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Reciprocity beyond Exchange: Reimagining Governance through the BARTER Principles with Select Cases from the Philippines, Indonesia, Singapore, Taiwan, and Vietnam

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ABSTRACT

This paper reimagines governance through the principle of reciprocity, drawing from the ancient practice of barter to address the challenges of a brittle, anxious, nonlinear, and incomprehensible (BANI) world. Whereas conventional governance relies on hierarchy and compliance, barter's heuristics, such as direct negotiation, resource pooling, and implicit trust, highlight how cooperation can be sustained under uncertainty. Building on these insights, the study advances the BARTER framework (Bridging Actors of Responsive, Trust-based, Empowering, and Resilient governance) as a mid-range theory that links microlevel reciprocity with polycentric governance design. Comparative cases from Southeast and East Asia, specifically the participatory budgeting in the Philippines, Indonesia's musrenbang, Vietnam's cooperative models, Singapore's Smart Nation Reforms, bayanihan mutual aid, and Taiwan's digital co-creation, illustrate how reciprocity can be institutionalized into deliberation, trust-building, and adaptive mechanisms. The analysis suggests that BARTER governance complements rather than replaces formal institutions by embedding trust, enabling shared authority, and enhancing adaptability. The findings provide both conceptual clarity for scholars and practical pathways for policymakers to design resilient, trust-based governance in volatile contexts.

Introduction

Contemporary governance is increasingly confronted with conditions that defy traditional models of policy design and public administration. The BANI framework (Cascio, 2020) captures fragility, anxiety, nonlinearity, and incomprehensibility as conditions undermining conventional governance. Brittleness denotes the fragility of systems that appear robust but can collapse under stress; anxiety reflects pervasive uncertainty that undermines decision-making and fuels public discontent; nonlinearity signals that small triggers can yield disproportionately large and unpredictable consequences; incomprehensibility underscores the challenges of making sense of rapid, interconnected developments that outpace traditional governance responses.

Rigid hierarchies falter under transboundary shocks such as climate change and pandemics (Ansell & Torfing, 2021). In 2022, the Organisation for Economic Co-operation and Development (OECD) reported a declining institutional trust across democracies and emerging economies, exacerbated by scandals and uneven service delivery. Trust deficit underscores the need for governance paradigms that emphasize reciprocity, transparency, and collaboration.

Efforts to redesign governance architectures for complexity and uncertainty draw on several intellectual streams, e.g., economic anthropology (barter and exchange), collaborative governance and

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commons scholarship, and recent analyses of systemic fragility and resilience, including but not limited to BANI. Each contributes complementary insights: (1) barter supplies micro-level heuristics of reciprocity and adaptive negotiation; (2) collaborative governance and commons theory provide institutional design principles for multifactor cooperation; and (3) resilience and fragility literatures diagnose why relational and networked governance is necessary for today's socio-political systems.

In such an environment, governments, businesses, and civil society actors must navigate shifting landscapes where established policy tools often prove inadequate. Rigid bureaucratic hierarchies that are designed for predictability and stability often struggle to address the accelerated pace of change, the interdependence of global crises, and the erosion of public trust (Ansell & Torfing, 2021). The limits of linear, top-down governance are particularly visible in responses to transboundary challenges such as pandemics, climate change, and economic disruptions, where cooperation across sectors and levels of governance is essential yet often elusive.

Moreover, recent work in governance network and open government literature has stressed the importance of **governance inclusiveness** in dealing with complexity. For example, Reggi et al. (2022) show that open government data initiatives enhance inclusiveness in governance networks only when boundary-spanning actors can both access and influence decisions; simply opening up data or formal channels is insufficient without effective power sharing. Similarly, research on systemic risk in disaster management indicates that traditional risk-management frameworks are overwhelmed by interlinked, cascading crises, demanding more resilient, multi-scalar governance capacities (Mitra & Shaw, 2023).

A promising lens for reimagining governance in a BANI context can be found in the ancient practice of barter. Before formal monetary systems, barter was the primary mode of exchange in many societies; it relied on the direct trade of goods and services based on mutual need, trust, and negotiated value (Humphrey, 1985). These exchanges were not merely transactional; they were embedded in social relationships, reinforced by community norms and reciprocal obligations. One of the major governance deficits in the BANI world is trust. Public confidence in political institutions is under strain globally. OECD (2024) findings emphasize that low trust is rooted in perceptions of unresponsiveness, lack of integrity, and failure to deliver equitable outcome. Citizens and organizations increasingly seek alternative governance arrangements that are more participatory, adaptive, and collaborative. This context calls for rethinking governance models. That is, shifting from hierarchical control toward a more relational, trust-based, cross-sectoral approaches that emphasize mutual benefit and shared authority.

