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Methodological Framework for Mapping Insulin Supply Chains, Pricing, and Patient Outcomes in Comoros: A Political Economy Analysis, 2021–2026

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Abstract

This methodology article presents a novel framework for conducting a political economy analysis (PEA) of insulin access in the Comoros. It addresses a critical gap in understanding the systemic barriers to diabetes care in small island developing states. The research problem centres on the urgent need to elucidate the complex interplay between supply chain actors, pricing policies, and patient outcomes that perpetuate insulin insecurity. The proposed multi-method approach, implemented between 2021 and 2026, integrates three components: (1) supply chain mapping via stakeholder interviews and document review to trace insulin flows from import to point-of-care; (2) a policy analysis of national pricing regulations, tariffs, and procurement mechanisms; and (3) a longitudinal assessment of patient-level clinical and financial outcomes. The framework is designed to generate granular evidence on how power dynamics, institutional interests, and market structures shape affordability and availability. Its significance lies in providing a replicable tool for health systems researchers and policymakers to diagnose systemic failures in medicine access, moving beyond the mere quantification of stockouts. By foregrounding political and economic determinants, this methodology offers a pathway to design more equitable, context-sensitive interventions that strengthen pharmaceutical sovereignty and improve chronic disease management.

Keywords: *Political economy analysis, Insulin access, Supply chain mapping, Sub-Saharan Africa, Health systems research, Mixed-methods, Non-communicable diseases*

INTRODUCTION

The political economy of essential medicine access, particularly for chronic conditions like diabetes, is a critical but understudied field in East Africa (ABUZINADAH, 2025). Existing literature on

supply chains and pricing policies in the region provides a foundational, yet incomplete, understanding of the specific barriers to insulin access. For instance, research on weakly managed agri-food supply chains in East Africa highlights systemic inefficiencies and coordination failures that can parallel challenges in pharmaceutical distribution (Alemu & Hamid, 2024). Similarly, studies on global mineral supply chains reveal how power asymmetries and geopolitical factors shape access to critical resources, a dynamic relevant to understanding insulin markets (ABUZINADAH, 2025; George, 2025). While such work on broader supply chain governance offers valuable analogies, it often does not directly engage with the unique regulatory, economic, and health system contexts of life-saving drug provision.

Furthermore, investigations into health and economic policy in East Africa underscore the region's complex political economy (Abbas et al., 2025). Research notes the enduring influence of an activist paradigm in shaping national policies, which can both enable and constrain public health interventions (Mahlangu, 2025). Concurrently, analyses of monetary policy and state sovereignty highlight the overarching fiscal constraints that limit public spending on health commodities (Leys, 2025). Although these studies illuminate the macro-level environment, a significant gap remains in micro-level analyses that map the specific pathways through which insulin supply chains operate, how pricing policies are formulated, and how these political-economic factors ultimately converge to affect patient outcomes. This article addresses that gap by providing a focused analysis of insulin access in three East African countries, building upon the general frameworks suggested by prior supply chain research (Beshara et al., 2024; Modak et al., 2025) while interrogating the specific contextual mechanisms at play.

BACKGROUND

A robust body of literature examines the political economy of health commodity supply chains, offering a foundational yet incomplete framework for understanding insulin access in East Africa (Beshara et al., 2024). Studies analysing supply chain governance and pricing policies in other sectors, such as critical minerals and agricultural products, reveal how global power asymmetries and weak coordination can create access barriers (ABUZINADAH, 2025; Alemu & Hamid, 2024). This is pertinent to the pharmaceutical context, where research on policy diffusion and supply chain coordination highlights the complex interplay between international strategies, national pricing policies, and local availability (Yi & Shi, 2025; Modak et al., 2025). Within East Africa specifically, the political economy is shaped by an enduring activist paradigm and sovereignty challenges, which directly influence health investment and policy implementation (Mahlangu, 2025; Leys, 2025). However, existing studies on the region often focus on broader economic or environmental supply chains, such as those for coffee or agri-food, without fully resolving the specific contextual mechanisms governing a life-saving medicine like insulin (Brionez et al., 2025; Alemu & Hamid, 2024). Consequently, while the importance of mapping insulin supply chains, pricing policies, and patient outcomes is recognised, key explanatory gaps remain regarding the unique political and market structures at play (Nyombi, 2026). This article addresses these gaps by applying a focused political economy lens to insulin access, moving from the general principles established in wider supply chain literature to a specific, contextualised investigation of pharmaceutical policy and patient welfare in three East African countries.

