AFRICA'S POLYTUNITY MOMENT

A Coevolutionary Tango

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Executive Summary

Africa's current polycrisis marked by a decline in traditional development aid and persistent systemic challenges is not merely a series of failures, but a symptom of a deeper flaw: the application of linear, mechanistic models to complex, adaptive economies. This paper applies Yuen Yuen Ang's concept of "Polytunity" (Ang, 2025b; Ang, 2025c; Ang, 2025d) to argue that this moment of disruption should be viewed as an opportunity to adopt what Ang terms an Adaptive Political Economy (APE) framework (Ang, 2016; Ang, 2025a).

Ang's APE framework is grounded in what she calls the AIM paradigm; Adaptive, Inclusive, Moral Political Economy (Ang, 2025b). It which provides three foundational commitments: replacing machine-thinking with systems-thinking (Adaptive), rejecting one-size-fits-all templates in favor of context-specific solutions (Inclusive), and acknowledging how power asymmetries shape whose knowledge and voices matter in defining development (Moral).

The APE framework, acknowledging complexity economics (Arthur, 2014), argues that sustainable prosperity requires a coevolutionary relationship between dynamic African marketers and agile meta-institutions - the operating system helping your applications run smoothly. These are not rigid blueprints, but adaptive governance mechanisms that, as Ang describes them, act to reduce transaction costs strategically, setting boundaries enabling grassroots innovation while repurposing existing assets. This approach demands a fundamental shift from top-down development models to strategies that are deeply aligned with local context, particularly the creative energy of African youth and the robust dynamism of the popular economy.

Drawing on case studies from across the Global South - from Kenya's M-PESA to West Africa's BCEAO payment system via Brazil's PIX and Vietnam's Doi Moi reforms - this paper demonstrates that coevolutionary transformation is already underway. Success is being driven by fintech, adaptive governance, and mission-oriented policies (Mazzucato, 2021) that leverage indigenous institutions like stokvels and chamas.

Ultimately, realizing this Polytunity requires a new social contract. We must transition from traditional, transactional partnerships to models of shared risk and collective reward, where the private sector actively invests in public capacity and the goal is to bring societies into the safe and just space outlined by Raworth's Doughnut Economics framework (Raworth, 2017). For Africa, this is the path from structural dependency to adaptive, mission-oriented sovereignty.

Key Terms: A Glossary

Adaptive governance

A governing approach that emphasizes learning, experimentation, and iterative adjustment rather than rigid, predetermined plans. Adaptive governance monitors outcomes, adjusts policies based on evidence, and creates space for grassroots innovation while maintaining accountability and strategic direction.

AIM (Adaptive, Inclusive, Moral Political Economy)

A paradigm developed by Yuen Yuen Ang that grounds Adaptive Political Economy with three foundational commitments: (1) Adaptive replaces machine-thinking with systems-thinking that sees societies as evolving ecosystems; (2) Inclusive rejects one-size-fits-all templates and values context-specific solutions; (3) Moral acknowledges how power shapes whose knowledge counts and whose voices matter in defining development.

Coevolution

The process by which markets and institutions evolve together in mutual adaptation. Rather than imposing fixed rules on dynamic economies, coevolution recognizes that economic activity shapes institutional rules, and institutional flexibility enables market growth. It's a "tango" rather than a top-down blueprint.

Meta-institution

A flexible governance framework that sets broad strategic boundaries while allowing local actors to experiment and innovate. Unlike rigid rules, meta-institutions create "sandboxes" for testing new approaches and adapt based on what works in practice. They act as "transaction cost engineers"—deliberately lowering barriers to economic participation.

Polytunity

A term coined by Yuen Yuen Ang to describe the transformation of multiple crises (polycrisis) into opportunities for fundamental change. Rather than viewing overlapping challenges as insurmountable, Polytunity encourages seeing them as catalysts for innovative, adaptive solutions.

Popular economy

The vibrant, adaptive economic sector—often mischaracterized as merely "informal"—where millions of micro, small, and medium businesses and workers operate. It includes market traders, smallholder farmers, street vendors, artisans, and others who have created resilient systems (like stokvels and chamas) in response to high transaction costs and institutional gaps. While a source of immense resilience and innovation, the popular economy also often operates without the labor protections and social security of the formal sector, a gap the coevolutionary process seeks to address.

Regulatory sandbox

A safe, time-limited testing environment where businesses, innovators, and organizations can experiment with new approaches under relaxed regulations while being monitored by authorities. Like a children's sandbox where play is encouraged within boundaries, regulatory sandboxes allow innovation while protecting the public and generating evidence about what works. AI is a prime example of domain requiring such sandboxes.

Transaction costs

The time, money, energy, and barriers involved in doing business or accessing services. These include fees, paperwork, travel time, waiting periods, and bureaucratic hurdles. High transaction costs exclude people from formal economic opportunities; lowering them enables broader participation.