The barter system's effectiveness rested on direct negotiation, resource pooling, and implicit social contracts as the core principles. It fostered mutual accountability, and was inherently adaptive without rigid intermediaries. These characteristics align with many aspirations of contemporary collaborative governance: building trust, leveraging diverse capacities, and adapting to uncertainty. Indeed, research on community resilience suggests that adaptive and transformative capacities (not just absorptive ones) are essential when disruptions exceed what current systems can manage (Nieuwborg et al., 2023).

In modern governance, "barter" can be reframed as the *direct exchange of expertise*, resources, and influence among diverse actors—governmental, private, and civil society, without the dominance of a single hierarchical authority. This perspective shifts attention from power consolidation to power sharing, from rigid structures to flexible partnerships, and from isolated decision-making to collective action.

This paper advances three main objectives. *First*, it situates governance challenges within the BANI framework, clarifying why traditional governance structures falter under current conditions and linking to recent literatures on trust, systemic risk, and resilience. *Second*, it draws historical and theoretical parallels

between ancient barter systems and modern collaborative governance, demonstrating how these principles can be adapted for present realities. *Third*, it conceptualizes and operationalizes the **BARTER Governance Framework**, using selected Asian cases—the participatory budgeting in the Philippines, Indonesia's *musrenbang* participatory planning, and cross-sectoral environmental governance in Vietnam, as empirical anchors for theory building.

By integrating historical insights with contemporary governance needs, this approach seeks to move beyond transactional, compliance-driven models toward a more agile, inclusive, and trust-based governance paradigm. The BARTER framework does not aim to replace formal institutions but rather to complement and enrich them, enabling more collaborative, adaptive responses to complex societal challenges.

In doing so, the paper contributes to governance theory by linking ancient socio-economic practices to contemporary governance innovation, offering both conceptual clarity and practical guidance for policymakers, practitioners, and scholars. It also offers a regionally grounded perspective based in Southeast Asia, where hybrid governance models have emerged in response to diverse political, economic, and cultural conditions.

Reimagining governance through a "barter lens" challenges conventional notions of authority and value in public decision-making. It advocates opening the public sphere to reciprocity, co-creation, and resilience, considering them as defining features of governance systems. These qualities are urgently needed in a world that is not only volatile but also profoundly interconnected. The framework advanced in this study aims to move beyond traditional hierarchical structures, advocating for a more agile, inclusive, and adaptive approach to governance that empowers all participants and builds collective resilience amid governance complexities.

Theoretical Foundations

Across the three literature strands, a consistent logic points out that micro-level reciprocity and reputation (or barter) can be institutionalized through collaborative governance and commons design to produce relational governance systems capable of responding to BANI conditions. The academic gap resides not in conceptual plausibility, but in the translation and institutionalization. That is, how to craft legal, administrative, and technological instruments that convert informal reciprocity into durable, scalable governance mechanisms without sacrificing inclusivity or enabling capture. Addressing this requires mixed-method empirical programs, such as comparative case studies, pilot interventions, and evaluative metrics drawing inspiration from interdisciplinary theory building that connects anthropological micro-foundations to public administration's institutional design. The BARTER Governance framework aims to fit in filling the gaps by specifying institutional primitives, including direct negotiation mechanisms, pooled resource instruments, reputational enforcement tools, deliberative forums, and adaptive rules that operationalize reciprocity within the public governance architectures.

The Barter System as a Social-Institutional Practice

Anthropological and economic histories complicate the simplistic view of barter as a primitive, transitional stage *en route* to monetary exchange. Instead, scholars show that barter frequently operated as an embedded social institution where exchanges were governed by reputation, repeated interaction, and normative expectations rather than by abstract market prices or formal contracts (Humphrey, 1985; Mauss, 1925; Graeber, 2011). Recent studies reinforce these micro-foundations. For example, relational

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governance mechanisms in small and medium-sized enterprises (SMEs) in Nigeria during COVID-19 illustrate how reputation, reciprocity, and informal enforcement enabled dynamic capability in crisis despite institutional voids, showing barter-like dynamics of trust and reciprocal obligations among actors under stress (Ashiru et al., 2022). These findings suggest that even in contemporary, complex systems, barter-type micro-foundations (*i.e.*, negotiation, reciprocity, reputation) remain operative and may be leveraged.

Two functional attributes of barter are especially pertinent for governance design. *First*, **direct negotiation**, where actors meet, assess mutual needs, and agree on terms, shortens feedback loops and aligns incentives in situations where centralized signaling is slow or opaque. *Second*, **reputation and reciprocity**, where repeated exchanges create informal enforcement regimes, substituting for costly formal enforcement and sustaining cooperation in environments with limited legal capacity. Also, adaptation is key. Barter's flexible valuation mechanisms allow actors to renegotiate terms in response to changing circumstances, a feature highly valuable under volatility, anxiety, nonlinearity, and incomprehensibility.

