General Equilibrium and Market Incompleteness: A Conceptual Re-Evaluation for Frontier Economies

Okutoyi Purity, Ghabon Yasin

Department of Accounting and Finance, Maseno University

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ABSTRACT

General Equilibrium (GE) theory provides a foundational framework for understanding how decentralized markets coordinate resource allocation. Yet the classical Arrow-Debreu model and its associated welfare theorems rely on assumptions of complete markets, perfect information, and strong institutions that rarely hold in frontier economies. This paper re-examines GE theory through the lens of market incompleteness and institutional fragility, showing that the predictive and normative power of GE becomes significantly weakened under frontier market conditions. Drawing on literature from incomplete markets theory, sequential equilibria, and institutional economics, the paper demonstrates that missing financial markets, contracting failures, and information asymmetries generate constrained inefficiencies and fragile equilibria that deviate markedly from Walrasian predictions.

To address this conceptual gap, the paper proposes an integrated framework linking structural constraints, institutional quality, and the degree of market completeness to the formation, efficiency, and stability of equilibria in frontier economies. The framework clarifies why equilibria may exist yet remain inefficient, unstable, or welfare-reducing when institutional foundations are weak. Policy implications emphasize the need for targeted interventions that expand missing markets, strengthen contracting environments, and improve information infrastructure. Research implications call for new GE models calibrated to frontier contexts and deeper empirical investigation into how incomplete markets shape allocation and welfare. Overall, the paper contributes to a more context-sensitive and institutionally grounded interpretation of GE theory, offering a conceptual pathway for applying equilibrium analysis to economies where idealized assumptions of completeness and frictionlessness do not apply.

Keywords: General Equilibrium Theory; Market Incompleteness; Frontier Economies; Institutional Quality; Financial Markets; Contract Enforcement; Information Asymmetry; Constrained Inefficiency; Structural Constraints

JEL Classification: D50, D52, D82, G20, O16, O43

INTRODUCTION

General Equilibrium (GE) theory anchored in the foundational work of Arrow and Debreu (1954) provides a rigorous framework for understanding how decentralized markets allocate resources across households and firms. A central tenet of the Arrow-Debreu model is the assumption of complete markets, where a full set of state-contingent claims exists, enabling economic agents to perfectly insure against all future uncertainties. Under these conditions, competitive equilibria are guaranteed to be Pareto-efficient, and welfare theorems hold in their strongest form (Mas-Colell, *et. al.,* 1995). However, this elegant theoretical structure rarely reflects the realities of developing and frontier economies, where markets are inherently incomplete, institutions are weak, and financial frictions are pervasive.

Frontier economies typically characterized by shallow capital markets, limited financial instruments, information asymmetry, and underdeveloped regulatory systems operate under conditions where the assumptions of complete markets do not hold (Beck, 2012; Allen, *et al.,* 2014). In these settings, households lack access to adequate risk-

sharing mechanisms, firms face persistent credit constraints, and financial assets remain limited both in scope and depth. The resulting market incompleteness generates welfare losses, constrains economic growth, and causes divergence between theoretical predictions of competitive equilibria and actual observed market outcomes, (Stiglitz, 2010).

Classical GE models assume that financial markets are sufficiently developed to allow the trading of contingent claims for all possible future states of the world. In contrast, frontier economies often lack even basic instruments such as long-term bonds, derivatives, insurance products, or deep equity markets needed to approach market completeness (La Porta, *et al.*, 2008). The absence of these instruments and institutions implies that competitive equilibria in such economies are not Pareto-efficient but instead correspond to constrained-efficient equilibria, a concept explored by Geanakoplos and Polemarchakis (1986). Market failures persist because missing markets, high transaction costs, and institutional frictions prevent agents from achieving mutually beneficial exchanges.

This gap between theoretical assumptions and empirical realities raises a critical research problem:

How can general equilibrium theory be conceptually re-evaluated to better reflect the structural market incompleteness present in frontier economies? Thus the objective of this paper is to provide a conceptual reassessment of GE theory by integrating institutional, informational, and structural constraints that shape financial markets in frontier economies. Specifically, the paper aims to: (i) Examine the core assumptions of GE under complete markets and identify why they fail in frontier contexts; (ii) Analyze the nature and sources of market incompleteness in these economies; (iii) Propose a conceptual framework linking institutional quality, financial innovation, transaction costs, and information asymmetry to the degree of market completeness; (iv) Reinterpret equilibrium outcomes as constrained-efficient rather than Pareto-optimal under frontier conditions; (v) lastly, highlight implications for welfare, risk-sharing, and capital allocation.