Transaction cost engineers

Institutions, policies, or governance mechanisms that are deliberately designed to reduce the barriers (costs) to economic participation. Rather than simply regulating, they strategically remove friction from business processes, making it easier, faster, and cheaper for people—especially those in the popular economy—to engage in formal economic activity.

1 Introduction: Emergence of Polytunity and the Legacy of Development

The traditional development narrative treats Global South economies like machines, emphasizing structural fragility that can be fixed by inserting the right parts; capital and institutions to produce predictable outcomes. This linear, Newtonian worldview contradicts the complex, adaptive systems defining African economies (Arthur, 2014). In this context, global challenges like climate change, health crises, and geopolitical shocks framed as insurmountable risks - a classic "polycrisis" view. However, as Ang (2025b; 2025c; 2025d) argues in her concept of “Polytunity,” the inherent adaptive capacity of emerging economies suggests we should view these crises differently; as opportunities for transformative change.

For decades, the intellectual framework was dominated by scholars like Raúl Prebisch, whose Dependency Theory identified structural asymmetries in the global economic system (Prebisch, 1950). The Prebisch-Singer thesis argued that the structure of the global economy inherently disadvantages the periphery (the Global South), whose commodity exports lose value relative to the manufactured goods imported from the center (the Global North). Prebisch identified a structural rigidity trapping developing nations in perpetual disadvantage, advocating for strong, state-led industrialization and import-substitution policies.

While Prebisch correctly identified structural asymmetries, the path to structural transformation requires a more dynamic framework accounting for real-world institutional change. Applying Ang's Adaptive Political Economy framework (Ang, 2016; Ang, 2025a), I argue that the path forward lies in recognizing these shocks as moments of opportunity - what Ang terms “Polytunity”. In effect, creating space for a necessary shift toward self-organizing, resilient ecosystems. The key insight from Ang’s work is that formal economies cannot simply impose solutions; rather, they must co-evolve with the complex social and economic realities on the ground, particularly the dynamic popular economy (often mischaracterized as merely “informal”).

This perspective is reinforced by the work of African and South Asian scholars. Mkandawire (2005) championed the idea of the 'Developmental State' in Africa, arguing for purposeful state intervention that is locally responsive. Similarly, Sen (1999) and Mahbub ul Haq (the architects of the Human Development Index) emphasized that development success must be measured not merely by GDP growth, but by expanding the 'capabilities' and freedoms of individuals; a metric that is only achieved when economic systems truly integrate and de-risk the lives of the most vulnerable, especially those in the popular economy. Furthermore, the structural transformation imperative championed by scholars like Lopes (2021) demands that African policy be internally driven, rejecting externally imposed narratives. Lopes emphasizes that true development requires a purposeful shift toward industrialization and higher-productivity services, arguing that the continent's youth and demographic dividend are an asset that must be strategically accounted for in national planning, demanding a complete overhaul of how Africa's labor market is viewed.

This paper merges these insights, accepting Prebisch's diagnosis of structural disadvantage while embracing Ang's adaptive roadmap for institutional innovation to advance a 'Polytunity Imperative'. As complexity economics demonstrates (Arthur, 2014), economies are not equilibrium seeking machines. They are dynamic, evolving systems characterized by feedback loops, emergence, and adaptation. Thus, the popular economy is not a failure of formality. It is a complex adaptive response to high transaction costs and institutional gaps emerging from the bottom-up.

2 The Theoretical Framework: Adaptive Political Economy and Coevolution

Development is often conceived in a linear fashion: adopt "best practice" Western institutions (strong property rights, complete transparency), and growth will follow. Ang's APE framework (2016; 2025a) challenges us to understand development not as a linear process, but as a coevolutionary relationship between economic activity and institutional rules. In this dance, economic dynamism drives institutional change, and institutional flexibility enables market growth. I like to imagine this as a coevolutionary tango where partners learn, adapt and reach higher levels of performance.

In this respect, in applying Ang's foundational framework to her Adaptive, Inclusive, Moral Political Economy's paradigm (AIM), she invites us to embrace three foundational commitments that should guide development thinking and practice:

ADAPTIVE

Adaptive means replacing machine-thinking with systems-thinking. In doing so, seeing societies not as toasters with buttons that produce predictable outcomes when pressed, but as living forests where multiple species interact, adapt, and coevolve. In development practice, this specifically means studying development as a coevolutionary process rather than a linear one. Instead of asking "what inputs produce growth?" we ask "how do markets and institutions adapt together over time?" This shift from mechanistic to organic thinking is essential for understanding why identical policies produce different outcomes in different contexts, and why the popular economy's apparent "chaos" is actually sophisticated adaptation.