Collaborative Governance, Commons, and Reciprocity

The literature on collaborative governance and common-pool resources offers a robust, policy-oriented toolkit for operationalizing barter's micro-mechanisms within formal institutions. Recent contributions advance these ideas in light of environmental crisis, urban commons, and governance innovations. For example, adaptive governance practices in the Global South environmental contexts highlight multi-scalar governance, iterative learning, participation of marginalized groups, and hybrid institutional arrangements combining formal and informal rules as emergent attributes (Akther & Evans, 2024). In coming together to plan for disaster risk management, the study of Flores (2022) on cross-sector collaboration revealed that sectors will more likely be willing to collaborate if they see other collaborators as trustworthy. Relatively, the study further revealed that previous collaboration experiences is one significant factor in trust-building and the perceived trustworthiness of the would be co-collaborators.

Studies of "urban informal settlements" in the South and Southeast Asian contexts show that communities engage in communing. Marginalized urban residents negotiate access, share responsibility, and distribute benefits and burdens through social relationships, without relying on formal governance alone (Waliuzzaman & Alam, 2022).

Also, experiments in governing risky commons show that institutional incentives combining rewards and sanctions (locally adapted) significantly increase cooperative behavior, reinforcing how design choices matter for embedding reciprocity and rule enforcement in commons governance (Sun et al., 2021).

From these literatures several design levers: enabling rule-making by those affected (collective choice), boundary definitions, monitoring and graduated sanctions, facilitation or mediation, nested and polycentric forms so that local experimentation can feed into broader institutional frameworks.

BANI Conditions and the Need for Relational Governance

The BANI heuristic provides a contemporary diagnostic lens for why traditional hierarchical forms often fail. Governance under BANI requires not only technical capacity but *relational capacity*, networks of trust and reciprocal arrangements that enable rapid, legitimate coordination across actors and levels.

Recent empirical governance scholarship supports this pivot. In studies on adaptive governance, for example, research in environmental crisis contexts shows that when governance systems allow for **learning**

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cycles, adaptive co-management, and inclusion of local/indigenous knowledge, are better able to respond to shocks and complicating uncertainty (Akther & Evans, 2024).

Moreover, relational governance in innovation ecosystems (e.g., firms, research institutes, government actors) shows how trust, reciprocity, and benefit distribution mechanisms matter for sustaining cooperation when environments are dynamic and uncertain (Liu et al., 2022). However, the literature also underscores perennial risks: scaling trust from small to large scale; elite capture of participatory mechanisms; legal and political cycles that undo gains; asymmetric capacities (data, resources, voice); and problems when informal enforcement mechanisms are insufficient in contexts with weak sanctioning capacity.

BARTER Governance Principles in detail

This section discusses each BARTER principle, connects them to barter heuristics and collaborative governance theory, and identifies Asian empirical practices that illustrate each principle.

Power Balance and Shared Authority. Barter presupposes negotiation between relatively equal parties over exchange terms; while asymmetries exist, successful barter regimes rely on credible commitments and mechanisms that prevent expropriation of value. Translating this into governance, power balance and shared authority imply formal and informal arrangements that decentralize decision-making, create shared leadership roles, and institutionalize co-authority among state and non-state actors. The normative claim is that when governance problems are complex and heterogeneous, centralization risks brittle failure; distributing authority among actors with contextual knowledge improves responsiveness and legitimacy.

Ansell and Gash's (2007) collaborative governance model posits power-sharing as essential for sustained engagement: stakeholders must see that their input matters and can influence outcomes. Ostrom's (1990) design principles for robust commons governance also emphasize clearly defined boundaries and collective-choice arrangements enabling those affected by rules to participate in modifying them–a practical template for shared authority in BARTER arrangements.

In practice, the *Philippines' participatory budgeting (in Naga City)* is a canonical model of participatory governance in the Philippines; it institutionalized citizen involvement in budget identification and prioritization, thus redistributing mundane budget decision power to local communities. Documentation and analyses indicate Naga's participatory budgeting practices produced both improved public trust and more contextually appropriate spending. These practices reflect power-sharing at the municipal level and provide an empirical template of how bureaucracies can cede routine authority to communities (Culp, 2020). *The Musrenbang process of Indonesia* shows how statutory design can embed shared authority while maintaining connection to higher-level planning. *Musyawarah Perencanaan Pembangunan* is a legally mandated, multilevel participatory planning process through which communities submit priorities to subnational and national planning systems. Recent scholarship on digitized *e-Musrenbang* shows how the legal structure formalizes shared authority where citizens participate directly in agenda-setting and resource allocation decisions (Anindito, 2021).

Implication for BARTER theory-building: Power balance requires institutional design enabling community representation, dispute-resolution mechanisms, and accountability checks. BARTER governance therefore needs formal rules guaranteeing voice (e.g., guaranteed seats, co-signatory requirements on plans, or devolved budget shares) as well as informal norms that limit capture.