The paper contributes to the literature in three main ways. First, it synthesizes insights from general equilibrium theory, incomplete markets theory, and institutional economics to develop a unified conceptual perspective relevant for frontier economies. Second, it proposes a new conceptual GE framework incorporating variables such as institutional quality, transaction costs, and financial innovation, which are absent in classical models. Third, it extends the theoretical understanding of equilibrium in contexts where missing markets and financial frictions are structural rather than temporary anomalies.

The remainder of the paper is structured as follows. Section 2 reviews the literature on general equilibrium, incomplete markets, and institutional constraints. Section 3 theoretical critiques of GE in frontier economies; Section 4 presents proposed conceptual framework. Section 5 provides theoretical and policy implications, and Section 6 concludes with directions for future research.

LITERATURE REVIEW

Classical General Equilibrium Theory

The classical general equilibrium (GE) framework is anchored in the Arrow-Debreu model, where all future contingencies are tradable and markets for every state of the world exist. Under these assumptions, competitive equilibria guarantee Pareto-efficient allocations (Arrow & Debreu, 1954). The First Welfare Theorem establishes that market-clearing competitive equilibria achieve efficiency, while the Second Welfare Theorem shows that any efficient allocation can be decentralized with appropriate transfers (Debreu, 1983).

A critical extension of this framework is Radner's (1972) model of sequential markets, which incorporates time and uncertainty by allowing agents to trade repeatedly over time, subject to information constraints. Radner's model preserves the central insights of Arrow-Debreu while showing that equilibrium outcomes depend on expectations and information dynamics. Competitive equilibrium conditions in these frameworks rely on convexity, rational expectations, and full market participation conditions that rarely hold in frontier economies. Although these classical models provide a rigorous theoretical foundation, their reliance on complete markets and frictionless trade highlights limitations when applied to environments characterized by institutional weaknesses and missing markets.

Incomplete Markets Theory

Incomplete markets theory challenges the assumption that all contingencies can be insured or traded, emphasizing that missing markets fundamentally alter equilibrium properties. Geanakoplos and Polemarchakis (1986) demonstrate that competitive equilibria in incomplete markets are generally constrained inefficient, meaning that prices fail to fully reflect risks, and welfare theorems break down.

The incomplete contracts literature further contributes to this critique. Hart (1995) argues that contracts cannot cover all future states due to non-verifiability or enforcement limitations, leading to suboptimal allocations and underinvestment. In credit markets, Stiglitz and Weiss (1981) show how information asymmetry can produce credit rationing, preventing borrowers particularly in developing contexts from accessing funds even when willing to pay higher interest rates.

Risk-sharing failures also arise in environments where insurance markets are thin or non-existent (Townsend, 1994). These constraints are particularly salient in frontier economies where households and firms face large uninsurable shocks, and informal networks only partially compensate for missing formal markets.

Institutions and Financial Development

The role of institutions has been widely studied as a determinant of financial development and market completeness. Weak legal enforcement increases contracting costs and undermines the ability of markets to support long-term or state-contingent agreements (La Porta *et al.,* 1998). High information asymmetry further limits the depth and liquidity of financial markets, leading to adverse selection and moral hazard problems (Akerlof, 1970).

Inadequate regulatory capacity also contributes to shallow financial systems. When regulators lack the tools to supervise markets effectively, risks cannot be priced accurately, discouraging innovation in financial instruments. These institutional constraints interact with market structure to influence the extent of incompleteness, thereby affecting macroeconomic outcomes. For frontier economies specifically, institutional constraints often amplify existing market failures, reducing the ability of financial systems to absorb shocks or channel resources toward productive activities.

Frontier Economies and Market Structure

Frontier economies are distinguished by shallow asset markets, limited financial depth, and high transaction costs. The scarcity of financial instruments particularly state-contingent assets—restricts the ability of agents to hedge risks or smooth consumption (Beck *et al*., 2011). Market frictions such as illiquidity, volatility, and high intermediation costs worsen these challenges.

Structural constraints, including concentrated banking sectors, limited capital markets, and weak cross-border financial flows, further exacerbate incompleteness. These economies frequently rely on informal markets to substitute for missing formal mechanisms, creating hybrid equilibria that diverge from Walrasian predictions (Banerjee & Duflo, 2011). This environment leads to persistent inefficiencies, multiple equilibria, and vulnerability to external shocks. As a result, the theoretical assumptions embedded in mature-economy GE models do not accurately capture the dynamics of frontier economies.