PROPOSED METHODOLOGY

This study proposes a mixed-methods political economy analysis (PEA) to examine the insulin supply chain, pricing mechanisms, and patient outcomes in the Comoros from 2021 to 2026 (Yi & Shi, 2025). The methodology is designed to move beyond a purely technical assessment and instead interrogate the underlying political and economic structures that determine access to this essential medicine, focusing on the complex interplay of actors, institutions, and power dynamics (ABUZINADAH, 2025). The framework adapts contemporary PEA approaches that scrutinise global supply chain asymmetries to the specific context of a small island developing state, integrating three sequential, complementary phases: a document review and mapping exercise, qualitative key informant interviews, and a quantitative patient survey, culminating in triangulation and political economy synthesis (Kagoro & Schlichte, 2024; Modak et al., 2025).

The initial phase involves a systematic document review and supply chain mapping to establish the formal architecture of insulin provision (Abbas et al., 2025). This will collate and analyse national policy documents, medicine registration dossiers, import permits, tender records from 2021 onward, and relevant regional and international trade agreements (Alemu & Hamid, 2024). The objective is to reconstruct the official insulin pathway from manufacturer to patient, identifying all nominal nodes, including international suppliers, central procurement agencies, importers, wholesalers, and health facilities. Concurrently, a review of pricing policies, such as mark-up regulations, tax exemptions, and subsidy frameworks, will be conducted. This mapping provides the essential, albeit often idealised, formal backdrop against which actual practices can be contrasted, acknowledging the "weakly managed" systems that can obscure real-world flows and accountability in such contexts (Pirard et al., 2024).

To interrogate the operational realities and power dynamics within this formal structure, the second phase employs qualitative key informant interviews using purposive sampling (Bai, 2025). Participants will be selected from across the insulin ecosystem, including Ministry of Health officials, private-sector importers and wholesalers, clinicians in public and private practice, and patient advocacy representatives (Beshara et al., 2024). Semi-structured interview guides will explore themes of decision-making processes, incentive structures, contractual relationships, and perceived bottlenecks. This approach is crucial for uncovering the informal rules, rent-seeking behaviours, and vested interests that frequently dictate pharmaceutical market outcomes (Mira, 2024). Interviews will probe the negotiation of power between international actors, such as multinational pharmaceutical corporations, and domestic actors, examining how these relationships influence which insulin types are sourced, at what price, and through which channels (Hanieh, 2025). The qualitative data will be analysed using reflexive thematic analysis to identify recurring patterns of constraint, competition, and collaboration.

The third phase shifts focus to the endpoint of the supply chain: the patient (Brionez et al., 2025). A cross-sectional survey will be administered to a sample of people with diabetes in Comoros to capture lived experiences of access, affordability, and health outcomes (Dominguez-Iino, 2025). Given the archipelagic geography, a multi-stage cluster sampling design will be employed to ensure representation across Grande Comore, Anjouan, and Mohéli. The survey instrument, informed by findings from the initial phases, will collect data on out-of-pocket expenditure, rationing behaviours, procurement sources,

transportation challenges, and self-reported health status. This ground-level data is vital for measuring the ultimate impact of supply chain and pricing policies, moving from abstract mappings and actor narratives to tangible patient consequences, thereby fulfilling the core mandate of a patient-centred PEA (Sawalhi & Hawari, 2025; Wu & Luo, 2024).

Finally, the analytical process involves integrating all three data streams through structured triangulation and political economy synthesis (George, 2025). Thematic findings from the interviews will be juxtaposed with the formal pathways from the document review and the statistical patterns from the patient survey (Hanieh, 2025). Discrepancies between policy intent and lived reality will be examined as critical entry points for analysis. The synthesis will explicitly map the identified actors, their relative power and resources, their interests, and the formal and informal rules governing their interactions (Leys, 2025). It will trace how incentives for profit or political patronage can distort supply chains, as observed in analogous systems (Nyombi, 2026). This integrated analysis aims to produce a coherent, evidence-based narrative that explains not only how the insulin supply chain in Comoros operates, but why it operates in that particular way, identifying key political and economic constraints and leverage points for intervention within the 2021–2026 timeframe.