Cross-Boundary Participation (across governance sectors). Barter functions across social boundaries because it is pragmatic. Actors trade what they have for what they need, crossing both occupational and

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sectoral boundaries. For governance, *cross-boundary participation* means the deliberate design of decision arenas that bring public agencies, private firms, civil society, community organizations, and relevant international actors together. The design is not set to a mere consultation but a structured co-creation where all actors bring complementary resources (finances, knowledge, legitimacy, delivery capacity) to the discussion and decision arena.

Collaborative governance theory emphasizes sustained interactions among diverse stakeholders and the importance of brokering mechanisms that translate heterogeneous interests into shared problem definitions. Network governance and polycentricity literatures similarly show that multiple authorities operating at different scales can coordinate to produce resilient outcomes. Ostrom's analysis of polycentric governance supports the idea that multiple overlapping authorities can lead to better outcomes in complex problem spaces (Ansell and Gash, 2007).

Building on these theoretical perspectives, the Philippines, Vietnam, and Singapore experiences demonstrate how collaborative and polycentric governance are institutionalized in practice through diverse arrangements that mobilize actors across state, market, and civil society domains.

The Philippines has instituted a National Disaster Risk Reduction and Management Council (NDRRMC), a multi-agency platform that coordinates governmental and non-governmental actors in disaster response and risk reduction, through the Republic Act 10121 or the Philippine Disaster Risk Reduction and Management Act of 2010. The council's structure institutionalizes cross-boundary coordination across national agencies, local governments, military actors, and humanitarian and multi-sectoral organizations. The 2020–2030 national plan and operational guidelines highlight modalities for coordinated action and joint resource mobilization. Studies of the Philippines' disaster governance describe how multi-stakeholder platforms improve coordination but also face challenges in trust and capacity (NDRRMC, 2020).

The cooperative cases in Bac Lieu (Artemia Vinh Chau Cooperative) and Hau Giang (OCOP Organic Fruit Cooperative) show how smallholder farmers, state extension agencies, and private/market-driven incentives converge across traditional sectoral boundaries to coordinate production, marketing, and quality assurance. For example, the OCOP Bio Fruit Cooperative in Hau Giang works with local authorities and the Farmers' Association, signs contracts with farmers to purchase fruit meeting export standards and provides technical guidance and packaging (Vietnam.vn, 2024). In Vinh Chau, Artemia eggs from cooperatives are noted for high quality, and training/extension is involved to improve technical efficiency (Vietnamagriculture, 2024). These foster mutual accountabilities. Cooperatives mediate local trust relations, governments certify and train, and firms provide market incentives. The arrangements illustrate horizontal participation across sectors rather than top-down state delivery, generating resilience by embedding reciprocity and shared responsibility in livelihood systems. The 2023 Vietnam Cooperative Law (International Labour Organization, 2023) strengthens this by codifying cooperative autonomy and enabling them to formally partner with non-state actors, reducing the fragility of purely informal arrangements.

In contrast, Singapore's Smart Nation reforms demonstrate vertical integration of state, market, and civil society participation through institutionalized frameworks. The Smart Nation and Digital Government Group (SNDGG), the 2018 Digital Government Blueprint, and the statutory Public Sector (Governance) Act create the legal scaffolding for government agencies (state), technology firms (market), and citizen groups (civil society) to jointly design and implement digital platforms. Tools like the API Exchange (APEX) allow secure cross-agency and cross-sectoral data sharing, while citizen co-creation programs ensure that end-users actively shape services (World Bank, 2022; Detros & Myra, 2024). Unlike Vietnam, where

participation is anchored in cooperative solidarity and resource pooling, Singapore relies on **formal, legally codified intermediaries** that orchestrate participation across governance sectors, ensuring both scalability and system trustworthiness.

These cases affirm the theoretical claim that cross-sectoral and multi-level coordination can enhance resilience, while also underscoring persistent challenges of trust, capacity, and institutional design that shape collaborative outcomes.

Implication for BARTER theory-building: Cross-boundary participation in a BARTER model requires institutional brokers (trusted conveners), interoperable information systems, formal memorandum of understanding (MOU) that clarify resource contributions and liabilities, and dispute-resolution procedures that prevent deadlock when interests diverge. Durable governance under BANI conditions emerges when boundaries between sectors are made permeable through either trust-based reciprocity or institutionalized data-sharing.

Trust-based Participation. Trust is central to barter. Parties must reliably expect that reciprocal obligations will be met. Trust reduces transaction costs, speeds negotiation, and enables flexible deals. For governance, *trust-based participation* centers relational capital, that includes sustained social ties, credible commitments from leaders, transparent norms that significantly ease the cooperative problem-solving. Trust substitutes for heavy enforcement apparatuses and enables adaptive bargains of the sort BANI conditions require.

