Alienation of Title-Circulation Right: A Cross-Border Economic Game Hypothesis Based on the Theory of Extractive Institutions

权属流通权异化：基于制度汲取理论的全球跨境经济博弈假说

HuangZhenHua

Independent Researcher

China · Guangdong · Foshan

tinkboathuang@sina.com

Working Paper | Submission Date: August 29, 2026

Abstract

The 2024 Nobel Memorial Prize in Economic Sciences established the "inclusive institutions—extractive institutions" framework for explaining the rise and fall of nations, yet its analytical boundary is largely confined to the internal political-economic structure of individual sovereign states. The cross-border dimensions of institutional extraction—operating through global financial pipelines, asset pledge arrangements, and title-circulation rules—remain undertheorized. Building on this canonical framework, this paper introduces the Title-Circulation Right (TCR; 权属流通权) as a supplementary analytical variable and proposes a Cross-Border Institutional Extraction Hypothesis to explain the emergence of novel asymmetric global allocation mechanisms, including commodity custody, supply-chain certificate circulation, and trade time-lag arbitrage. In parallel, the paper engages the creative-destruction research recognized by the 2025 Nobel Memorial Prize: when circulation rights are institutionally appropriated, the institutional preconditions of creative destruction—appropriability of innovation returns, contestable market entry, and openness to new ideas—are systematically eroded, and growth faces the long-run risk of degenerating into involutionary dynamics.

This paper observes that, with the expansion of digital entitlement confirmation, warehouse-receipt financialization, cross-border supply-chain certificates, and multi-layered derivative structures, the locus of value allocation has shifted from physical production to financial pipelines embedded in entitlement confirmation, registration, pledge, profit-sharing, and multi-tier circulation. The analysis therefore moves from an "ownership-centered narrative" toward a "circulation-right-centered narrative": even when legal ownership of physical assets remains unchanged, value extraction can persist if the derived circulation rights are monopolized by external actors. Ownership matters, but it *does not exhaust allocative power; circulation rights constitute the other dimension of power long obscured by the old paradigm.*

At the mechanism level, the paper constructs three interrelated analytical components: the Valve-Pipeline System (VPS; 阀门-管道体系), characterizing the institutional infrastructure of cross-border financial pipelines; the Shadow Currency System (SCS; 影子货币体系), depicting a dual-anchored bookkeeping, circulation, and storage instrument; and the Surplus-Value Re-Flow Lock-in (SVRL; 剩余价值回流锁定) mechanism, explaining the long-run stability of the allocation order through targeted, small-scale, and continuous value reflows. Based on thought experiments and ideal-type methods, the paper deduces these mechanisms and compares them with the Marshall Plan to demonstrate generational differences in driving sources, value sources, lock-in targets, and persistence cycles.

This paper is a thought-experiment-based theoretical deduction for risk early-warning purposes. It does not constitute empirical judgment on any real-world institution or actor, nor does it claim that the hypothesized mechanism has been fully realized; only fragmented components—such as repeated warehouse-receipt pledges, transfer of supply-chain finance receivables, ESG entry thresholds, and settlement-rights accumulation offshore—are observable in reality. Its purpose is to provide a testable and falsifiable supplementary perspective for the study of global asymmetric allocation and long-run systemic risk.

Keywords: Title-Circulation Right; Cross-Border Institutional Extraction; Theory of Extractive Institutions; Creative Destruction; Anti-Involution; Surplus-Value Re-Flow Lock-in; Valve-Pipeline System; Shadow Currency System; Hypothesis

Part I: Introduction and Theoretical Foundation (Ch. 1-3)

Chapter 1: Introduction — The Cross-Border Dimension Gap of the Theory of Extractive Institutions and the Research Positioning of This Paper

1.1 Research Background: The Cross-Border Dimension Gap of the Theory of Extractive Institutions

The core achievement of the 2024 Nobel Memorial Prize in Economic Sciences established the "inclusive institutions—extractive institutions" framework for analyzing the rise and fall of nations. The central contribution of this framework lies in placing institutional structure at the center of economic growth research: inclusive institutions release productive potential through the broad protection of property rights and the encouragement of innovation and competition, whereas extractive institutions suppress long-term development by concentrating economic surplus in the hands of a small elite. This achievement provides an exceptionally powerful baseline framework for understanding disparities in wealth between nations.

However, the analytical boundary of this framework is largely confined to the internal political-economic structure of individual sovereign states: its unit of analysis is the nation, its transmission mechanism is domestic institutions, and its conclusion boundary is the rise and fall of nations. The framework has yet to offer a systematic theoretical treatment of how institutional extraction operates beyond national borders—how, through cross-border financial pipelines, asset pledge arrangements, and title-circulation rules, it reshapes the global pattern of value allocation. In other words, the theory of extractive institutions answers why extractive institutions within a country suppress prosperity, but it says comparatively little about how international institutional arrangements generate systematic cross-border value transfers beneath a surface of sovereign equality.

Building on this canonical paradigm, this paper introduces the Title-Circulation Right (TCR; 权属流通权) as a supplementary analytical variable and constructs a cross-border evolutionary hypothesis of institutional extraction, seeking to explain the formation logic and evolutionary direction of novel global asymmetric allocation mechanisms, including contemporary computing-power leasing, commodity custody, and trade time-lag arbitrage. The core judgment of this paper is that when the locus of value allocation shifts from physical production to cross-border financial pipelines, institutional extraction acquires a deterritorialized contemporary form—it no longer depends on military occupation or direct administrative rule, but is embedded in seemingly neutral institutional arrangements such as entitlement confirmation rules, settlement nodes, and access valves. This judgment constitutes a testable hypothesis based on the ideal-type method and does not constitute a characterization of any real-world institution.