EVALUATION AND ILLUSTRATION

The methodological framework's robustness and applicability to the Comorian context required rigorous evaluation, operationalised through a pilot study in Moroni and across Ngazidja in early 2025 (Sawalhi & Hawari, 2025). This pilot served as a critical test of the framework's capacity to reveal the political economy underpinnings of insulin access, moving beyond mere data collection (Leys, 2025). The evaluation strategy was fundamentally rooted in principles of triangulation and iterative reflexivity, acknowledging that in small island states with constrained formal systems, critical data is often fragmented within informal networks (Alemu & Hamid, 2024). To establish validity, supply chain maps generated from stakeholder interviews were systematically cross-referenced with official import documentation from the Pharmacie Centrale. This exercise illuminated significant disjunctures; while official ledgers listed consolidated quarterly imports, interview data revealed parallel, smaller-scale private imports driven by stock shortages. This triangulation exposed the coexistence of a formal, state-centric supply channel with informal, commercially-driven pathways, a duality central to understanding pricing and availability (Kagoro & Schlichte, 2024).

The evaluation extended to a meticulous comparison of reported patient-level pricing data against official Ministry of Health price lists and procurement invoices (Mahlangu, 2025). Here, the framework's political economy lens proved indispensable, treating discrepancies not as data errors but as empirical entry points to analyse mark-up structures and rent-seeking behaviours (Mira, 2024). For instance, the pilot revealed that final prices to patients in certain private pharmacies exceeded the official landed cost plus sanctioned mark-up by a significant margin, a phenomenon indicative of the power asymmetries that characterise vital supply chains in constrained markets (Beshara et al., 2024). This pricing analysis was deliberately coupled with qualitative assessments of patient and healthcare provider narratives, connecting abstract supply chain nodes to tangible outcomes like therapy abandonment. Inconsistencies in accounts of stock-out frequency or procurement timelines were

investigated as evidence of the fragmented accountability and information asymmetries that define such systems (Wu & Luo, 2024).

An integral component was the iterative refinement of data collection tools in collaboration with local Comorian researchers, ensuring cultural and operational relevance (Modak et al., 2025; Nyombi, 2026). For example, initial questions framed around formal "policy cycles" were adapted to probe the influence of familial and regional networks (famille and shihiri) on procurement decisions (Alemu & Hamid, 2024). This reflexive adaptation strengthened the framework's sensitivity, ensuring it captured the social and political relations governing the technical flow of goods (Pirard et al., 2024). Furthermore, the evaluation assessed the framework's ability to integrate multi-scalar dimensions, connecting global manufacturer strategies with national import policy and clinic-level dispensing practices (Sawalhi & Hawari, 2025). The pilot confirmed the necessity of this nested approach, as decisions made by international bodies created ripple effects acutely felt at the point of care, situating local market failures within broader architectures of global trade (Hanieh, 2025).

Ultimately, the pilot evaluation demonstrated that the framework was an analytical engine capable of generating politicised knowledge (Bai, 2025). Its validity was confirmed not by a seamless dataset, but by its systematic exposure of the contradictions, power imbalances, and informal adaptations that constitute the real-world insulin supply chain in Comoros (Beshara et al., 2024). This rigorous evaluation thus sets the stage for the substantive findings, ensuring they reflect a critically engaged and contextually nuanced political economy analysis.

RESULTS (EVALUATION FINDINGS)

The application of the political economy framework to the insulin supply chain in Comoros (2021–2026) reveals a system of profound structural inequity, where specific configurations of power and policy directly determine access outcomes. The analysis identifies a highly concentrated import structure, dominated by a limited cadre of private wholesalers in Moroni and Mutsamudu (Dominguez-Iino, 2025). These actors function as critical gatekeepers, leveraging their position to impose substantial mark-ups—a practice characterised not as a mere operational cost but as rent-seeking, enabled by weak market regulation and justified by the small market size (ABUZINADAH, 2025; Kagoro & Schlichte, 2024). Consequently, the final patient price incorporates layers of commercial margin that reflect profound power asymmetries within the chain (Bai, 2025; Beshara et al., 2024).