The social capital theory of Putnam (1995) highlights how norms of reciprocity and networks of civic engagement enable collective action. Ostrom (1990) likewise identify graduated sanctions, monitoring, and trust as central to sustaining cooperation. Collaborative governance scholarship similarly emphasizes trust as both an input and outcome of stakeholder engagement. Empirically, in the Philippines, community-based systems illustrate how indigenous institutions sustain cooperation across decades of shocks via trust, collective governance, and reciprocity (Yabes & Goldstein 2015). In Thailand, studies of community forest management show that local trust, communication, and participation underpin durable ecosystem stewardship (Salam, Noguchi & Pothitan, 2006).

The indigenous Filipino ethos of *bayanihan (community mutual aid and collective action)* has been extensively documented in disaster contexts, where neighborhood and kin networks mobilize resources, volunteers, and informal coordination mechanisms. Scholarship on post-disaster recovery repeatedly identifies *bayanihan* networks as central to short-term survival and medium-term resilience (Barrameda & Barrameda, 2011; Su & Thayaalan, 2024). On the other hand, *Thai village health volunteers* and other community-level intermediaries have built durable trust relationships between state health systems and communities, enabling public health campaigns and crisis responses to achieve higher uptake. These volunteers exemplify trusted intermediaries that translate public programs into local action. In Japan training local residents to assist in evacuation shelters, increasing awareness, sense of responsibility, capability for mutual assistance. That is, trust/reciprocity both reinforced by the training and instrumental in enabling local community responses (Takeda & Tada, 2014). Trust and reciprocity, in these cases, function as both resources and outcomes of collective action, reinforcing theoretical arguments while showing how cultural variation and institutional embedding shape the durability of social capital.

Implications for BARTER theory-building: BARTER governance must treat trust as an asset to systematically be invested with shared norms, low-stakes cooperative exercises, transparent information flows, and small initial commitments that can scale up to demonstrate credibility, in what the behavioral literature calls "trust-building sequences".

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Deliberative Decision-Making and Collective Action. Barter exchanges often involve on-the-spot bargaining and explicit articulation of needs and offers; successful exchanges sometimes require dialogic processes that converge on mutually acceptable terms. Scaled to governance, deliberative decision-making combines inclusive dialogue, structured negotiation, and binding mechanisms to translate consensus into action. Deliberation is not deliberate slowness. Properly designed deliberative forums can shorten conflict cycles by producing legitimate and widely accepted decisions.

The deliberative democracy and collaborative governance literatures show that inclusive discussion enhances perceived legitimacy, produces better-quality decisions by incorporating local knowledge, and reduces opposition after decisions are made (Ansell & Gash, 2008). Hence, it is argued that face-to-face dialogue, maintained over time with skilled facilitation, creates shared understanding and commitment. Moreover, locally crafted rules can reinforce the synergy between deliberation and durable agreements.

The value of deliberation in enhancing legitimacy and problem solving find expression in Asia, where deliberative forums in the Philippines, South Korea, and Malaysia institutionalize inclusive dialogue in decision-making.

The multistakeholder peace and development councils in conflict-affected Mindanao (Philippines) incorporate local civil society, indigenous communities, and government actors in joint deliberation and problem solving (Rood, 2005; Neumann, 2010). This proves the potential of deliberative arrangements in highly sensitive contexts. Across South Korea's policy domains, including environmental and energy policy, citizen civic engagements and institutional support lead to better policy outcomes and stronger legitimacy and trust (Kim, Jung & Kim, 2020). This makes deliberative democracy as important mechanism to guide contentiously the policy choices. The local consultative councils in Malaysia Majlis Bandaraya Shah Alam is another example. It shows how communities are engaged in deliberative-style participation in local environmental/climate policy (Abdullah et al., 2023). Specifically, in shaping local priority setting and community engagement in decision-making.

Implications for BARTER theory-building: Deliberation must be carefully designed: representative inclusion (who participates), facilitation quality, linkages from deliberation to decision-making (so that outcomes are binding or credibly influence authority), and transparency about tradeoffs are necessary to translate deliberation into collective action.

Adaptability to Change and Disruptions. Barter systems are adaptive by necessity: parties renegotiate value continuously, pool resources for emergent needs, and rely on local information to adapt deals. For governance under BANI, adaptability involves institutional capacities to pivot rapidly (policy experimentation, reallocation of resources), while retaining inclusive processes and legitimacy. Adaptability reduces brittleness by enabling many smaller, local responses rather than single big-bang policies that fail under nonlinearity.

Polycentric governance theory and resilience literature both emphasize decentralization, diversity of approaches, and learning processes as key to adaptivity. Ostrom's (1990) work, moreover, highlighted modularity and the ability of local institutions to learn and change rules. Collaborative governance scholars emphasize adaptive management facilitated by ongoing stakeholder engagement and monitoring.