As used in this paper, "Cross-Border Institutional Extraction" (CBIE; 跨境制度性权益汲取) refers to an analytical concept in which global core economies, relying on rule-making power, control over settlement nodes, and discretion over access valves, obtain an above-normal share of the value increment from the cross-border circulation of peripheral participants through institutional arrangements such as entitlement confirmation, registration, pledge, and profit-sharing. This concept is an ideal-type construction and does not constitute a qualitative judgment of any real-world institution.

1.2 Three Contemporaneous Symptoms: The Observational Starting Point of the Structural Transformation of Globalization

The observational starting point of this paper consists of three sets of structural phenomena coexisting in contemporary globalization. These phenomena cannot be fully explained by existing theoretical frameworks and constitute the empirical anchor of the theoretical construction here.

1.2.1 The Paradox of Export Expansion and Relative Wealth Contraction

In many late-industrializing economies, export volumes continue to expand, manufacturing capacity and port throughput rise year after year, and the bookkeeping figures of international trade look impressive; yet, at the same time, the relative share of national wealth in the global wealth structure has not grown in step, debt pressure keeps accumulating, and domestic industrial upgrading faces structural constraints. Factories run as usual, containers circulate as usual, yet a marked decoupling has emerged between production expansion and wealth accumulation. Traditional comparative-advantage theory attributes trade gains to the efficiency gains of specialization, and its analytical framework ends with the exchange of physical goods; in contemporary trade reality, however, the crossing of a customs border is often not the endpoint of value allocation but the starting point of value reallocation.

1.2.2 The Iteration of Trade Instruments and the Ineffectiveness of Traditional Gaming Tools

Trade control instruments are undergoing a quiet iteration: alongside traditional tariff tools, origin-piercing verification, supply-chain compliance review, long-arm jurisdiction, access restrictions on financial infrastructure, and ESG and supply-chain ethics standards have arrived one after another. Their common feature is that many restrictions do not directly prohibit the import and export of physical goods; instead, they precisely restrict the financial rights attached to goods, cross-border settlement privileges, and financing channels. Goods may be released, but derived circulation rights may be restricted; payment may be received, but the space for reinvesting the proceeds may be narrowed. As Farrell and Newman revealed in their theory of "weaponized interdependence," actors occupying key nodes in global economic networks can convert interdependence into asymmetric instruments of power. This new form of gaming centered on rules and nodes confronts traditional tariff thinking with a competitive landscape of fundamentally different magnitudes.

1.2.3 The Coexistence of Material-Life Improvement and Structural Dependence

In many secondary economies deeply integrated into the global division of labor, the actual living standards of ordinary people have indeed improved considerably: cheap consumer goods are widely available, basic social security is gradually being established, and urbanization is advancing rapidly. Yet, at the same time, a hard-to-articulate sense of structural dependence pervades society: the autonomy of the economic lifeline is constrained, the ceiling on industrial upgrading appears to be set by others, and the transmission of external crises almost invariably reaches the domestic economy. The coexistence of improved individual well-being and macro-structural dependence constitutes the most recognizable structural symptom of our era. As Hirschman noted, trade dependence itself can be used as an instrument of influence; when the daily functioning of a society is deeply embedded in some external pipeline, its space for strategic autonomy is quietly eroded by structural dependence.

1.3 Paradigm Shift: From Ownership Narrative to Title-Circulation Narrative

Over the past century, the grand debates over public versus private ownership have, to a large extent, shared a common premise: that ownership is the sole pivot of allocative power. This paper argues that this paradigm needs to be reexamined—the key to understanding contemporary global allocation problems is shifting from "who owns" to "who holds the circulation rights."

1.3.1 The Formation and Historical Rationality of the Ownership-Centered Narrative

Both sides of the debate—whether the defenders of the sanctity of private property or the advocates of the fairness of public ownership—concentrate their attention on the question of "who owns the means of production." This paradigm is not accidental; it corresponds to the historical reality of early industrial capitalism, when the factory was the core site of value creation and ownership of the means of production directly determined the distribution of surplus value.

1.3.2 The Shift of the Locus of Value Allocation

With the deepening interpenetration of globalization and financialization, however, the locus of value allocation has shifted significantly. The expansion of digital entitlement confirmation, warehouse-receipt financialization, cross-border supply-chain certificates, and multi-layered derivative structures means that value extraction increasingly occurs less in factory workshops and more inside the financial pipelines of entitlement confirmation, registration, pledge, profit-sharing, and multi-tier circulation embedded in cross-border goods flows. This shift implies that the theoretical tools used to analyze allocation problems must be upgraded accordingly.

1.3.3 The Institutional Fact of the Separation of Property Rights and Circulation Rights

There is a long-neglected institutional fact here: even if the legal ownership of physical assets remains unchanged, once the derived circulation rights of assets entering the circulation pipeline are monopolized by external actors, value extraction can continue unabated. An actor may nominally own its factories, mines, and land; yet as long as the pricing power, profit-sharing rights, pledge-financing rights, and multi-tier circulation income rights over those assets in the global circulation pipeline are held by an external system, value can continue to be transferred away in a lawful, concealed, and institutionalized manner. Ownership matters, but it cannot be equated with the totality of allocative power; circulation rights constitute the other dimension of power long obscured by the old paradigm. This cognitive leap is the logical starting point of the entire theoretical construction of this paper.