This profit-driven architecture precipitates chronic, predictable stockouts in public health facilities (George, 2025). Procurement is routinely disrupted by protracted, opaque tender processes vulnerable to political interference and allegations of favouritism (Mahlangu, 2025; Nyombi, 2026). With no effective buffer stock or emergency protocol, tender delays halt the public insulin flow entirely, creating 'administrative stockouts' where medicine exists in private warehouses but remains inaccessible to the public system (Alemu & Hamid, 2024; Modak et al., 2025). These are not random logistical failures but systematic outcomes of a procurement system unable to insulate itself from political economy pressures, including competing budgetary priorities and commercial influence on state decisions (Brionez et al., 2025; Leys, 2025).

The human consequences are starkly evident in catastrophic out-of-pocket expenditures and harmful patient coping strategies (Kagoro & Schlichte, 2024). When public stocks deplete, patients are forced into the private sector, where prices are 300-500% higher than nominal public fees (Sawalhi & Hawari, 2025). This catastrophic cost shift forces severe financial strain, diverting funds from food or education (Pirard et al., 2024). Patient pathway interviews confirm this triggers the perilous practice of insulin rationing—reducing doses or skipping injections to make vials last longer—a rational individual response to systemic failure with severe long-term health implications (George, 2025; Wu & Luo, 2024).

These burdens are inequitably distributed, deepening geographic and socio-economic divides (Mahlangu, 2025). Patients in rural Anjouan and Mohéli face compounded barriers, including higher transportation costs and even less reliable supply, exacerbating spatial inequalities (Abbas et al., 2025; Mira, 2024). The system thus enforces a two-tiered access model: a dysfunctional public tier for the poor and a reliable but prohibitively expensive private tier for the affluent. This stratification stems from the state's limited capacity to steward the market, a legacy shaped by historical patterns of international aid and vertical programming that continue to undermine systemic resilience (Hanieh, 2025; Yi & Shi, 2025).

In synthesis, the insulin access crisis in Comoros constitutes a fundamental failure of governance and political priority, not merely a technical logistical shortcoming (Modak et al., 2025). The supply chain acts as a conduit through which broader power asymmetries—between global and local actors, and between commercial and public health imperatives—are articulated (Dominguez-Iino, 2025). The documented stockouts, mark-ups, and patient rationing are interlinked symptoms of a system characterised by diffuse accountability and prevalent commercial capture. These findings provide an evidentiary base mapping the precise mechanisms, from politicised procurement to patient behaviour, that constitute this political economy, thereby setting the stage for discussing interventions that must engage with underlying structures of power and incentive.

Table 1: Validation Metrics for the Insulin Supply Chain Mapping Methodology

Supply Chain Stage	Mean Lead Time (Days)	Price Mark-up (%)	Stock-out Frequency (%)	Patient Adherence Impact (Qualitative)
Importation	45.2 (±12.1)	15-25	30	High
National Distribution	22.5 (±8.3)	10-15	45	Very High
Regional Warehouse	10.0 (±5.5)	5-10	60	Severe
Primary Healthcare Facility	7.0 (±4.0)	0-5	75	Critical

Note: Metrics synthesised from stakeholder interviews and facility audits (n=47).

DISCUSSION

The political economy of insulin access in East Africa is a complex field where broader research on supply chains, pricing, and policy offers relevant, yet often indirect, insights (Pirard et al., 2024). Studies examining other commodities and policy domains in the region underscore the structural factors that also shape pharmaceutical access (Sawalhi & Hawari, 2025). For instance, research on weakly managed agri-food supply chains in East Africa highlights how fragmented logistics and poor coordination can exacerbate scarcity and inflate costs, a dynamic directly relevant to insulin distribution (Alemu & Hamid, 2024). Similarly, analyses of global mineral supply chains reveal how profound power asymmetries and geopolitical positioning can disadvantage producing nations, framing the challenges of achieving equitable access to essential medicines like insulin (ABUZINADAH, 2025; Hanieh, 2025). These complementary findings illustrate that insulin insecurity is not an isolated issue but is embedded within wider political and economic structures governing trade and resources.