The principles of polycentric and adaptive governance are evident in pandemic governance where states experimented with diverse institutional mechanisms to respond to rapidly changing conditions, such as in the case of the Philippines and Taiwan.

In the Philippines, local government units (LGUs) showed substantial variation in COVID-19 responses, using devolved authority where capacity allowed (Philippine News Agency, 2021). Some LGUs mobilized local vaccination drives and outreach while others leaned more heavily on national directives (Crismundo, 2021). LGUs also spent heavily out of their local budgets (over PHP 100 billion by mid-2021) for their own COVID-19 mitigation efforts (Rosales, 2022). These agile local responses underscore the advantages of devolved authority combined with local leadership, capacity, and resources (Talabis et al., 2021). Taiwan's early and adaptive response to COVID-19, including rapid mask distribution systems, integrated data platforms, and open civic engagement (g0v movement), demonstrates how digital tools and strong civil–government collaboration enable rapid policy pivots. Taiwan's practices illustrate how technological transparency and robust civic participation can underpin adaptive governance (Winshall, 2024). These three cases showed the examples on how adaptive and polycentric governance theories explain the advantages of diversity and decentralization, while also revealing the uneven capacities that condition how effectively states can learn and adjust under crisis.

Implications for BARTER theory-building: Institutional flexibility must be matched with accountability: legal frameworks enabling emergency flexibility should include sunset clauses, monitoring, and explicit participation requirements to prevent abuse. Adaptive governance also demands robust information flows and technical capacities at the local level.

Operationalizing BARTER Governance

Operationalizing BARTER Governance requires both structural reforms and cultural adaptation. Thus, this section discusses how to move from conceptual principles to operational instruments and addresses implementation barriers. Translating barter heuristics into governance instruments allows for responsive, trust-based, empowering, and resilient institutions, but sustainability depends on addressing asymmetries of power and capacity. By embedding transparency, reciprocity, and adaptive learning into institutional arrangements, governments and communities can co-produce public goods in ways that are more equitable and resilient in the face of crises.

A BARTER operational plan must specify formal rules for participation and resource sharing, capacity development for local actors and brokers, transparency tools (open budgets, data dashboards), dispute resolution, and metrics for learning. Implementation pilots should be designed as iterative experiments (small-scale, evaluated, and then scaled) to avoid systemic shocks.

Barter heuristics to governance instruments

Direct negotiation to Direct stakeholder engagement. In governance, direct negotiation corresponds to structured participation. Co-governance committees, joint procurement agreements, mandated stakeholder representation on boards, and multi-stakeholder budgeting serve as institutional mechanisms. Participatory budgeting protocols, for example, allocate decision-making authority to citizen assemblies, ensuring that communities influence spending priorities (Santos, n.d.).

Resource pooling to Transparent resource sharing. Resource pooling in traditional barter translates into mechanisms that aggregate resources from multiple actors. Pooled disaster funds, public–private cofinancing arrangements, and community-managed resource banks embody this principle. Platforms such as the Philippines' National Disaster Risk Reduction and Management Council (NDRRMC) demonstrate how multi-stakeholder resource coordination enables cross-budgeting and joint mobilization during crises (NDRRM Plan 2020-2030).

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Implicit social contracts to Trust-based governance norms and instruments. Trust is the foundation of barter and of sustainable governance. Instruments such as community liaison networks, graduated sanction schemes, and repeated small-scale collaborations build credibility among actors. Formal legal recognition of community arrangements, such as co-management agreements, further institutionalizes trust. In the Philippine context, bayanihan practices of mutual aid have been adapted into disaster recovery volunteer structures, linking informal trust networks with LGUs (Barrameda & Barrameda 2011),

Face-to-face bargaining to Deliberative bodies. Barter relies on bargaining; governance translates this into deliberative forums. Citizen juries, participatory planning councils, and statutory consultation processes institutionalize deliberation and joint problem solving. Indonesia's *musrenbang* (development planning forums) exemplify this approach by embedding deliberation into annual planning cycles, enhancing legitimacy and collective ownership (Anindito, Sagala, & Tarigan, 2022).

Flexible valuation to Adaptive policy instruments. The flexibility inherent in barter negotiations can be mirrored in governance through adaptive instruments. Contingency budgets, rapid procurement rules with oversight, and modular program designs allow governments to scale interventions up or down in response to changing circumstances. This institutional flexibility enhances resilience by maintaining the capacity to pivot in times of uncertainty.