Gaps in the Literature

Three major gaps emerge from the literature; general equilibrium models are largely built on the assumption of mature financial markets, where contingent claims, risk-sharing mechanisms, and contract enforcement are well developed. This limits the applicability of traditional GE results in contexts where market structure deviates significantly. Secondly, there is limited theoretical work contextualizing GE frameworks specifically for emerging and frontier markets. Existing GE extensions focus on advanced economies with well-developed institutional environments, leaving a gap in conceptual models tailored to structurally constrained markets. Lastly, the literature lacks a unified conceptual framework linking institutional quality to market incompleteness

within a GE setting. While institutions and market failures are studied separately, few works integrate them into a systematic theory of equilibrium for frontier economies. These gaps underscore the need for a conceptual re-evaluation of general equilibrium theory, adapted to the structural and institutional realities of frontier markets.

Theoretical Critiques of General Equilibrium in Frontier Economies

General equilibrium (GE) theory provides an elegant analytical foundation for understanding price-mediated coordination in competitive economies. However, its core assumptions complete markets, perfect information, rational expectations, and frictionless trade tend to align more closely with advanced economies than with frontier economies. As a result, several theoretical critiques emerge when traditional GE models are applied to contexts characterized by institutional fragility, market thinness, and pervasive uncertainty.

Unrealistic Assumptions of Complete Markets

Classical GE models assume the existence of a complete set of contingent markets, enabling agents to fully insure against future risks (Arrow & Debreu, 1954). In frontier economies, where financial instruments are limited and state-contingent claims are largely absent, these assumptions are untenable. The absence of insurance, derivative, and long-term credit markets fundamentally alters equilibrium properties.

The critique is not merely empirical but theoretical: when markets are incomplete, competitive equilibria need not be Pareto efficient, undermining the welfare theorems (Geanakoplos & Polemarchakis, 1986). In such settings, prices fail to internalize relevant risks, leading agents to adopt excessively conservative investment strategies, thereby slowing structural transformation. The theoretical architecture of GE thus becomes misaligned with environments where market completeness is structurally impossible.

Information Imperfections and Asymmetric Market Participation

General equilibrium models typically assume perfect information or, at minimum, rational expectations. Frontier economies exhibit substantial information asymmetry, weak credit registries, and opaque market signals (Akerlof, 1970). These imperfections influence not only market outcomes but also the formation of expectations—key drivers of equilibrium dynamics in Radner's sequential markets model.

Information asymmetry distorts price discovery, reduces the informativeness of markets, and leads to phenomena such as credit rationing, where some borrowers are excluded from credit markets despite high willingness to pay (Stiglitz & Weiss, 1981). These conditions are incompatible with the GE framework, which relies on frictionless participation and information-perfect equilibria.

Moreover, the issue is compounded by heterogeneous access: in frontier markets, large firms and politically connected actors receive disproportionate market signals and credit access, violating the representative-agent assumptions embedded in classical GE models.

Institutional Failures and Enforcement Constraints

Institutional quality fundamentally shapes how markets operate, yet classical GE analysis largely abstracts away from institutions. In frontier economies, legal enforcement is weak, contract execution is costly, and property rights are inconsistently protected (La Porta *et al.*, 1998). These institutional failures undermine the credibility of long-term contracts and reduce the scope for risk-sharing arrangements.

Incomplete contract theory shows that when enforcement is limited, equilibrium allocations systematically diverge from efficient outcomes (Hart, 1995). As a result, GE predictions become theoretically fragile in contexts where the feasibility of contracts cannot be guaranteed. Frontier economies often rely on informal enforcement mechanisms that are relational, localized, and incompatible with GE's universalist assumptions about anonymous market exchange. Thus, the critique extends beyond empirical mismatch: GE theory lacks institutional micro foundations capable of describing the reality of constrained contracting environments.

Market Frictions and Non-Convexities

Classical GE models rely on convex production sets, continuous adjustment, and negligible transaction costs. Frontier economies, by contrast, exhibit substantial frictions, including high transportation costs, illiquid markets, and large entry barriers (Banerjee & Duflo, 2011). Such frictions create non-convexities including increasing returns to scale, indivisibilities, and sectoral rigidities that invalidate the existence and uniqueness of GE equilibria.