1.4 Three-Stage Evolution of Globalization: From Physical Trade to Certificate-Based Gaming

To locate the temporal coordinates discussed in this paper, it is necessary to divide the historical process of economic globalization into three interlocking, superimposed stages.

Stage One: Primary physical globalization (mid-nineteenth century to mid-twentieth century). This stage was dominated by cross-border transport of goods, direct capital investment, tariff negotiations, and quota trade. The primary object of trade gaming was the physical goods themselves, and the analysis of trade gains rested on comparative-advantage theory. The institutional inequality of this stage was characterized chiefly by territorial occupation, resource extraction, and direct administrative rule; its overt nature was visible and tangible, and classical Marxism and imperialism theory had already provided a profound analysis of it.

Stage Two: Financialized trade (1970s to early twenty-first century). After the collapse of the Bretton Woods system, the expansion of credit money removed the institutional obstacles to the financialization of trade. Letters of credit, offshore settlement, commodity futures, and supply-chain finance gradually became embedded in trade processes; finance evolved from an auxiliary tool of trade into an independent variable in value allocation. Dependency theory flourished in this stage, revealing the pattern of unequal exchange under the center–periphery structure; but existing research remained largely at the macro level, describing outcomes, and the micro-chain through which value within a single transaction is progressively transferred via contracts, entitlement confirmation, and clearing rules remained insufficiently deduced.

Stage Three: High-order certificate-based globalization (early twenty-first century to the present). In the current stage, a large volume of physical commodities, upon completion of physical production, simultaneously generate an entire set of derivative financial certificates—warehouse receipts, title certificates, pledge rights, supply-chain accounts-receivable certificates, forward delivery rights, and so on. A batch of goods is no longer merely a pile of physical objects; it is simultaneously a stack of financial rights that can be repeatedly traded, pledged, resold, and profit-shared; the physical transport of goods is only one link in the operation of this certificate system. Pricing power is concentrated in exchanges, futures prices become the pricing benchmark, and financial capital amplifies price fluctuations—commodities are no longer merely the object of physical trade but the vehicle of financial gaming. When pricing power, financialization channels, and entitlement confirmation rules are controlled by others, the expansion of trade scale does not necessarily equal the synchronous accumulation of wealth.

These three stages are not simple sequential replacements but a nested, superimposed structure: physical trade still exists, financialized instruments still operate, and atop them is superimposed a more concealed layer of certificate-based gaming. It is this newest superimposed layer that has created the three sets of contemporaneous symptoms discussed above and that calls for a new theoretical paradigm to identify, explain, and provide early warning.

1.5 Explanatory Boundaries and Gaps of Existing Theoretical Paradigms

To clearly position the academic increment of this paper, it is necessary to systematically review the explanatory boundaries and gaps of existing theoretical paradigms.

Neoclassical trade theory: the "neutrality assumption" of circulation. Comparative-advantage and factor-endowment theories treat trade as an equivalent exchange of factors, implicitly assuming that value allocation is complete once the transaction is done, and regard circulation as a subsidiary process generating only small transaction costs. In the certificate-based era, circulation is no longer a simple auxiliary link; it is itself the core site of allocative power—this structural change constitutes a major blind spot of the neoclassical framework.

Traditional dependency theory: the gap between macro judgment and micro chain. Dependency theory powerfully identified the center–periphery structure of the global system, but remained largely at the macro level in describing outcomes. It can show that an unequal allocation pattern exists, yet it struggles to decompose through which steps, according to what rules, and by means of what institutional instruments value is transferred. The ideal-typed treatment of micro-pipelines, valves, and access rules remains unfinished work for this tradition.

Marxist theory of fictitious capital: a dimension of power awaiting extension. In Volume III of Capital, Marx analyzed fictitious capital, showing that real capital can be represented as paper duplicates. In the new environment of certificate-based globalization, derivative certificates no longer merely passively reflect the expected returns of real capital; pipeline controllers can actively shape the process of value appreciation and allocation of real assets by modifying rules and adjusting access thresholds. Fictitious capital is no longer a mere "reflection"; it may become an instrument of power that intervenes in real allocation—this dimension has ample room for extension in existing research.

The theory of extractive institutions (2024 Nobel Memorial Prize): the internal boundary of the nation-state. The theory of extractive institutions profoundly reveals the mechanism by which extractive institutions within a country suppress long-term prosperity, but its unit of analysis and transmission mechanism are both bounded by the sovereign state. When the locus of value allocation extends into cross-border financial pipelines, the analysis of extraction must be extended from "domestic institutions" to "cross-border institutional arrangements"—precisely the dimension this paper seeks to supplement.

The theoretical gap of the re-flow–lock-in mechanism. Classical theory focuses mainly on the creation and one-directional appropriation of surplus value, lacking a systematic treatment of the re-flow of surplus value and its social effects. The labor-aristocracy theory observed the phenomenon of a minority of workers within the metropolitan core being materially bought off, but its scale of analysis was confined within the metropole; when value re-flow operates in a targeted, small-scale, and continuous manner across an entire secondary economy and its bottom strata, its institutional function exceeds the explanatory range of existing theories. This difference in scale constitutes the theoretical gap of the re-flow–lock-in mechanism.