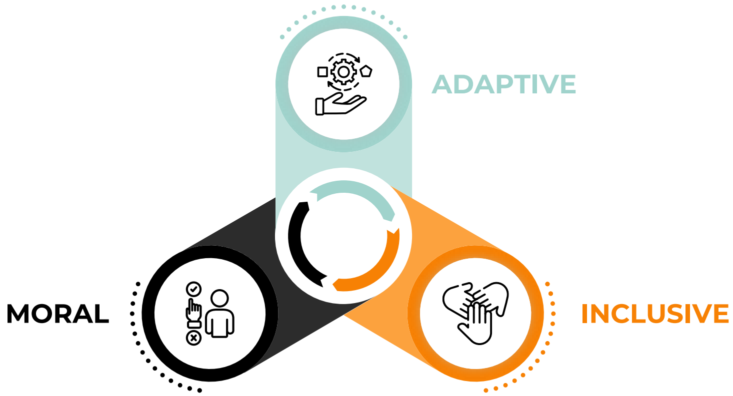
INCLUSIVE

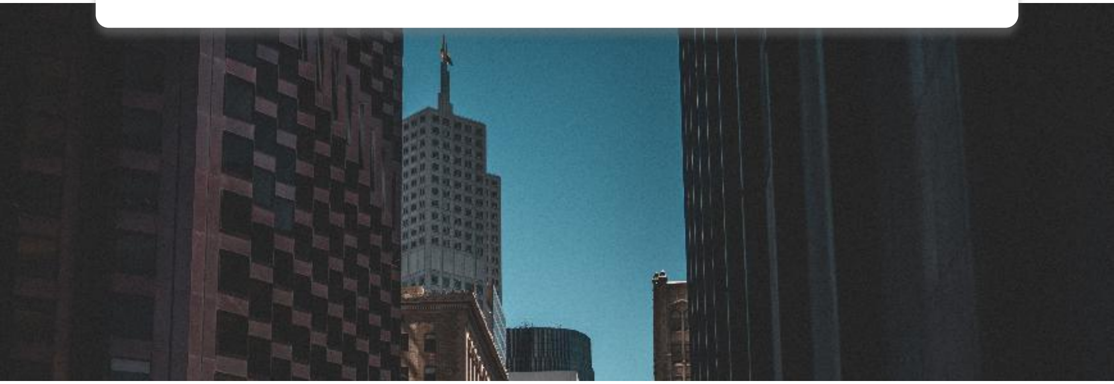
Inclusive means rejecting the idea that all societies must mold themselves to a single template. AIM takes inclusion as an opportunity to value modalities and solutions tailored to context. It is more than acknowledging "cultural differences." It is an invitation to fundamentally rethink whether there is a universal development ladder that all must climb. Vietnam's Doi Moi, Brazil's PIX, and Kenya's M-PESA succeeded precisely because they did not simply copy. They repurposed what existed locally. Inclusivity means recognizing that indigenous institutions like stokvels are not primitive precursors to "real" banking but sophisticated financial technologies in their own right, worthy of integration rather than replacement.

MORAL

Moral means acknowledging how power asymmetries shape the production of knowledge itself. Who decides what counts as "best practice"? Why is a lifetime managing a successful chama is dismissed as "informal"? The moral dimension of AIM insists that development economics cannot be neutral because the very categories of formal/informal, developed/developing, modern/traditional encode historical power relations. As Lopes (2021) argues, true African transformation requires not just better policies but reclaiming the authority to define what transformation means and how it should be measured. This moral stance does not mean abandoning rigor; it means being explicit about whose interests our analysis serves and whose voices shape our questions.

Together, these three commitments (Adaptive, Inclusive, Moral) provide a contextual lens through which to operationalize Ang's APE framework to Africa. They remind us that development is not a technical exercise in optimization but a fundamentally political project of building institutions that serve human progress in all its contextual diversity.





2.1 Meta-Institutions as Transaction Cost Engineers

The concept of the Meta-Institution is central to Ang's APE framework (2020; 2025a). As she explains, meta-institutions are not rigid laws, but adaptive governance mechanisms that set broad strategic boundaries while granting local actors and private partners the flexibility to experiment. Drawing on North's (1990) institutional economics, these meta-institutions dramatically lower transactions costs, the cost of doing business, especially for those in the popular economy.

They are the regulatory equivalent of a sandbox, allowing localized innovation to scale, particularly when that innovation emerges from non-traditional structures. This approach recognizes that in environments with high institutional volatility, innovation often happens at the grassroots level by repurposing existing, context-specific systems (E.G).

AIRTIME INFRASTRUCTURE

COMMUNITY SAVINGS GROUPS

Following Ang's framework, the role of the state is not to dictate solutions but to be an intelligent, adaptive regulator providing cues for market experimentation and codifying success based on evidence.

In this context, a digital identification system, for example, reduces the cost of verifying identity for banks and citizens alike.