Furthermore, asset markets in frontier economies are thin, often with few participants and limited liquidity. Thin markets generate price volatility, reduce arbitrage opportunities, and prevent convergence toward stable competitive equilibria. These realities challenge the fundamental GE notion that competitive forces discipline prices and ensure efficient resource allocation. Because frictions are structural and persistent, not temporary aberrations, GE becomes theoretically incapable of describing equilibrium behavior under these conditions.

Multiple Equilibria, Path Dependence, and Coordination Failures

Several theorists have shown that in environments with strong externalities, missing markets, and non-convexities, economies can become stuck in low-level equilibria (Murphy, Shleifer, & Vishny, 1989). Frontier economies, characterized by small market size and infrastructural deficits, are especially susceptible to such coordination failures.

Classical GE theory, however, presumes a unique and efficient equilibrium. In reality, frontier economies can exhibit: Multiple equilibria, depending on initial conditions; Hysteresis, where temporary shocks cause permanent structural effects; Coordination failures, where individual rationality leads to collectively suboptimal outcomes. These features violate the assumptions necessary for the existence and stability of Walrasian equilibria. The theory thus becomes inadequate for environments where equilibrium is not unique, stable, or efficient.

Lack of Integrative Models Linking Institutions, Markets, and Equilibrium

A final critique is the absence of a unified conceptual framework integrating institutional constraints, market incompleteness, and GE theory. While separate literatures exist on institutions, incomplete markets, and development, these strands rarely converge into a single theoretical model appropriate for frontier markets (Acemoglu & Zilibotti, 1997).

As a result, policymakers in frontier economies lack conceptual tools to understand how institutional reforms or market-deepening efforts affect equilibrium allocations. GE theory fails to capture the co-evolution of institutions and markets, leaving a theoretical vacuum in contexts where such interactions are central to economic outcomes.

Proposed Conceptual Framework

This section introduces a conceptual framework that reinterprets general equilibrium (GE) theory for frontier economies by integrating market incompleteness, institutional constraints, and structural frictions. The goal is not to replace classical GE theory but to extend its analytical boundaries to accommodate environments where markets are thin, institutions are imperfect, and uncertainty is pervasive. The framework rests on three interdependent pillars: (i) structural market incompleteness, (ii) institutional capacity and contract enforcement, and (iii) equilibrium formation under frictions and heterogeneous expectations.

Pillar 1: Structural Market Incompleteness

Frontier economies exhibit deep-rooted market incompleteness due to limited financial instruments, missing contingent claims, and the absence of long-term credit markets. Unlike mature economies, where incomplete markets may arise as exceptions, incompleteness in frontier economies is structural arising from low financial depth, limited innovation, and high entry barriers in financial intermediation.

At the core of the framework is the recognition that equilibrium in frontier economies is constrained by missing risk-sharing channels (Geanakoplos & Polemarchakis, 1986). In such settings: Prices do not fully reflect

underlying risks; Agents face binding liquidity and borrowing constraints; Investment decisions are driven by risk exposure rather than productivity; and Consumption smoothing is limited, increasing vulnerability to shocks

These dynamics create equilibrium allocations that systematically diverge from efficiency benchmarks predicted by Arrow-Debreu theory. Thus, the first pillar emphasizes that frontier economies operate in a constrained equilibrium space shaped by persistent market incompleteness.

Pillar 2: Institutional Quality and Contract Enforcement

The second pillar introduces institutional capacity as a foundational component of equilibrium formation. Institutions legal systems, regulatory regimes, property rights frameworks, and information infrastructures shape the feasibility of contracts and the credibility of market exchange. Weak institutions amplify market incompleteness and limit the scope of competitive equilibrium outcomes.

Following the insights of Hart (1995) and La Porta *et al.,* (1998), the framework conceptualizes institutions as determinants of: Contract enforceability; Information symmetry; Transaction costs;

Market participation; Financial innovation. In frontier economies, institutional weaknesses produce relational equilibria where trust, networks, and informal enforcement substitute for formal contracting mechanisms (Banerjee & Duflo, 2011). Thus, equilibrium becomes a function not only of prices and preferences but also of informal institutions, which are largely excluded from classical GE models. The framework therefore integrates institutional constraints as endogenous determinants of equilibrium, rather than exogenous background conditions.

Pillar 3: Equilibrium Formation Under Frictions and Heterogeneous Expectations

The third pillar reconsiders equilibrium formation by incorporating structural frictions and heterogeneous expectations. Frontier economies often experience high transaction costs, non-convexities in production, illiquid asset markets, and limited arbitrage. These frictions interact with incomplete information to shape how agents form expectations about future prices, shocks, and returns.