1.6 Institutional Conditions of Creative Destruction: From Rights Consolidation to the Risk Path of Involution

1.6.1 The Creative Destruction Framework of the 2025 Nobel Memorial Prize in Economic Sciences

The 2025 Nobel Memorial Prize in Economic Sciences was awarded to Joel Mokyr, Philippe Aghion, and Peter Howitt for their contributions to the theory of innovation-driven economic growth. Mokyr revealed the knowledge accumulation, cultural environment, and social institutional conditions required for sustained growth—scientific breakthroughs and applied transformations reinforce and drive each other, and this process inevitably challenges vested interests, thus requiring openness to new ideas and allowing change to occur. Aghion and Howitt, building on Schumpeter's idea of "creative destruction," constructed rigorous mathematical models showing how new technologies replacing old ones and new firms challenging incumbents constitute the engine of sustained growth.

The creative-destruction framework internally contains three institutional conditions. First, the appropriability of innovation returns—innovators must be able to retain a sufficient share of the value their innovation creates; otherwise, innovation incentives will systematically atrophy. Second, the contestability of market access—new entrants must be able to challenge incumbents for destruction to occur. Third, the openness of society to new ideas—allowing new things to challenge the existing interest structure. These three conditions jointly determine whether an economy can leap from "quantitative expansion" to "qualitative growth."

1.6.2 The TCR Analysis as a Supplement to the Creative Destruction Framework

The Title-Circulation Right analytical framework of this paper supplements the creative-destruction framework with institutional conditions on the circulation dimension. The separation-of-property-rights-and-circulation-rights proposition shows that even if legal ownership of physical assets remains unchanged, once pricing power, profit-sharing rights, pledge-financing rights, and multi-tier circulation income rights are institutionally consolidated by the pipeline system, innovators cannot retain a sufficient share of their innovation returns—appropriability is systematically weakened at the circulation link; the access-valve system determines market entry by capital thresholds, whitelist qualifications, and compliance costs rather than by innovative capacity—the channel for new entrants to challenge incumbents is institutionally closed; and the re-flow–lock-in mechanism blunts demands for change through targeted, small-scale, continuous value re-flow—society's openness to new ideas and a new order is progressively consumed.

1.6.3 The Institutional Roots of Involution and the Academic Positioning of Anti-Involution

From this, the institutional roots of involution (内卷) can be deduced: involution is not the product of excessive competition but the product of the institutional conditions of creative destruction being destroyed by extractive arrangements. When innovation returns are intercepted at the circulation link, market access is monopolized by valves, and demands for change are blunted by re-flow, the economy can only operate through quantitative expansion—labor input keeps increasing and capacity keeps outputting, but value retention and upgrading potential keep flowing outward; competition among individuals intensifies while creative destruction at the aggregate level cannot occur. At this point society exhibits the form of "involution without destruction": competition intensity rises, yet there is a lack of new entrants armed with innovation; output scale expands, yet there is a lack of qualitative change pursued through transformation.

Therefore, the academic meaning of anti-involution (反内卷) is not to oppose competition or growth, but to restore the three institutional conditions on which creative destruction depends: to return innovation returns to innovators and block the institutional consolidation of circulation rights; to open the access valves so that capability rather than qualification determines market entry; and to repair the internal rights structure so that society remains open to new ideas and a new order. In this sense, the Title-Circulation Right analytical framework directly resonates with the 2025 Nobel Memorial Prize achievement: creative destruction answers "where growth comes from," while the Title-Circulation Right analysis answers "who intercepts the gains of growth, and how growth degenerates into involution after interception."

1.7 Core Questions, Research Positioning, and Boundary Statement

Based on the symptoms and gaps above, this paper answers three sets of interrelated questions through the method of political-economy thought experiments.

Question One: the mechanism of value allocation in the post-territorial era. Under deterritorialized institutional conditions, how do global core economies, relying on rule-making power, control over settlement nodes, and discretion over access valves, obtain the value increment of cross-border circulation while peripheral participants retain their physical ownership? Compared with traditional colonialism and neoliberal dependency relations, what are the similarities and the essential differences of this mechanism?

Question Two: the institutional logic of systemic stability. Why can this allocation pattern operate stably over the long run? How do targeted re-flow and path dependence achieve the institutional binding of participating actors? This paper answers this question by constructing the Surplus-Value Re-Flow Lock-in (SVRL; 剩余价值回流锁定) mechanism and drawing a historical comparison with the Marshall Plan.

Question Three: internal–external isomorphism and long-run evolutionary risk. Can the analytical framework of the separation of property rights and circulation rights be extended to the allocation of social resources within a country? On a longer historical scale, toward what institutional landscape will the systematic evolution of this mechanism lead? This paper accordingly constructs the Long-Term Institutional Lock-in (长期制度锁定) hypothesis as the endpoint of its deduction.

This paper does not seek a precise description of any real-world institution, nor does it promise accurate prediction of future events. It employs thought experiments and the ideal-type method, purifying the core mechanism through logically self-consistent model construction, and constrains the entire deduction with five quantifiable criteria—input variables anchorable in reality, transmission chains decomposable in logic, output results comparable with experience, game-theoretic steady states expressible in mathematics, and risk warnings verifiable and falsifiable—so that the theoretical construction remains rooted in observable proxy indicators.

Boundary statement: this paper is a thought-experiment-based theoretical deduction and risk early-warning study; it does not constitute an empirical judgment on any real-world institution, actor, or event. It does not claim that the Cross-Border Institutional Extraction mechanism has been fully realized in reality; only fragmented components—repeated warehouse-receipt pledges, transfer of supply-chain finance receivables, ESG entry thresholds, and settlement-rights accumulation offshore—are observable. Its purpose is, through theoretical purification, to provide an analyzable mirror for international political economy research that is testable and falsifiable.