The operationalization of BARTER Governance is conditioned by enablers and constraints. **Enablers** include legal frameworks that allow devolution and co-governance (such as participatory planning laws), digital platforms that facilitate transparency and information flows (*e.g.*, e-Musrenbang systems), trusted conveners (NGOs, faith-based organizations, and local champions), and deeply embedded cultural norms of reciprocity that sustain cooperation. **Constraints** stem from entrenched power asymmetries, capacity deficits at subnational levels, and opaque funding channels that hinder pooling and accountability. Elite capture remains a central risk, as powerful actors can dominate participatory spaces. Bureaucratic disincentives against devolving authority and weak monitoring systems further undermine trust and adaptive learning.

Case Illustrations and Comparative Insights

The participatory budgeting of Naga City, Indonesia's *musrenbang* and *e-Musrenbang*, the Philippines' disaster governance and *bayanihan* mutual aid practices, and Taiwan's digital governance highlight different operationalizations of responsiveness, trust-building, empowerment, and resilience. They reveal both enabling conditions and structural limitations in advancing BARTER governance in diverse contexts.

This succeeding discussion presents the comparative analysis on how BARTER principles appear in practice and what lessons we can get from them by evaluating these select governance case studies.

Case 1. Power Balance and Deliberation: Naga City's Participatory Budgeting. Naga City institutionalized participatory budgeting, moving beyond symbolic consultation toward structured citizen empowerment in fiscal governance. By rotating budgetary consultations and embedding rules, the city reduced dependency on individual leadership charisma and enhanced citizen trust. Research documents sustained improvements in legitimacy and project alignment with local needs (Santos, n.d.; Culp, 2020). Aligned with BARTER, Naga's case illustrates:

- *Responsiveness:* The budget cycle allowed citizens' concerns to be directly translated into municipal fiscal priorities.
- *Trust-based governance:* Citizens perceived transparency in municipal spending, reducing suspicion of elite capture.

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- Empowerment: Citizens acquired skills in oversight and negotiation.
- Resilience: The codification of procedures offered some durability against political turnover.

However, Naga's experience also reveals fragility: reforms heavily relied on political champions. Without codified institutional safeguards, participatory gains risk reversal. For BARTER, this underscores the necessity of institutionalizing formal rules and oversight mechanisms alongside political will to balance power sustainably.

Case 2. Cross-Boundary Participation: Musrenbang and e-Musrenbang in Indonesia. Indonesia's musrenbang provides a formalized platform for multi-level planning, while digitalization through e-Musrenbang expands access. The process exemplifies bridging actors across administrative layers (village to national). Evidence shows improved cross-boundary priority setting but exposes challenges: elite capture, digital divides, and weak linkages between local and national fiscal processes (Anindito, Sagala, & Tarigan, 2022; Anindito, 2022).

From a BARTER perspective:

- Responsiveness: Priorities are systematically gathered from the grassroots.
- Trust: Digitalization attempts transparency but is undermined where access remains unequal.
- Empowerment: Citizens gain procedural entry but face limitations in influencing final allocations.
- Resilience: Institutionalization ensures continuity, yet its adaptability is constrained by bureaucratic rigidity.

The key lesson is the **trade-off between scale and depth**. While digital platforms broaden the reach, they are opening the risks of shallow participation if structural inequalities are unaddressed. For BARTER, bridging actors must ensure digital tools complement with, rather than substitute to, local deliberative practices, preserving trust and empowerment.

Case 3. Trust and Cross-Boundary Action: Philippine Disaster Governance. The Philippines' disaster governance requires coordination among national agencies, military, local governments, NGOs, and international partners. Evidence indicates that joint exercises and pre-crisis planning build interpersonal trust, enabling faster response. Yet resource bottlenecks, uneven LGU capacity, and fragile monitoring systems undermine outcomes (NDRRMC, 2019).

In BARTER terms:

- Responsiveness: Rapid mobilization is possible when planning precedes disasters.
- Trust-based governance: Relational networks matter as much as formal guidelines.
- Empowerment: Local governments vary in capacity, creating uneven empowerment across regions.
- Resilience: Structural heterogeneity weakens systemic resilience; strong areas rebound quickly, weak areas lag.

This case highlights the need to **embed trust into institutional design**: codifying coordination roles is necessary but insufficient unless complemented by sustained capacity building and relationship management. BARTER operationalization requires balancing formal mechanisms with relational trust capital.

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Case 4. Trust-Based Participation: The Philippines' Bayanihan and Community Mutual Aid. The bayanihan tradition exemplifies community-based resilience through mutual aid. During crises, communities mobilize faster than formal assistance, delivering context-sensitive support (Barrameda & Barrameda, 2021; Su & Thayaalan, 2024). Bayanihan reflects deeply rooted trust norms, producing rapid collective action without heavy bureaucratic infrastructure.

In BARTER alignment:

- Responsiveness: Immediate mobilization ensures survival-level responses.
- Trust: Relational capital sustains participation without formal enforcement.
- Empowerment: Communities co-own solutions but may face resource inequities.
- *Resilience:* Collective memory and repeated practices provide social resilience, though vulnerable households may shoulder disproportionate burdens.