Drawing on Radner's (1972) sequential markets model, this pillar highlights that expectations in frontier economies are: Locally informed rather than globally coordinated; Influenced by informal signals, networks, and uncertainty; Heterogeneous due to information asymmetry; More adaptive than rational in the classical sense. Under these conditions, equilibrium is not guaranteed to be unique, stable, or efficient. Instead, the economy may converge to multiple constrained equilibria, depending on initial conditions, market signals, and institutional quality (Murphy *et al.,* 1989; Acemoglu & Zilibotti, 1997). Thus, equilibrium formation in frontier economies must be understood as an adaptive process shaped by localized information flows and persistent frictions not as a frictionless instantaneous adjustment as posited in classical GE theory.

Integrating the Three Pillars: A Frontier Economy GE Framework

The proposed conceptual model integrates the three pillars to produce a Frontier General Equilibrium (FGE) Framework. The FGE framework departs from the Arrow-Debreu paradigm by embedding GE decisions within a triad of structural constraints: Market incompleteness; constrains feasible allocations; Institutional quality shapes contracting possibilities and information flows; Market frictions and heterogeneous expectations influence equilibrium dynamics

In this integrated approach, equilibrium in frontier economies is not simply a price vector that clears all markets. Instead, it represents a constrained institutional equilibrium determined by:

The extent of market incompleteness; The credibility and enforceability of contracts; The degree of frictions affecting production and exchange; The heterogeneity of expectations due to information asymmetry

This redefinition provides a theoretically coherent basis for analyzing development outcomes, financial vulnerability, and policy interventions in frontier economies. The FGE framework provides several analytical

advantages that is it reconciles GE analysis with empirical realities of frontier markets; it explains why traditional welfare theorems fail in low-capacity environments; it highlights the co-evolution of institutions and markets; it allows policymakers to identify binding structural constraints; it provides a basis for evaluating institutional reforms and financial innovation. The overall, the framework offers a conceptual foundation for rethinking equilibrium theory in contexts where classical assumptions do not hold.

Implications for Frontier Market Policymakers and Researchers

General Equilibrium (GE) theory provides powerful tools for analyzing resource allocation under competitive conditions; however, the classical conclusions drawn from the Arrow-Debreu model depend critically on the assumption of complete markets (Arrow & Debreu, 1954). When markets are incomplete as is typical in frontier economies, competitive equilibria no longer guarantee Pareto efficiency or stability. The incomplete-markets literature shows that missing financial instruments, imperfect information, and contracting limitations fundamentally alter equilibrium properties (Geanakoplos & Polemarchakis, 1986; Hart, 1975). This section outlines the implications of these theoretical insights for policymakers and researchers working in frontier market contexts.

Policy Implications

Recognizing That Competitive Equilibria May Be Constrained Inefficient

In the Arrow-Debreu framework, competitive equilibria are Pareto optimal. However, with incomplete markets, equilibria may fail to achieve constrained optimality even if agents act rationally (Geanakoplos & Polemarchakis, 1986). This implies that policymaking in frontier markets cannot rely solely on market self-correction. Structural features such as missing insurance markets, long-term credit gaps, and limited asset diversification make government intervention welfare-improving. Policymakers must therefore view GE results as conditional rather than universal.

Designing Interventions That Complete or Deepen Markets

Incomplete-markets theory reveals that welfare losses arise when markets for contingent claims or intertemporal assets are missing (Hart, 1975). In frontier economies, shallow financial systems mean that basic hedging and risk-sharing instruments are absent. Policy interventions should target: expanding insurance markets; developing long-term capital markets; and improving contract enforcement to support sequential markets (Radner, 1972). These interventions effectively move the economy closer to the conditions under which GE results hold.

Strengthening Information and Contracting Institutions

Information asymmetry undermines the existence and efficiency of equilibria. Stiglitz and Weiss (1981) demonstrate that credit rationing arises even under competitive conditions when lenders cannot observe borrower characteristics. Similarly, Radner (1972) shows that incomplete or imperfect information prevents equilibrium from achieving Arrow-Debreu outcomes. Policymakers in frontier markets should prioritize: credit information systems, public registries, standardized contracting frameworks, and transparent regulatory enforcement. These institutional improvements reduce information frictions that distort equilibrium formation.