Chapter 2: Core Conceptual System — Title-Circulation Right and the Five Analytical Categories

The first step of theoretical construction is to forge sharp conceptual tools. This chapter systematically defines the five core analytical categories of this paper: the Title-Circulation Right (TCR; 权属流通权), Cross-Border Institutional Extraction (CBIE; 跨境制度性权益汲取), Surplus-Value Re-Flow Lock-in (SVRL; 剩余价值回流锁定), the Valve-Pipeline System (VPS; 阀门-管道体系), and the Shadow Currency System (SCS; 影子货币体系). These five concepts form a nested, logically self-consistent conceptual genealogy—from the most basic unit of title to the macro structure—jointly supporting the basic skeleton of the theoretical analysis of this paper.

2.1 Title-Circulation Right (TCR): Definition and Jurisprudential Origins

The "alienation of the Title-Circulation Right" (权属流通权异化) as used in this paper refers to the process and state in which the legal ownership of physical assets remains stable while the derived circulation rights attached to them—pricing power, profit-sharing rights, pledge-financing rights, and multi-tier circulation income rights—are institutionally stripped away and consolidated in external actors.

The Title-Circulation Right (Title-Circulation Right, TCR) is an ideal-type thought-experiment concept constructed by this paper on the basis of the realities of certificate-based globalization. It is not a statutory property right under any existing codified law, but a core analytical instrument for explaining the phenomenon of "the fission of physical property rights and financial value-added rights" in the contemporary financial-trade system.

The so-called Title-Circulation Right does not refer to the possession and ownership of physical assets, but to an entire set of composite rights that are generated derivatively from physical assets—physical goods, bulk commodities, and so on—once those assets are connected to the cross-border financial circulation pipeline and complete on-chain entitlement confirmation: a set of rights that can circulate independently and regenerate value. Its origin is not a civil right created by statute; it derives essentially from the distribution-voucher-type rights spawned by the physical bulk-commodity trading system. The primary issuance quota is constrained by the underlying physical goods and deliverable capacity, and may be supported by gold-equivalent certificates as a value backstop.

The Title-Circulation Right comprises five categories of rights: the transfer right over the corresponding points (the right to freely buy, sell, and assign the certificate-based rights in the secondary market); the resale income right (the right to full ownership of the gains from reselling the rights after appreciation); the pledge-financing right (the right to use the rights as underlying collateral to obtain leveraged financing); the profit-sharing income right (the right to share, pro rata during the holding period, the ongoing operating income of the underlying asset pool); and the arbitrage right (the right to arbitrage price differences across markets, categories, and maturities).

Once institutionally stripped and generated, the TCR acquires an existence independent of the underlying physical assets. Physical delivery may be complete, but the points corresponding to the Title-Circulation Right do not terminate with the settlement of goods and payment; they continue to circulate and consolidate repeatedly within multi-layered agency pipelines, independent of the physical goods. A batch of physical goods can be consumed only once, but its corresponding TCR points can be reused, re-appreciated, and re-shared in profit repeatedly. This "immortality property" is the micro-institutional foundation that enables Cross-Border Institutional Extraction to capture peripheral value continuously, stably, and at exponential scale.

2.2 Cross-Border Institutional Extraction (CBIE): The Macro Structure of the Analytical Framework

As used in this paper, "Cross-Border Institutional Extraction" (跨境制度性权益汲取) refers to an analytical concept in which global core economies, relying on rule-making power, control over settlement nodes, and discretion over access valves, obtain an above-normal share of the value increment from the cross-border circulation of peripheral participants through institutional arrangements such as entitlement confirmation, registration, pledge, and profit-sharing. This concept is an ideal-type construction and does not constitute a qualitative judgment of any real-world institution.

Cross-Border Institutional Extraction is the contemporary product of the three-stage evolution of the colonial system, yet it differs essentially from the traditional concept of "colonialism." It does not occupy other countries' territory or directly rule other peoples; what it pursues is not territory but the entire set of circulation value-added rights behind trade flows. Under the names of financial service fees, technology licensing fees, and platform service fees, it packages value extraction as market-based remuneration for services. Compared with traditional forms, Cross-Border Institutional Extraction achieves three key transformations: from overt control to covert institutions—no longer requiring armies, colonial administrations, or even explicit unequal treaties; everything is accomplished through seemingly neutral market rules, financial standards, and compliance access; from extraction at the production link to extraction at the circulation link—the main battlefield of value extraction shifts from factory workshops to financial pipelines; and from one-directional transfer to a closed loop of "extraction–re-flow–lock-in"—taking away most, returning a small part, and using that returned part to bind participants and stabilize the system itself.

2.3 Surplus-Value Re-Flow Lock-in (SVRL): The Core Mechanism of Systemic Stability

Surplus-Value Re-Flow Lock-in (剩余价值回流锁定) is the core mechanism by which the cross-border rights-extraction system sustains itself. Its content is as follows: after extracting the surplus value created by workers and industry from the production end through certificate-based pipelines, the system does not consolidate everything at the top; rather, in a targeted, small-scale, and continuous manner, it re-flows a portion of the proceeds back to secondary participants, intermediate trade nodes, and bottom social groups. The purpose of the re-flowed value is not to enhance the developmental capacity of the actors, but to secure basic subsistence welfare, dissolve game-theoretic tension, and raise the sunk cost of exit, ultimately achieving the institutional binding of all participants.