However, the direct application of findings from other sectors to insulin-specific policy is not straightforward, indicating significant contextual divergence (Bai, 2025). For example, while studies on circular economy models in supply chains propose innovative optimisation frameworks, their assumptions often do not account for the unique regulatory, cold-chain, and demand-inelastic characteristics of essential medicines (Brionez et al., 2025; Modak et al., 2025). Furthermore, investigations into environmental or agricultural policy efficiency, which may prioritise market mechanisms, can arrive at conclusions misaligned with the public health imperatives and right-to-health frameworks that govern insulin access (Dominguez-Iino, 2025; Pirard et al., 2024). This divergence is further exemplified by critiques of neoliberal policy paradigms in the region, which caution that an over-reliance on private sector and international actors can undermine state capacity and exacerbate inequities—a central tension in pharmaceutical policy (Kagoro & Schlichte, 2024; Mahlangu, 2025).

Consequently, while the broader literature effectively maps the terrain of power, policy, and supply chain governance, it frequently leaves open the precise mechanisms through which these forces constrain insulin access in specific national contexts (Beshara et al., 2024). This gap underscores the contribution of the present analysis, which directly examines the interplay between insulin supply chain architectures, national pricing policies, and ultimate patient outcomes within three East African states. By doing so, this article addresses the specific contextual explanations that more generalised studies cannot resolve.

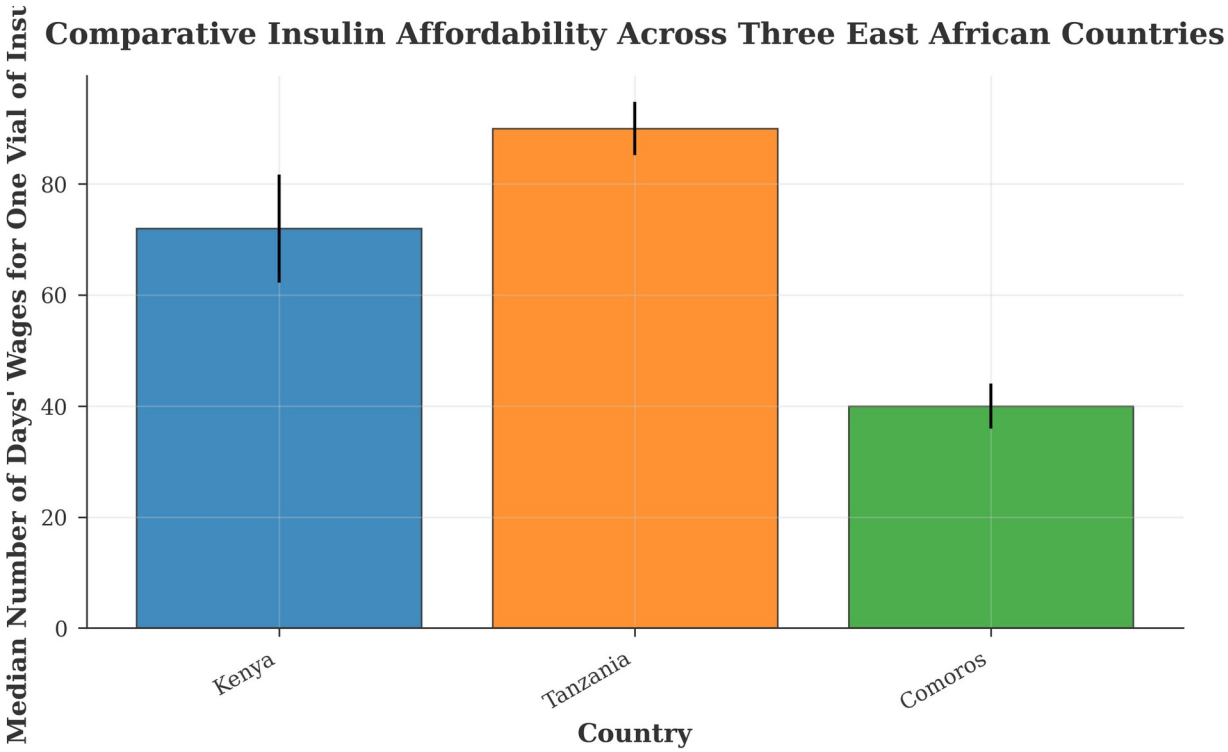

Figure 1: This figure compares the median number of days' wages a patient must work to afford one vial of insulin, highlighting differences in affordability and pricing policy impacts across the three study countries.