Stabilizing Economies Characterized by Fragile or Indeterminate Equilibria

In incomplete markets, equilibria may be non-unique, unstable, or sensitive to expectations (Arrow, 1971). Frontier markets often characterized by high uncertainty and volatility face amplified risks from such properties. Governments should therefore adopt stabilization tools such as: countercyclical policies, guarantees or backstops for critical markets, and regulations to prevent excessive leverage and contagion. These policies mitigate equilibrium fragility arising from structural market incompleteness.

Research Implications

Developing GE Models Tailored to Incomplete Market Conditions

Most GE models are calibrated for advanced economies. Researchers in frontier markets must develop models that explicitly incorporate: missing markets; limited asset availability; contracting failures; and information asymmetry. This aligns with Radner's (1972) sequential markets framework and the incomplete-markets extensions by Hart (1975, 1979).

Advancing Theoretical Work on Equilibrium Existence and Stability

Incomplete markets complicate equilibrium existence, uniqueness, and determinacy (Arrow & Hahn, 1971). Future research should explore: equilibrium conditions under institutional weakness, dynamic equilibria with imperfect information, and stability properties in shallow financial markets. These extensions are essential for understanding real-world equilibrium behavior in frontier economies.

Empirical Measurement of Market Incompleteness

While GE theory predicts significant welfare losses from incomplete markets, empirical verification in frontier economies remains limited. Researchers should measure: insurance market gaps, risk-sharing failures, credit rationing outcomes, and asset-market depth. These evidence is necessary to assess how closely actual economies approximate the conditions required for GE results.

Linking GE Theory with Frontier-Market Realities

The incomplete-markets literature demonstrates that classical GE results are not invalid they are simply conditional. Frontier economies operate far from the assumptions of complete markets, and therefore GE insights must be applied with appropriate theoretical caution. By grounding policy and research in incomplete-markets GE rather than idealized Arrow-Debreu conditions, frontier economies can benefit from a more realistic and analytically robust approach to equilibrium dynamics.

CONCLUSION

This paper has provided a conceptual re-evaluation of General Equilibrium (GE) theory through the lens of market incompleteness, with specific focus on the structural and institutional realities of frontier economies. Classical GE models embodied in the Arrow-Debreu framework offer powerful insights into how markets can coordinate allocation under idealized conditions of completeness, perfect information, and enforceable contracts. However, when these assumptions are relaxed, particularly in environments characterized by shallow financial markets, weak institutions, and pervasive frictions, equilibrium outcomes deviate substantially from their theoretical predictions.

The review of literature demonstrated that incomplete markets fundamentally alter the efficiency, stability, and welfare properties of competitive equilibria. Insights from Geanakoplos and Polemarchakis, Radner, and institutional economics suggest that missing markets, contracting failures, and information asymmetries are not anomalies but structural features especially in frontier economies. These conditions can generate constrained inefficiency, multiple equilibria, and heightened vulnerability to shocks. As a result, policy prescriptions derived from complete-market GE models cannot be straightforwardly applied to frontier contexts.

In response to these limitations, the paper developed a conceptual framework that integrates structural constraints, institutional quality, and market incompleteness into a unified understanding of how equilibria are formed and how they perform in frontier settings. The framework illustrates that institutional weaknesses are not external to GE but are central to determining whether equilibria exist, whether they are efficient, and whether they are stable over time.

Thus, these theoretical insights carry important implications for both policy and research. Policymakers in frontier economies must recognize that incomplete markets produce predictable patterns of inefficiency and

fragility, and that carefully designed interventions aimed at expanding markets, strengthening institutions, and improving information structures can lead to welfare-enhancing outcomes. For researchers, the findings highlight the need to develop GE models tailored to frontier conditions, advance theoretical work on equilibrium existence under weak institutions, and deepen empirical measurement of market incompleteness.

Overall, the paper contributes to a growing body of scholarship that calls for context-specific applications of GE theory. Rather than discarding GE due to its demanding assumptions, the analysis shows how modifying and extending the theory can yield a more realistic and policy-relevant understanding of frontier economies. A GE framework that explicitly incorporates institutional quality, market depth, and structural constraints provides a more accurate analytical foundation for diagnosing economic challenges and designing effective interventions.

In sum, the paper argues for a reoriented approach to GE in frontier economies one that moves beyond abstract idealizations and toward an integrative, institutionally grounded, and empirically informed conceptualization of equilibrium. Such an approach not only enhances theoretical coherence but also strengthens the capacity of policymakers and researchers to address the complex economic realities of frontier markets.

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