2.2 The Popular Economy as a Complex Adaptive Asset

The popular economy, dominated by Micro Small and Medium Businesses (MSMBs), is traditionally viewed by as a tax-dodging, unorganized problem to be formalized or eliminated. Ang's APE framework reframes the popular economy as Africa's most robust adaptive asset; a perspective aligned with Ostrom's (1990) work on self-governing institutions.

The popular economy demonstrates human ingenuity in the face of high transaction costs. It operates on resilient indigenous institutions (trust, communal collateral, queenship networks) and provides immediate, localized safety nets often absent from formal systems. Any genuine coevolutionary strategy must strategically integrate this sector by acknowledging and building products around its operational logic, rather than trying to force it into non-conforming regulatory molds.

While I celebrate the popular economy as Africa's most robust adaptive asset, it is crucial to acknowledge that this adaptation is often a response to exclusion and comes with its own set of transaction costs for the individuals within it. The very lack of regulation that enables its flexibility can also mean a absence of labor protections, environmental safeguards, and formal social security, leaving workers vulnerable to exploitation and shocks. The genius of the stokvel is shadowed by the precarity of the street vendor.

Therefore, the goal of the APE framework is not to romanticize or fossilize popular economy, but to orchestrate its coevolution into a more secure, productive, and dignified form. The meta-institution's role is to lower the transaction costs of participation through simplified registration, digital identification, and targeted social safety nets, thereby changing perception and mitigating the risks associated with informality.

3 Africa's Coevolutionary Engine: Repurposing for Lower Transactions Costs

The coevolutionary dynamic central to Ang's framework (2016; 2025a) is powerfully illustrated by financial and governance experiments across the continent.

CASE STUDIES

3.1 Financial Services and Fintech (M-PESA, Kenya)

The success of mobile money platforms like M-PESA in Kenya exemplifies what Ang describes as institutional repurposing (Mas, 2009; Safaricom 2016). Instead of waiting for formal banks to penetrate rural areas (the linear solution), Safaricom leveraged the existing, widespread infrastructure of airtime distribution. This grassroots innovation initially tolerated by the government - providing what Ang would call a meta-institutional cue - and later regulated following the proven success. At its core, it is a simple money transfer function built on a cellular network that became a verifiable financial identity for millions of marginalized economic agents in the popular economy. M-PESA's genius was its drastic reduction in transaction costs for sending money in bypassing the high costs of building physical banks branches. As a result, both market behavior and regulatory frameworks were transformed.

3.2 Harnessing Indigenous Institutions

Beyond M-PESA, the potential of integrating indigenous, trust-based institutions remains largely untapped. The rotating savings and credit associations known as stokvels in South Africa, Chama in Kenya, Esusu in Nigeria and Tontine in Côte d'Ivoire are highly resilient adaptive institutions that manage billions of dollars annually based on social collateral (World Bank, 2019). These represents masterclasses in minimizing the transaction costs of lending and saving. Communities use social collateral to eliminate the need for costly credit checks and legal enforcement. Iposit says that when a private bank or insurer designs products that formally integrate these credit histories or group collateral, it demonstrates true co-evolution; aligning private profit with community resilience, consistent with Ostrom's (1990) principles of collective action.

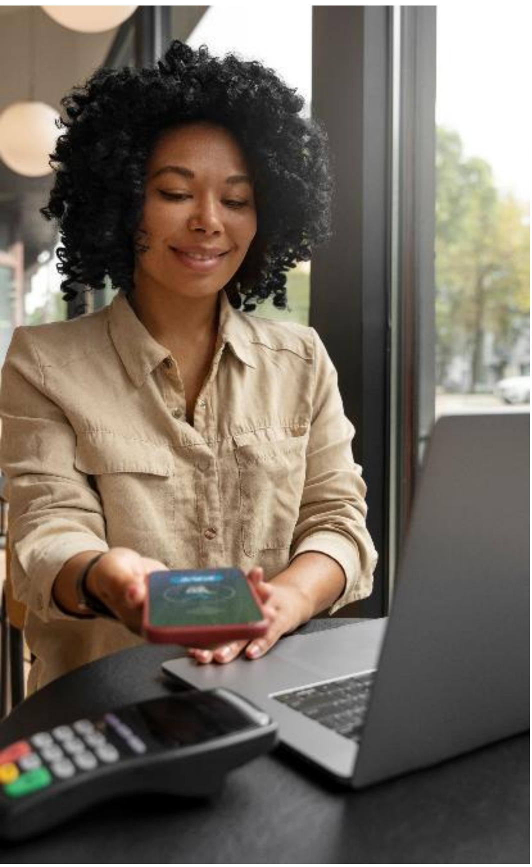
3.3 Regulatory Cues for Agency Banking

The Bank of Ghana acted as a potent meta-institution by issuing comprehensive guidelines for branchless banking (Bank of Ghana, 2011). Licensed financial institutions, such as Ecobank strategically repurposed micro small and medium businesses operating in the popular economy, as Ecobank Xpress Point agents. This adaptive cue expanded reach by bypassing the costly linear build-out of brick-and-mortar branches. The regulator's role was to define the secure, transparent rule-set that enabled localized market-driven delivery, focusing on building state capacity for financial inclusion while leveraging the popular economy's grassroots trust and private sector infrastructure.