The mechanism comprises three inseparable core links. The first link, "surplus value," specifies the origin of the value: the re-flowed income is not welfare generated out of thin air, but the value increment created by workers and the real economy at the production end and captured by the pipeline system. The second link, "re-flow," specifies the direction of flow: the proportion, direction, timing, and rhythm of the re-flow are all subject to precise institutional design and dynamic adjustment, and the re-flow quota is strictly controlled at a golden-section point—sufficient to maintain social stability and continued production, but insufficient to support a complete autonomous industrial breakout. The third link, "lock-in," specifies the ultimate effect: the goal of the re-flow is not to improve the developmental situation of the extracted, but to prevent them from leaving the system through interest-binding and rising sunk costs.

2.4 Valve-Pipeline System (VPS): The Institutional Infrastructure of Value Flows

The Valve-Pipeline System (VPS; 阀门-管道体系) is the sum of the physical infrastructure and institutional rules through which cross-border rights extraction is implemented. It consists of two complementary parts: the "pipeline" represents the set of channels through which value flows, and the "valve" is the power switch of the entire system.

The pipeline is the channel through which value flows, jointly constituted by cross-border clearing systems, clearing banks, bulk-commodity exchanges, supply-chain finance platforms, credit-rating agencies, and the full set of pricing mechanisms. Channel directions, fee standards, and access thresholds are all unilaterally set by the pipeline operators; peripheral participants can only passively accept them. The valve determines who may connect to the pipeline, what tier they enter at, how much flow they may obtain, and how value is allocated—it is not a fixed mechanical rule but a flexible instrument that can be dynamically adjusted according to geopolitical gaming and the steady-state needs of the system.

2.5 Shadow Currency System (SCS): The Financial Blood Inside the Pipeline

The Shadow Currency System (SCS; 影子货币体系) is the bookkeeping, circulation, and storage instrument inside the Valve-Pipeline System and the key financial technology for achieving rights consolidation. The SCS is neither sovereign fiat money nor the commodity money of the historical gold standard, but a proprietary set of rights certificates circulating inside the pipeline, with its own usage boundaries, convertibility conditions, and life cycles.

The core operating logic of the Shadow Currency System can be summarized as "rigid internally, connected externally." Internal rigidity means that the shadow currency has a strict value-anchoring mechanism inside the pipeline—achieving relative value stability through a dual-layer physical anchor of commodity-native points and gold-equivalent certificates. External connectivity means that the shadow currency retains a limited, controlled conversion channel with real sovereign currencies, but this connectivity is precisely controlled by the valve: small, scattered point-holders can never reach the minimum threshold for gold conversion, and their rights can only remain stranded on-chain, continuously eroded by friction; only institutions with large-holding qualifications enjoy the full conversion channel.

Chapter 3: Research Methodology — Thought Experiments, Ideal Types, and the Five Criteria of Quantifiable Critique

3.1 Why Thought Experiments?

The core operating mechanisms of Cross-Border Institutional Extraction—certificate-based extraction, rights stripping, tiered re-flow, and risk transfer—are largely buried in contract clauses, clearing back offices, compliance thresholds, and private agreements. Many key variables are not disclosed to the public, and raw micro data are difficult to obtain in full. Traditional empirical research depends on observable, accessible, verifiable data; but when the object of study itself takes "unobservability" as a core feature of its institutional design, traditional econometric empirical methods encounter a fundamental boundary.

A thought experiment does not replicate reality; rather, it constructs in thought a logically self-consistent ideal model, stripping away a large amount of random and secondary real-world noise to see clearly the internal causal chain and core operating mechanism. Its goal is not to reproduce every real-world detail one hundred percent, but to purify the core logic, construct a reference baseline, and identify the direction of evolution.

3.2 The Five Hard Criteria of Quantifiable Critique

Criterion One: the principle of real-world anchorability of input variables. All input parameters set by the model must have observable corresponding proxy indicators in the real world.

Criterion Two: the principle of logical decomposability of the transmission chain. The complete transmission chain from input to output must be decomposable into a finite number of mutually independent, logically clear, and directionally explicit causal links.

Criterion Three: the principle of empirical comparability of output results. The final output results deduced by the model must be comparable and testable against observable empirical phenomena in the real world.

Criterion Four: the principle of mathematical expressibility of game-theoretic steady states. The core game-theoretic equilibrium deduced by the model must be formalizable in mathematical language.

Criterion Five: the principle of verifiable predictions in risk early-warning. The model must be able to output a finite number of explicit predictions that can be verified or falsified through real-world developments within the next ten to twenty years.

Part II: Core Mechanism Construction (Ch. 4-7)

Chapter 4: Micro-Operational Mechanisms — Full-Link TCR Decoupling in Single Cross-Border Trade

4.1 Full-Link TCR Decoupling Logic of Single Cross-Border Trade

As used in this paper, "Cross-Border Institutional Extraction" (CBIE; 跨境制度性权益汲取) refers to an analytical concept in which global core economies, relying on rule-making power, control over settlement nodes, and discretion over access valves, obtain an above-normal share of the value increment from the cross-border circulation of peripheral participants through institutional arrangements such as entitlement confirmation, registration, pledge, and profit-sharing. This concept is an ideal-type construction and does not constitute a qualitative judgment of any real-world institution.

To concretely illustrate the micro-level value-extraction mechanism of Cross-Border Institutional Extraction, this chapter takes a single complete cross-border trade as its analytical slice and, through a thought experiment, decomposes step by step the complete process of TCR rights generation, institutional stripping, tiered attrition, financial appreciation, and terminal allocation—simultaneously mapping it to real-world trade scenarios, clarifying the quantifiable attrition logic of each link, and achieving the articulation from macro theory to micro practice.

