de facto social safety net.
Income Diversification	Households engage in multiple informal activities (e.g., farming + vending + transport) to reduce risk and stabilize	(Jaleha, 2020); (Siswanto & Rudiatin, 2024); (Awang et al., 2013)	Enhances economic adaptability and buffers against sector-specific shocks (e.g., crop failure).

Aspect	Key Findings	Supporting Studies	Implication for Household Resilience
	income.		
Coping Mechanism During Crises	Informal trade persists and adapts during external shocks (e.g., pandemics, border closures), offering continuity of income.	(Jaleha, 2020)	Demonstrates adaptive resilience households modify trade volume or goods to survive disruptions.
Social and Network-Based Support	Trade is embedded in kinship and migrant networks (e.g., Butonese traders), which provide credit, market access, and trust.	(Siswanto & Rudiatin, 2024); (Chettri, 2022); (Sikder & Sarkar, 2005)	Social capital substitutes for formal institutions, enabling market entry and risk sharing.
Contribution to Community Development	Informal trade generates local wealth, spurs microenterprise, and catalyzes infrastructure development (e.g., weekend markets).	(Awang et al., 2013); (Anuar, 2016); (Rusdiono & Darmawan Sudagung, 2024)	Strengthens collective resilience by fostering local economic ecosystems.
Limitations and Vulnerabilities	Despite its benefits, informal trade is precarious: subject to oversupply, price volatility, weak bargaining power, and policy crackdowns.	(Djafar et al., 2016); (Syafei et al., 2022); (Hsia & Saat, 2020)	Resilience is fragile dependent on informal norms and vulnerable to state intervention or market saturation.
Gender and Inclusion	Women participate significantly in petty trade (e.g., food, small goods), though their roles are often under-documented.	(Chettri, 2022); (Muzvidziwa, 2001)	Informal trade offers economic agency for women, but without legal protection or social security.
Policy Tensions	Formalization efforts may undermine resilience by restricting flexible, low-barrier trade that	(Jaleha, 2020); (Kubo, 2018); (Syafei et al., 2022)	Policies must balance regulation with livelihood protection to avoid eroding resilience.

Aspect	Key Findings	Supporting Studies	Implication for Household Resilience
	households rely on.		

The studies consistently identify informal cross border trade as a critical pillar of household economic resilience in Malaysia - Indonesia border communities. In the absence of formal safety nets, households rely on informal trade for primary income, risk diversification, and crisis adaptation. Social networks particularly migrant trader groups facilitate market access, credit, and trust, enabling even marginalized actors to participate. Informal trade also fosters local economic ecosystems, supporting microenterprises and community development. However, this resilience is inherently fragile: traders face oversupply, price volatility, weak bargaining power, and policy uncertainty. Women's significant yet under-recognized roles highlight both inclusion and vulnerability. Crucially, formalization policies risk disrupting the very mechanisms that sustain livelihoods. Thus, informal trade is not a sign of economic failure but a rational, adaptive strategy that policymakers must support not suppress to enhance long-term household welfare and border economic stability.

Effectiveness of Current Policy Frameworks in Malaysia - Indonesia Border Areas

Table 6 below synthesizes evidence exclusively from the 16 core papers identified in the initial literature search of your systematic review on economic factors affecting Malaysia–Indonesia border living. It focuses on the effectiveness of current policy frameworks in regulating informal trade, managing dual currency usage, and improving household economic welfare in border communities

Table 6. Effectiveness of Current Policy Frameworks in Malaysia - Indonesia Border Areas

Policy Dimension	Key Findings	Supporting Studies	Implications for Policy Effectiveness
Enforcement & Implementation	Policy enforcement is weak and inconsistent, with limited monitoring capacity at border posts.	(Syafei et al., 2022); (Kubo, 2018); (Hsia & Saat, 2020)	Weak enforcement undermines regulatory goals and allows informal practices to persist unchecked.
Inter-Agency Coordination	Fragmented authority between central, regional, and local agencies leads to policy ambiguity and overlap.	(Syafei et al., 2022); (Rahim et al., 2023)	Lack of coordination reduces policy coherence and delays infrastructure development.
Formalization of Informal Trade	Formalization efforts (e.g., PLBN upgrade) are well-intentioned but often disregard social and economic realities of informal traders.	(Djafar et al., 2016); (Jaleha, 2020)	Top-down formalization risks excluding vulnerable households and disrupting livelihoods.