3.4 BCEAO's Regional Instant Payment System

The eight-member West African Economic and Monetary Union offers a compelling example of centralized regulatory alignment acting as a meta-institution through its development of a modern, regional instant payment system (BCEAO, 2025). This centralized mandate requires participation from all banks and licensed payment institutions. By guaranteeing instant, low-cost settlements across borders, this regional approach creates a massive, unified digital market for cross-border transfers and micro-payments.

This centralized cue drastically lowers market entry barriers for fintechs and MSMBs. Thus accelerating financial inclusion, and driving coevolution by making digital efficiency the competitive baseline for private sector players. It demonstrates proactive regional governance.



The transformation engineered by M-PESA, stokvels, Agency Banking, and BCEAO collectively illustrate a core principle of grounded transformation for human sustainability: transformation must begin with the Africa we have. Human sustainability is about health, education, nutrition and skills with a focus on enabling prosperity, for the majority, in the popular economy. As such, my work on inclusive finance highlights that the end goal of financial innovation is not inclusion itself, but the creation of trust leading to behavioral change.

We are witnessing a transaction cost revolution which is at the heart of the digital imperative. Millions of micro small and medium businesses and invisible workers now have verified digital footprints; their ticket to full economic participation shifting high risk perception to recognized assets. They can tango in the local, regional and global markets.

4 Adaptive Governance: Global Lessons in Institutional Flexibility

Ang’s Polytunity Imperative (2025b; 2025c; 2025d) is not unique to Africa. Across the Global South and beyond, adaptive economies exhibit institutional agility that defies conventional good governance prescriptions yet proves highly effective in context for communities, as Rodrick (2007) has documented in his work on institutional diversity.

4.1 Brazil: Centralized Regulatory Agility

Latin America has long struggled with financial inclusion and market concentration, echoing Prebisch's structural critiques (1950). However, recent regulatory efforts demonstrate adaptive governance in action, leveraging centralized power to foster rapid, decentralized innovation. Brazil's PIX instant payment system is not a private fintech innovation but public infrastructure functioning as a meta-institution under the auspices of the Central Bank (Central Bank of Brazil, 2020).

By mandating its use, defining a transparent rule-set, and enabling all financial institutions to participate in a free, instant payment network interoperability became a reality. This single act of centralized regulatory intervention immediately lowered entry barriers for fintechs and micro small and medium businesses with the dual purpose of formalizing transactions and enabling an open ecosystem.

A verifiable digital footprint for millions of previously marginalized workers and micro-enterprises became reality. In effect, a state actor created structural conditions for market coevolution; a masterclass in repurposing a state-backed meta-institution to create a public utility for the digital age, giving private actors a platform to compete on service delivery.

4.2 Vietnam: Doi Moi - Repurposing the State for Export Growth

Vietnam's rapid transformation rooted in the Doi Moi reforms of 1986 represents a mission-oriented strategy focused on export-led growth (Vietnam Communist Party, 1986). This successful, non-linear development through institutional repurposing aligns with one of Ang's key APE tenets (2016). The government decentralized execution, creating competition among provinces to lower transaction costs, making local governments partners in market creation.

Local officials had the power to work with their context, were incentivized to experiment, and nurtured a decentralized adaptive layer to respond to internal and external competitive market conditions. This strategy, while in contradiction with conventional standards, proved highly effective in positioning Vietnam as as source of rice and manufacturing for import hungry markets. By serving a clear national economic goal, Vietnam's growth enabled prosperity through effective institutions with adaptive capabilities. It was not about perfection but the ability to serve a clear national transformation goal.

The ability of local and provincial governments alongside state-owned enterprises to commercialize and engage in market activities which created the competition for foreign direct investment and export quotas. Textbook models might have limited the thinking and appetite for this distinctive approach.

4.3 E-Estonia: Repurposing Digital ID for Trust

Estonia's X-Road is the ultimate transaction-cost-reducing meta-institution (Vinter & Pappel, 2018). The post-Soviet transition in Central and Eastern Europe presented a unique challenge in a compressed timeframe. The decision to build Estonia's e-governance provides a powerful lesson in institutional leapfrogging using digital technology as the meta-institution.