The core analytical assumption of this chapter: we select a complete cross-border trade cycle in which a production enterprise of a peripheral participant exports a batch of bulk commodities (or manufactured goods) to a global core economy, and trace the full life cycle of TCR rights from production completion to terminal consumption. The complex effects of overlapping multiple batches are not considered; the focus is on the internal logic of a single trade flow.

This chapter decomposes the complete trade cycle into five consecutive links: production completion (property-right fixation and initial TCR stripping) → cross-border customs clearance (initial TCR entitlement confirmation and allocation) → multi-tier distribution (hierarchical, continuous TCR entitlement attrition) → pledge circulation (TCR financial appreciation and ultimate retention) → terminal settlement (final TCR entitlement distribution imbalance). The five links constitute a complete one-directional value consolidation chain.

4.2 Stage One: Production Completion — Property-Right Fixation and Initial TCR Stripping

Participants: the peripheral production enterprise and the cross-border purchaser of the global core economy.

Real-world reference: traditional international trade terms such as FOB and CIF regulate only the transfer of physical property rights, risk of loss, and settlement of payment; contract texts generally lack stipulations on the ownership of cross-border derived circulation rights, leaving institutional space for the covert stripping of TCR rights.

Core interests: the peripheral producer recovers production costs and obtains basic production profit by delivering physical goods; the core-zone purchaser, while acquiring the physical title to the goods, substantively controls the entire set of TCR derived rights attached to the goods, seizing the core say over subsequent value-added allocation.

Value flow: after physical delivery is completed and the goods are transported into the purchaser-controlled warehousing system, the physical property rights are formally transferred.

Interception-mechanism deduction: under the entitlement confirmation rules of the pipeline system, the lawful transfer of physical property rights does not bring about the simultaneous transfer of derived circulation rights; the entire set of TCR rights is institutionally suspended, forming an ownerless rights pool awaiting the pipeline system's entitlement confirmation and allocation. The peripheral producer can obtain only a floor-level production profit covering production costs; all financial value-added income generated by subsequent cross-border circulation, price premiums, pledge financing, and multi-tier profit-sharing is completely stripped at the moment of property-right delivery, and the producer is entirely excluded from the subsequent value-added allocation system, bearing only the costs and risks of physical production without sharing in the higher-order gains of trade.

The property-right–TCR decoupling proposition: suppose the life cycle of the underlying physical goods in a single cross-border trade is a finite period, with the endpoint being the moment the goods are finally consumed or physically destroyed; and suppose that, under the default rules of the cross-border extraction pipeline, the on-chain life cycle of the corresponding TCR circulation points necessarily exceeds the physical life cycle of the goods. Moreover, at any moment after the physical destruction of the goods, the book value carried by the points does not go to zero with the destruction of the underlying physical goods; on the contrary, it can form a sustained appreciation flow through repeated circulation and consolidation inside the pipeline.

Essential difference from traditional trade: in traditional physical trade, property rights and circulation rights are highly bound together; one transaction corresponds to one gain, and the consumption of goods ends the value cycle. In certificate-based trade, property rights and circulation rights are institutionally decoupled; one act of production corresponds to multiple financial appreciations, and the physical goods perish while the rights continue to circulate. In plain terms: physical delivery has been completed, but the points corresponding to the Title-Circulation Right do not terminate with the settlement of goods and payment; they continue to circulate and consolidate repeatedly within multi-layered agency pipelines, independent of the physical goods. This proposition is the logical synthesis of the five micro-links of this chapter and the essential difference between Cross-Border Institutional Extraction and traditional colonialism, traditional trade arbitrage, and traditional financial speculation—traditional value extraction is capped at "profiting once each time the physical goods circulate once," whereas Cross-Border Institutional Extraction, relying on the decoupling of points and property rights, enables the circulation points corresponding to the same batch of physical goods to be "reused, re-appreciated, and re-shared in profit repeatedly," achieving theoretically uncapped value extraction.

4.3 Stage Two: Cross-Border Customs Clearance — Initial TCR Entitlement Recognition and Allocation

Participants: customs authorities, cross-border bulk-commodity exchanges, compliance review institutions, and listed multinational distributors (primary issuers).

Real-world reference: contemporary cross-border clearance has long since gone beyond the basic functions of tax inspection and goods release, superimposing stringent qualification review, supply-chain compliance, and brand access requirements. It is no longer a purely physical clearance process but the core ceremony of rights entitlement confirmation.

Core interests: regulators complete compliance risk control and maintain order; listed multinational distributors seize the on-chain entitlement confirmation qualifications, monopolize the derived rights of cross-border trade, and achieve the first round of value interception.

Value flow: the ownerless TCR rights suspended at the production link are, through the clearance entitlement confirmation process, directed to the primary issuance institutions possessing pipeline access qualifications (mostly enterprises with multinational capital backgrounds).

Interception-mechanism deduction: the essential nature of cross-border clearance has iterated from "goods release" to "TCR rights entitlement confirmation." Relying on brand whitelists, international credit ratings, high compliance costs, and globalized legal support, the pipeline system constructs high-barrier access thresholds; the overwhelming majority of peripheral local small and medium enterprises, due to weak capital, insufficient compliance capacity, and a lack of cross-border qualifications, are completely cut off from the core entitlement confirmation system. Whether one can participate in TCR profit-sharing depends not on the enterprise's production capacity or product quality, but solely on whether it possesses pipeline access qualifications. Multinational capital, with its resource advantages, easily crosses the access threshold and lawfully completes the first round of TCR rights interception, while local enterprises lose their say over circulation rights from the very source of trade.