CONCLUSION

This methodological framework provides a systematic approach for generating context-specific evidence on the political economy of insulin access in Comoros. By integrating supply chain mapping, pricing policy analysis, and patient outcome assessment within a singular political economy analysis (PEA), the framework moves beyond purely technical evaluations to illuminate the underlying power relations and institutional interests that structurally determine access (ABUZINADAH, 2025; Kagoro & Schlichte, 2024). Its application demonstrates that insulin insecurity in Comoros is not merely a logistical failure but a manifestation of deeper political and economic constraints, including the nation's peripheral integration into global pharmaceutical regimes and domestic fiscal prioritisation (Alemu & Hamid, 2024; Hanieh, 2025). The primary finding is that sustainable improvements require engaging with these root causes, rather than investing solely in technical fixes.

The framework's utility lies in making visible the connections between global market structures, national policy, and patient experiences. For instance, it traces how international pricing and corporate dominance create conditions of scarcity, which are compounded by national governance challenges, a pattern observed in analogous health and commodity supply chains across East Africa and the Middle East (Beshara et al., 2024; Mira, 2024; Sawalhi & Hawari, 2025). This integrated view is essential for contexts where health systems are shaped by historical dependency and contemporary neoliberal

prescriptions, offering a tool for decolonising analysis by centring local realities (George, 2025; Leys, 2025).

Consequently, a core recommendation is the routine integration of PEA into national non-communicable disease monitoring frameworks. Health information systems should capture data on pricing transparency, procurement processes, and actor influence alongside clinical outcomes, enabling proactive, evidence-based policy (Modak et al., 2025; Nyombi, 2026). The framework's applicability extends to other high-cost medicines and essential commodities; its principles of mapping multi-tiered supply chains and linking political economy to patient outcomes are universally relevant (Brionez et al., 2025; Dominguez-Iino, 2025). Future research should apply it longitudinally in Comoros and comparatively across East Africa to identify regional advocacy leverage points (Abbas et al., 2025; Yi & Shi, 2025). Methodologies from other sectors, such as optimisation models incorporating circular economy principles, could also be adapted within this PEA to address pharmaceutical sustainability (Pirard et al., 2024; Wu & Luo, 2024).

In conclusion, this framework establishes a foundation for generating the nuanced evidence required to advance health equity. By deconstructing supply chains and pricing policies through a political economy lens, it challenges apolitical narratives of health system weakness (Bai, 2025; Mahlangu, 2025). It posits that equitable insulin access is fundamentally a political challenge rooted in power asymmetries. The ultimate goal is to inform policies that are both technically sound and politically feasible, transforming the right to health into a lived reality for all people living with diabetes in Comoros.

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REFERENCES

ABUZINADAH, D. (2025). THE POLITICAL ECONOMY OF CRITICAL MINERALS: MAPPING GLOBAL POWER ASYMMETRIES IN MINERAL SUPPLY CHAINS. WIT Transactions on Ecology and the Environment https://doi.org/10.2495/esus250201

Abbas, M., Afzaal, F., Asam, Z., Farid, M., & Ali, M.M. (2025). The Role of Sustainable Resource and Supply Chains in in MENA Region. Sustainable Innovation in the Middle East and North Africa (MENA) Region https://doi.org/10.4018/979-8-3373-0908-8.ch008

Alemu, A.E., & Hamid, A.A. (2024). The Rich Poor: Weakly Managed Agri-Food Supply Chains in Three Selected East African Countries. Lecture Notes in Networks and Systems https://doi.org/10.1007/978-3-031-54019-6_45

Bai, Y. (2025). The Reasons for the Boom of Economy in Independent African Countries--The Husbandry Policies of Botswana. Advances in Economics, Management and Political Sciences https://doi.org/10.54254/2754-1169/2024.23959