Estonia chose the X-Road, a secure, interoperable data exchange layer that ensures all government agencies can securely communicate and exchange data. That decision to look to the future rather than reform bureaucratic institutions over decades, became the foundation for integrating citizens into the economy. Entrepreneurs could register a business in minutes and access digital collateral, with one key outcome being a reduction in the cost of starting a business. Moreover, the digital identification system was a fundamental institutional repurposing, moving trust from physical documents and human discretion to cryptographic verification. By moving trust to a cryptographic layer, it minimized the bureaucratic friction, a stifler of business and public service delivery.

A key lesson for global transitioning economies is that the most effective way to address the fragmentation of institutional capacity is not through slow reform, but through the rapid establishment of a universally trusted, shared digital infrastructure that mandates interoperability and minimizes bureaucratic human friction.

4.4 Managing Frontier Technology: AI Governance as a Meta-Institution

The rise of Artificial Intelligence presents a new layer of both polycrisis (algorithmic bias, job displacement) and Polytunity (efficiency gains, data-driven policymaking). Governing AI requires a highly adaptive approach given the obsolescence of traditional, slow-moving regulation.

Ang's APE framework suggests treating AI governance itself as a meta-institution; A flexible framework founded on principles of safety, fairness and transparency, rather than prescriptive rules on specific technologies.

In this respect, I see the emergence of principle based regulatory sandboxes in leading hubs where developers can test novel AI applications for financial services, health, or public administration under flexible regulatory oversight. The key is that regulators are co-designing the rules alongside innovators.

The Meta-Institution here is the adaptive regulatory process itself, ensuring societal risks such as algorithmic lending discrimination against the popular economy are identified and mitigated earnestly. The end goal is public trust and stability while learning and adapting with the market to leapfrog with managed systemic risk.

5 Shared Risk, Collective Reward: Operationalizing the Social Contract

The case studies of M-PESA, PIX, and others demonstrate that coevolution is possible. To scale these successes into a continent-wide transformation, however, requires a fundamental recalibration of the relationship between the state, the private sector, and citizens — a new social contract built on shared risk and collective reward.

As such, rethinking transformation through Ang's Polytunity lens (2025b; 2025c; 2025d) requires redefining the contract between public and private sectors; transitioning from a transactional transformation model (donor-recipient, or regulatory compliance) to a coevolutionary one.

5.1 Reframing MSMBs and Mitigating Risk

The popular economy must be recognized as the foundation of economic stability. The perception of high-risk liability must evolve to one of shared risk where transfer is not an end in itself but collaborative risk management becomes the operating model.

This implies private sector innovation that accounts for indigenous institutional realities in its design. For instance, index-based insurance for smallholder farmers provides payouts based on an objective, easily verifiable index (e.g., localized rainfall data) rather than on individual damage assessment.

By financially de-risking the base of the economy through such products, the private sector (insurers, banks) uses technology to lower the transaction costs of providing insurance to millions of smallholders, making shared risk commercially viable.

Operationalizing shared risk requires moving beyond sentiment to concrete financial and governance models. I propose three concrete pathways:

Blended Finance with a Mandate for Integration

Development finance and public capital should be deployed to de-risk private investment explicitly tied to the integration of the popular economy. For example, a fund guaranteeing first-loss capital for lenders serving smallholder farmers, contingent on those lenders accepting non-traditional collateral (like warehouse receipts or group guarantees from esusu).

Data Cooperatives and Value Sharing

As MSMBs in the popular economy generate valuable digital footprints, the model of data extraction must be avoided. Instead, the meta-institution can promote the formation of data cooperatives where farmers, market traders, or drivers pool their anonymized data to negotiate better prices for inputs, insurance, and credit, ensuring they retain ownership and benefit from the value their data creates.

Outcome-Based Partnerships

Shift procurement from paying for inputs to paying for verified social and economic outcomes. A city could partner with a waste-management startup not by granting an exclusive contract, but by paying a premium for every ton of plastic collected from informal dump sites, thereby aligning profit with a public good and creating formalized income for waste-pickers.

5.2 Investing in Public Sector Capacity

The shared governance principle under Ang's Adaptive Political Economy framework (2016; 2025a) requires private firms to actively invest in the public sector's ability to manage complexity. This is vital because the pace of technological change often outstrips regulatory capacity, leading to systemic risk of regulatory failure (e.g., cryptocurrencies, AI).

This investment goes beyond simple training. It involves:

Joint Data Infrastructure

Developing shared, interoperable data platforms (e.g., between public health ministries and private telehealth providers) that ensure regulatory bodies have access to real-time, high-quality data.

Seconding Technical Staff

Private firms, particularly in fintech and tech, seconding technical, legal, and operational staff to government agencies and central banks to ensure regulatory bodies can understand and keep pace with rapid technological shifts.

When private firms help build public data infrastructure, they are investing in lowering the long-term transaction costs of regulation and market intelligence, aligning their profit with public stability.