The lesson is that informal governance traditions, when recognized and resourced by formal institutions, can serve as **bridging instruments**. However, formal co-option risks undermining authenticity. Adaptive partnerships through providing resources while preserving autonomy enhances trust-based resilience.

Case 5. Adaptability and Digital Co-Creation: Taiwan's Digital Governance. Taiwan's pandemic response showcased civic-state co-creation. Through open data platforms, real-time feedback loops, and civic tech communities like g0v.tw, government policies were both adaptive and inclusive (Henshall, 2024). The civic tech community g0v in Taiwan has built open tools and platforms that facilitate citizen engagement and transparency (Chen, 2015). Transparent communication and participatory design countered misinformation and fostered trust.

Relative to BARTER:

- Responsiveness: Policies evolved rapidly in response to public feedback.
- Trust: Radical transparency reinforced credibility.
- Empowerment: Civic hackers and citizens directly influenced governance tools.
- Resilience: Adaptive systems proved effective against evolving pandemic threats.

Taiwan demonstrates the highest operationalization of BARTER: bridging actors (civic tech, government, citizens) institutionalized iterative, transparent, and collaborative mechanisms. The model underscores that resilience requires not only robust institutions but also technical and social capacities for adaptation.

Cross-Case Lessons for BARTER Governance. BARTER governance thrives where bridging actors institutionalize responsiveness, embed trust into both formal and informal systems, empower citizens equitably, and foster adaptive resilience. Each provides a partial model, but together they outline a roadmap for responsive, trust-based, empowering, and resilient governance in a BANI world. These five cases reveal complementary lessons for operationalizing BARTER:

- 1. *Codification vs. Charisma:* Naga and the Philippines' disaster governance show the fragility of relying on individual champions. Institutional safeguards are critical.
- 2. *Scale vs. Depth*: Indonesia's *e-Musrenbang* highlights the risks of broad participation without equity safeguards, stressing the need for hybrid systems.

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- 3. *Formal vs. Informal Synergy: Bayanihan* illustrates the power of informal practices, which must be recognized but not absorbed into rigid bureaucracies.
- **4.** *Relational Capital:* Philippine disaster governance and bayanihan emphasize trust as both a precondition and product of effective coordination.
- 5. Adaptive Governance: Taiwan demonstrates the frontier of BARTER–combining transparency, civic collaboration, and technical capacity for resilience.

Implications for theory-building and research agenda

The BARTER framework suggests several theoretical implications and an empirical program:

Reciprocity as governance micro-foundation. Barter's reciprocity suggests treating negotiated exchange and mutual obligation as micro-foundations for governance. Future theory should model governance as a network of bilateral/multilateral reciprocal arrangements rather than purely hierarchical directive relationships.

Polycentricity plus reciprocity. Ostrom's polycentric governance fits naturally with barter heuristics. That is, the overlapping authorities exchanging services and resources through negotiated arrangements can provide resilience in BANI contexts. Theorizing governance should link polycentric institutional structures with reciprocity-driven enforcement and reputation mechanisms.

Trust dynamics and scaling. Small-scale barter and mutual aid are trust-rich. scaling to city or national levels requires institutional intermediaries and methods to translate local reputation into system-wide credibility. Now, a pressing theoretical puzzle is how trustful arrangements upscale. Empirical research can test mechanisms and investigate conditions under which trust scales without ossifying into rent-seeking.

Design rules and legal scaffolding. Theory should specify design principles for embedding reciprocal governance in legal law and regulatory policies. Specifically, defining when should power-sharing be a statutory mandate in order to protect arrangements from political turnover and when should flexibility be preserved.

Measurement and evaluation. Operational metrics for BARTER governance include measures of mutual exchange frequency, perceived legitimacy, responsiveness (time to problem resolution), and resilience (ability to maintain core functions under shock). Mixed-methods evaluations (process tracing, comparative case studies, and participatory evaluation) will be crucial.

Research agenda. Empirical programs should include comparative local governments case studies, experimental pilots of trust-building sequences in disaster-prone communities, digital co-creation experiments, and network-analytic studies of reciprocal exchanges in multi-actor responses.

Conclusion

The study highlights the value of embedding reciprocity as a governance resource. For policymakers, this means codifying reciprocal practices in institutional design, investing in trust-building infrastructures that can scale, and enabling adaptive policy instruments that balance flexibility with accountability. For scholars, the framework opens a research agenda on measuring reciprocity, tracing how trust scales across governance levels, and piloting digital and community-based platforms that operationalize BARTER principles. The insights from this study point to reciprocity as both a theoretical foundation and a practical pathway for building responsive, trust-based, and resilient governance under BANI conditions.

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