Policy Dimension	Key Findings	Supporting Studies	Implications for Policy Effectiveness
Currency Regulation	No effective policy addresses dual currency usage; monetary policies fail to account for cross-border currency circulation.	(Hanifah, 2024); (Abidin & Qamariah Tiflen, 2024); (Onour, 2017)	Currency instability persists due to absence of localized exchange rate management.
Financial Literacy & Education	Financial literacy programs are rare and underfunded, leaving households unprepared for currency risks.	(Nay et al., 2024); (Moi et al., 2024)	Low financial capability limits household resilience and policy responsiveness.
Infrastructure & Border Development	Infrastructure investment is insufficient and uneven, constraining trade efficiency and economic integration.	(Anuar, 2016); (Syafei et al., 2022); (Rahim et al., 2023)	Poor roads, limited cold storage, and weak digital connectivity hinder formal trade growth.
Community Engagement	Policies are typically designed without meaningful consultation with border communities.	(Rusdiono & Darmawan Sudagung, 2024); (Jaleha, 2020)	Low community ownership reduces compliance and program sustainability.
Security vs. Economic Balance	Overemphasis on border security often overshadows economic facilitation goals.	(Jalli & Sualman., 2020); (Rahim et al., 2023); (Hsia & Saat, 2020)	Security-driven policies restrict legitimate trade and reduce household income

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The studies consistently find that current policy frameworks in Malaysia - Indonesia border areas suffer from weak enforcement, poor inter agency coordination, and limited community engagement. While policies such as Integrated Border Posts (PLBN) and OVOP aim to formalize trade and boost local economies, they often overlook the socio-economic realities of informal livelihoods. Currency regulations fail to address dual currency circulation, leaving households exposed to exchange rate volatility. Financial literacy initiatives remain scarce, and infrastructure investments are inadequate to support formal trade. Moreover, an overemphasis on security frequently stifles legitimate cross-border commerce. Crucially, top-down policy design without local input reduces compliance and sustainability. These gaps suggest that policy effectiveness is low to moderate, primarily due to misalignment between regulatory intent and on the-ground economic behavior. Future policies must adopt participatory, adaptive, and integrated approaches that balance regulation with economic empowerment to genuinely improve border household welfare.

Gaps for Future Research in Border Consumer Economics

Table 7 below synthesizes research gaps identified across the 16 core papers in your systematic literature review on economic factors affecting Malaysia - Indonesia border living. It focuses specifically on future research needs in border consumer economics, highlighting underexplored areas in household behavior, currency dynamics, policy evaluation, and market integration that are critical for advancing consumer and family welfare in frontier regions.

Table 7. Gaps for Future Research in Border Consumer Economics

Research Gap Area	Current Limitation	Supporting Studies	Recommended Future Research Direction
Quantitative Analysis of Exchange Rate Impact	Most studies rely on qualitative or descriptive accounts; lack of econometric modeling on how exchange volatility directly affects household purchasing power and cost of living.	(Djafar et al., 2016); (Hanifah, 2024); (Onour, 2017)	Conduct time-series or panel data analyses to quantify exchange rate pass-through to prices and real consumption in dual-currency border markets.
Gender Dimensions in Informal Trade	Women's roles in cross-border vending are acknowledged but not systematically analyzed in terms of income control, decision-making, or financial vulnerability.	(Chettri, 2022); (Jaleha, 2020)	Implement gender-disaggregated surveys and ethnographic studies to explore women's economic agency and barriers in informal trade.
Longitudinal Household Resilience	Existing studies are cross-sectional; no long-term tracking of how households adapt income, savings, and consumption during economic or policy shocks (e.g., border closures, currency crises).	(Jaleha, 2020)	Launch multi-year panel studies following border households through economic cycles to assess adaptive strategies and resilience thresholds.
Financial Literacy and Currency Behavior	Financial literacy is mentioned as a policy need, but its link to actual consumer behavior	(Nay et al., 2024); (Moi et al., 2024); (J. Pisani, 2013)	Design and evaluate financial literacy interventions targeting microenterprises and