5.3 Introducing the Doughnut as a Compass

This need for a new compass for development finds powerful alignment with Lopes' (2021) call for Africa to define its own development metrics and narratives. Lopes argues that Africa's transformation cannot be measured by externally imposed benchmarks that ignore the continent's unique demographic dividend, resource endowments, and structural realities.

He emphasizes that sustainable transformation requires a shift from extractive, commodity-dependent growth models to value-added industrialization and productive services that generate quality employment for Africa's youthful population.

Lopes challenges the conventional wisdom that celebrates GDP growth while ignoring whether that growth translates into decent work, reduced inequality, and enhanced human dignity—concerns that align directly with the Doughnut's social foundations.

Moreover, Lopes (2021) insists that Africa's structural transformation must be internally driven, with policy priorities determined by African needs rather than donor agendas. This demand for sovereignty in defining development success mirrors the Doughnut's recognition that different contexts require different balances between social needs and ecological limits. For Africa, this means meta-institutions must be designed to track progress on metrics that matter to African populations: youth employment rates, the formalization and dignification of popular economy work, access to quality education and healthcare, food security, and the resilience of local productive capacities. It also means rejecting development models that achieve narrow economic gains at the expense of environmental degradation or social dislocation—a principle Lopes reinforces when he argues that Africa's abundant natural resources must be leveraged for broad-based prosperity rather than elite capture or foreign extraction.

Following Raworth’s (2017) Doughnut Economics framework, the ultimate goal of coevolution should be to bring societies into the "safe and just space for humanity." This means meta-institutions should be evaluated not only on GDP growth but on their ability to meet social foundations (e.g., housing, health, education, nutrition, skills) while respecting ecological ceilings (e.g., climate, biodiversity). This provides a holistic, context-specific dashboard for measuring the success of Adaptive Political Economy, moving beyond a singular focus on growth consistent with Sen’s (1999) capabilities approach.

By combining Raworth's Doughnut framework with Lopes' insistence on African agency in defining transformation, we arrive at a powerful compass for Adaptive Political Economy: one that measures success not by how closely African economies mimic Northern models, but by how effectively they create dignified livelihoods within their ecological means, guided by locally determined priorities and grounded in the adaptive capacities of their own populations

5.4 Cultivating the Adaptive State

A legitimate critique of the APE framework is the assumption of a state capable of and interested in playing the role of a sophisticated, adaptive meta-institution. The reality is often different, with states ranging from incapacitated to predatory. The answer, however, is not to abandon the model but to make the cultivation of adaptive state capacity a central goal of the coevolutionary process. This is where the principle of shared risk extends to governance itself.

Mkandawire's (2005) work on the developmental state in Africa provides crucial insights here. He challenges the binary framing that dominated post-structural adjustment discourse, which portrayed African states as either hopelessly corrupt or requiring complete dismantling in favor of markets. Instead, Mkandawire argues for a more nuanced understanding: states possess heterogeneous capacities, with pockets of effectiveness coexisting alongside areas of weakness. The task is not to write off the state entirely, but to identify and nurture these islands of competence while building broader institutional capacity over time.

Mkandawire (2005) further emphasizes that state capacity is not a fixed attribute but can be purposefully built through strategic focus on specific developmental missions. He critiques the "good governance" agenda's assumption that states must achieve comprehensive institutional perfection before they can effectively drive development. Instead, drawing on the historical experience of successful East Asian developmental states, he argues that targeted state intervention in specific sectors—even with imperfect institutions—can generate learning-by-doing that gradually builds broader capacity. This perspective directly supports the notion that meta-institutions can emerge incrementally through mission-oriented focus rather than requiring wholesale institutional transformation upfront.

The case studies of Brazil's Central Bank and the Bank of Ghana provide a blueprint: by focusing on a specific, high-impact mission (e.g., financial inclusion via an instant payment system or agency banking), a pocket of effectiveness can be created within the state, consistent with Mazzucato's (2021) mission-oriented approach. This island of competence can then be leveraged to build broader capacity. Furthermore, the technical secondment and joint data infrastructure proposed in Section 5.2 are direct mechanisms for private and international partners to seed adaptive capacity into the public sector, building trust and demonstrating efficacy one building block at a time.

Mkandawire's insistence on the necessity of state capacity for meaningful development—particularly in addressing the coordination failures and long-term investments that markets alone cannot solve—reinforces that the cultivation of adaptive state capacity is not optional but central to the Polytunity Imperative. The popular economy's resilience, indigenous institutions' ingenuity, and private sector innovation can only be fully leveraged and scaled when the state possesses sufficient capacity to act as an intelligent, adaptive regulator. This does not require a perfect state, but it does require deliberate, strategic investment in building pockets of state effectiveness that can expand over time through successful demonstration.