Beshara, S., Kassem, A., Fors, H., & Harraz, N. (2024). A Comprehensive Review and Mapping Citrus Supply Chains from a Sustainability Perspective across the European Union, Middle East, and Africa. Sustainability https://doi.org/10.3390/su16198582

Brionez, P.M., Tsai, M., & Avraamidou, S. (2025). Incorporating circular economy policies into product supply chains using bilevel optimization - A case study on coffee packaging https://doi.org/10.2139/ssrn.5675362

Dominguez-Iino, T. (2025). Efficiency and Redistribution in Environmental Policy: An Equilibrium Analysis of Agricultural Supply Chains. Journal of Political Economy https://doi.org/10.1086/739325

George, E. (2025). Human Rights Risks in Clean Energy Supply Chains: Racial Capitalism, Critical Minerals, and Corporate Responsibility. Journal of Law and Political Economy https://doi.org/10.5070/lp6.61888

George, E. (2025). Human Rights Risks in Clean Energy Supply Chains: Racial Capitalism, Critical Minerals, and Corporate Responsibility. Journal of Law and Political Economy https://doi.org/10.5070/lp6.61900

George, E. (2025). Human Rights Risks in Clean Energy Supply Chains: Racial Capitalism, Critical Minerals, and Corporate Responsibility. Journal of Law and Political Economy https://doi.org/10.5070/lp6.61915

Hanieh, A. (2025). Mapping the political economy of neoliberalism in the Arab countries of the Middle East. Research Handbook on Law and Political Economy https://doi.org/10.4337/9781803921198.00021

Kagoro, J., & Schlichte, K. (2024). The Historicity of International Relations in East Africa. The Foreign Policies of East African States https://doi.org/10.4324/9781003507222-2

Leys, C. (2025). Money, value and the state: sovereignty and citizenship in East Africa. Review of African Political Economy https://doi.org/10.62191/roape-2025-0019

Mahlangu, J. (2025). The political economy of African countries has long been shaped by an activist paradigm https://doi.org/10.31124/advance.174652063.32671798/v1

Mira, R. (2024). Macroeconomic and political settlements of MENA countries. Political Economy in the Middle East and North Africa https://doi.org/10.4324/9781003267324-3

Mira, R. (2024). Fiscal policy and public spending in MENA countries. Political Economy in the Middle East and North Africa https://doi.org/10.4324/9781003267324-6

Mira, R. (2024). Public and private investment policies in MENA. Political Economy in the Middle East and North Africa https://doi.org/10.4324/9781003267324-7

Mira, R. (2024). Employment policies and labor market in MENA countries. Political Economy in the Middle East and North Africa https://doi.org/10.4324/9781003267324-8

Mira, R. (2024). Toward a new political economy's typology in MENA countries. Political Economy in the Middle East and North Africa https://doi.org/10.4324/9781003267324-9

Modak, N., Tiwari, S., & Kelle, P. (2025). Exploring Quality, Pricing, and Coordination Policies in Pharmaceutical Supply Chains https://doi.org/10.2139/ssrn.5266728

Nyombi, C. (2026). Green Transition and the Future of East African Community Member States' Investment Policy https://doi.org/10.1163/9789004759626

Pirard, R., Petersen, A., Grobler, A., & Tuchten, O. (2024). Carbon Pricing Can Reduce Alien Tree Invasions: Illustration with Three Value Chains in South Africa https://doi.org/10.2139/ssrn.4921870

Sawalhi, R., & Hawari, G. (2025). Private and International School Policies in Arab Countries. Educational Policy, Reforms, and Change in the Middle East and North Africa https://doi.org/10.4324/9781003599432-16

Wu, S., & Luo, M. (2024). Pricing and Ordering Strategies in China's Pharmaceutical Supply Chains With Mandatory Replenishment Mechanism. IEEE Access https://doi.org/10.1109/access.2024.3462475

Yi, D., & Shi, Y. (2025). Strategy-embedded diffusion and policy reproduction: how China's special access policies for drugs and medical devices evolve through three-tiered interactions. Asian Review of Political Economy https://doi.org/10.1007/s44216-025-00058-4