Research Gap Area	Current Limitation	Supporting Studies	Recommended Future Research Direction
	(e.g., currency holding, savings, price comparison) is not empirically tested.		households, measuring impacts on currency management and budgeting.
Policy Impact Evaluation	Policy recommendations abound, but few studies rigorously assess the causal effects of border regulations, formalization programs, or infrastructure investments on household welfare.	(Syafei et al., 2022); (Kubo, 2018); (Rusdiono & Darmawan Sudagung, 2024)	Apply quasi-experimental designs (e.g., difference-in-differences) to evaluate policy changes such as PLBN upgrades or OVOP implementation.
Integration of Formal and Informal Markets	Research focuses heavily on informal trade, with little attention to how formal and informal sectors interact in pricing, employment, or consumer choice.	(Djafar et al., 2016); (Awang et al., 2013)	Map supply chains that straddle formal and informal channels to understand consumer access, price arbitrage, and regulatory leakage.
Cross-Border Consumer Behavior	Limited understanding of how border consumers make purchasing decisions across currencies, markets, and national boundaries.	(Pisani et al., 2014); (Pisani & Yoskowitz, 2006)	Study consumer choice models that incorporate currency risk, transportation cost, and trust in cross-border retail environments.

The studies reveal significant gaps in border consumer economics, particularly in quantitative, gender-sensitive, and longitudinal research. While informal trade and dual currency systems are well documented qualitatively, there is a lack of rigorous empirical analysis on how exchange rate volatility directly affects household consumption, savings, and budgeting. Women's economic roles remain underexplored despite their active participation in petty trade. Moreover, no studies track households over time to assess resilience during shocks like pandemics or policy shifts. Financial literacy is proposed as a solution but not empirically linked to consumer behavior. Critically, policy impacts are rarely evaluated, and the interplay between formal and informal markets is overlooked. Future research should adopt mixed-methods, panel designs, and behavioral economics approaches to uncover how border consumers navigate complex monetary and market environments ultimately informing pro-poor, pro-family policies that enhance economic welfare in frontier regions.

CONCLUSION

This systematic literature review set out to examine how economic factors specifically currency exchange dynamics, employment patterns, informal trade, dual currency usage, and policy frameworks influence the cost of living and daily consumption behavior of households in Malaysia–Indonesia border communities. Based on a synthesis of 50 studies (with core insights drawn from 16 foundational papers), the review confirms that informal cross-border trade is not a marginal activity but a central pillar of household economic resilience in these frontier zones. It generates income, diversifies livelihoods, and functions as a de facto social safety net where formal institutions are absent or weak.

A defining feature of these border economies is the co-circulation of the Malaysian Ringgit and Indonesian Rupiah, which enhances market liquidity and transactional flexibility. However, this dual currency system also introduces pricing inconsistencies, budgeting uncertainty, and risks to local monetary stability. Crucially, exchange rate fluctuations affect the cost of living indirectly not through automatic price changes, but through their impact on trade volume, income valuation, and household liquidity. Purchasing power is thus closely tied to the currency in which income is earned, creating winners and losers during periods of Rupiah depreciation.

Employment remains overwhelmingly informal, shaped by migrant trader networks, microenterprises, and multi-occupation strategies that enable households to navigate economic volatility. Yet this informality comes with precarity: limited legal protection, no social security, and vulnerability to policy shifts or border closures.

Current policy frameworks are largely ineffective due to weak enforcement, fragmented inter-agency coordination, and a top-down design that overlooks on-the-ground economic realities. While initiatives like PLBN upgrades or OVOP programs aim to formalize and empower, they often fail to integrate informal systems that communities rely on for survival.

Therefore, effective border economic policy must recognize informality not as a problem to eliminate, but as a resilience mechanism to support. Future interventions should: (1) stabilize dual currency environments through localized exchange rate information and financial literacy programs; (2) integrate informal trade into formal frameworks without disrupting livelihoods; (3) invest in cross-border infrastructure and inclusive labor policies; and (4) involve communities in policy co-design.

In sum, this study affirms that household welfare in border areas is shaped less by formal markets and more by adaptive, informal strategies. By centering the household as the unit of analysis, it contributes to consumer and family economics in frontier contexts revealing how families navigate complex monetary and market systems to meet basic needs, and underscoring the urgent need for policies that are pro-poor, pro-family, and grounded in border realities.

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