6 AI and the Adaptive State: A New Meta-Institution in the Making

The rapid emergence of Artificial Intelligence is not merely a technological shock. It is a profound institutional force which can unlock an unprecedented Polytunity, in Ang's (2025b; 2025c, 2025d) terms. Its impact will be determined by how effectively the principles of Adaptive Political Economy such as repurposing, meta-institutions, and shared risk are applied to its governance and deployment. AI itself can become the most powerful meta-institution yet when steered to serve the coevolution of markets and institutions for the majority.

6.1 AI as a Transaction Cost Revolution and a Source of Friction

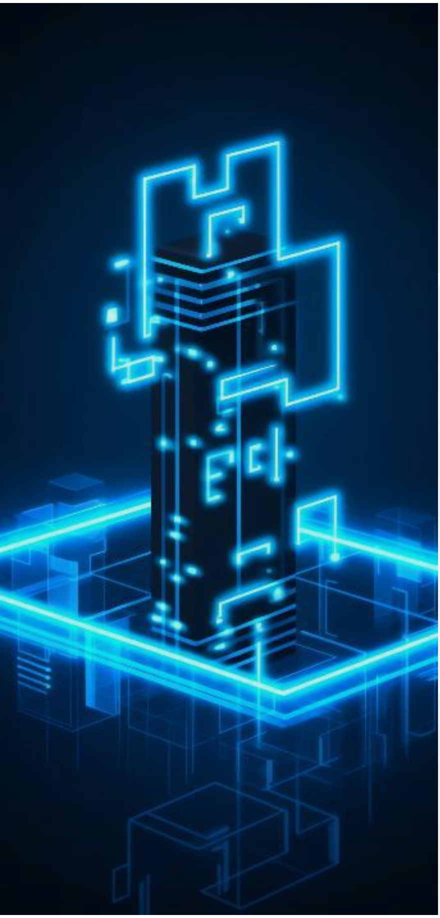
AI is a radical transaction cost engine. It can dramatically lower the costs of information asymmetry and bureaucratic friction. However, unguided AI deployment also creates new, perverse transaction costs. Algorithmic bias can erect new digital barriers for marginalized groups. The concentration of AI development in a few corporations risks creating new forms of digital dependency, where African economies provide raw data but lack the sovereignty to build and control their own intelligent systems.

AI is the ultimate test of the Polytunity Imperative. It can be a force that further concentrates power and creates new dependencies, cementing a 21st-century version of the structural disadvantages Prebisch (1950) identified. Or, it can be harnessed as a foundational meta-institution; repurposed for local context, governed by adaptive rules, and directed by a mission to build inclusive, resilient economies. The path Africa chooses will determine whether AI becomes a tool of extraction or the key that finally unlocks the productive potential of its most adaptive asset: its people.

7 Conclusion: From Dependency to Adaptive Mission-Oriented Sovereignty

The time for viewing development as a mechanical, one-size-fits-all fix is definitively over. The structural critique leveled by Prebisch (1950) in the mid-twentieth century about the periphery being structurally disadvantaged remains relevant in a world of declining ODA and pervasive climate vulnerability (the polycrisis). However, the Polytunity Imperative, informed by Ang's Adaptive Political Economy framework (2016; 2025a), and her concept of Polytunity (2025b; 2025c; 2025d) offers a pragmatic and hopeful path beyond that structural determinism.

Where Prebisch saw an iron cage of dependency, Ang offers a roadmap for Adaptive Sovereignty. Just as M-PESA repurposed mobile infrastructure, AI can repurpose data; and just as the BCEAO built a regional payment meta-institution, we must now build regional AI governance meta-institutions. This is achieved by:



Repurposing

Leveraging existing indigenous institutions, albeit often imperfect ones such as the popular economy, as the foundation for modern agile transformation (M-PESA built on airtime, financial products built on stokvels).

Meta-Institutions as mission-shapers

Using flexible, strategic regulatory frameworks not just to enable experimentation, but to actively steer innovation toward grand challenges (health equity and youth employment), enabling local experimentation and iterative coevolution between markets and governance (Agency Banking, Brazil's PIX, principle-based AI governance), consistent with Mazzucato's (2021) mission-oriented innovation approach.

Shared Risk

Aligning private profit with public resilience by financially de-risking the foundation of the economy (MSMBs in the popular economy) and actively investing in the public sector's capacity to manage complexity.

Africa's future depends on embracing the Polytunity inherent in its crises and fostering the courageous, adaptive partnerships that build lasting, coevolutionary prosperity. The ultimate goal, as articulated by Raworth (2017), is to ensure that growth is locally owned, resilient, and inclusive, within a just and regenerative space. But the definition of that space, the metrics for that prosperity, and the pathway to that future must be, as Lopes (2021) insists, authored by Africa itself. This is the path from structural dependency to a sovereign, adaptive, and mission-oriented future.

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