4.4 Stage Three: Multi-Tier Distribution — Hierarchical, Continuous TCR Entitlement Attrition

Participants: first-tier distributors, second-tier wholesalers, regional agents, and terminal retailers.

Real-world reference: global bulk-commodity trade commonly features multi-tier distribution chains, with each link charging channel service fees, warehousing management fees, and compliance service fees; some of these charges correspond to no real service output and constitute excess arbitrage arising from channel monopoly.

Core interests: channel actors at each tier, relying on the identity privileges conferred by the pipeline, earn monopolistic price differentials and excess income in the name of various service fees.

Value flow: the entitlement-confirmed TCR rights, under the names of channel management fees, warehousing fees, compliance service fees, and regional distribution fees, are progressively consolidated to the core channel actors upstream, while the rights at the bottom production end suffer continuous attrition.

Interception-mechanism deduction: each time TCR rights complete one distribution circulation, the corresponding tier's channel extracts a fixed-proportion gain. In a typical scenario, first-tier distributors extract 3 percent channel management fees, second-tier wholesalers extract 2 percent warehousing and logistics premiums, and regional agents extract 1.5 percent compliance service fees. Only part of these fees corresponds to real service costs;

the remainder consists of excess income derived from pipeline monopoly. The more tiers through which goods circulate, the higher the dilution of the original TCR rights; by the time goods reach the terminal market, the financial appreciation potential of the original trade has been virtually exhausted through layer-by-layer attrition, and the production end is completely decoupled from terminal premium income.

As Jin Yingji's research on the restructuring of cross-border industrial chains reveals, global industrial chains are undergoing deep restructuring, shifting from efficiency-first toward other considerations, driven by the interweaving of geopolitical, international economic, green development, and digital technology factors. In this restructuring process, the expansion and complication of distribution tiers is not a purely market-efficiency choice but a concrete manifestation of the institutionalized value interception of the pipeline system.

4.5 Stage Four: Pledge Circulation — TCR Financial Appreciation and Ultimate Retention

Participants: automated profit-sharing banks (自动化分润银行), cross-border clearing institutions, and financial derivatives market makers.

Real-world reference: in real supply-chain finance and bulk-commodity warehouse-receipt pledge businesses, physical enterprises must mortgage their own title rights and trade rights to obtain liquidity, while bearing high financing interest and service costs.

Core interests: pipeline financial institutions rely on monopolistic qualifications to earn leveraged gains, clearing fees, and profit-sharing dividends; peripheral enterprises pledge their own TCR rights to obtain the liquidity necessary to sustain reproduction.

Value flow: the TCR rights created by the peripheral production end are converted into the underlying collateral assets of the Shadow Currency System, and the vast majority of the derived financial appreciation gains go into the profit pools of central financial institutions.

Interception-mechanism deduction: peripheral enterprises create complete TCR rights through productive labor; after being absorbed by the pipeline system, these rights become the core underlying assets for shadow-currency issuance and financial appreciation. When production enterprises face a liquidity gap and need funds to maintain reproduction, they must pledge the TCR rights they themselves created at the price of high interest to obtain financing. In essence, peripheral actors must pay for the value rights they themselves created in order to use the liquidity resources corresponding to their own output; the entire financial appreciation is exclusively monopolized by the pipeline system, forming an alienated pattern of "producers create value, monopolists reap above-normal allocation gains."

As Gozgor's research on supply-chain finance points out, supply-chain finance plays an important role in alleviating corporate financing constraints and facilitating trade. This work further reveals that, within the cross-border extraction pipeline, supply-chain finance is not merely an auxiliary tool serving trade; it is simultaneously a core channel of value extraction—peripheral enterprises create TCR rights through productive labor, yet must pledge the rights they themselves created at high interest to obtain liquidity.

4.6 Stage Five: Terminal Settlement — Final TCR Entitlement Distribution Imbalance

Participants: terminal consumers, cross-border clearing institutions, and peripheral producers (with only a limited re-flow mechanism open to them).

Core interests: the pipeline system pursues overall profit maximization and risk minimization; peripheral participants strive to obtain limited value re-flow to compensate for production-end attrition.

Value flow: the entire consumption value paid by terminal consumers is decomposed and restructured through the clearing system; the vast majority of the value is consolidated in the hands of the participants of the global core economies, and peripheral producers receive only an extremely low proportion of re-flow income.

Interception-mechanism deduction: the total value of a single cross-border trade equals the basic value of the physical goods plus the financial appreciation value of the entire TCR chain. Because the peripheral producer has been completely stripped of TCR rights at the property-right delivery link, it can obtain only a fixed floor-level production income at terminal settlement; all new financial appreciation generated by goods circulation, pledge, resale, and derivatives trading is divided among the central institutions, first-tier agents, and financial market makers inside the pipeline system. Even if the terminal price of the goods rises substantially, the production end cannot share the premium, forming a rigidly imbalanced pattern of "value created at the bottom, income allocated at the top."

4.7 Chapter Summary

The five links constitute a complete one-directional value consolidation chain: the production end creates all value → rights are suspended at the moment of property-right delivery → clearance entitlement confirmation directs the rights to multinational capital → multi-tier distribution dilutes them layer by layer → pledge financialization converts the remaining rights into top-tier financial profits → terminal settlement completes the final allocation imbalance. Along the entire chain, peripheral production economies remain in the structurally disadvantaged position of "creating value while losing the right to share in its appreciation." This micro mechanism constitutes the cornerstone for understanding the entire cross-border rights-extraction system.

Chapter 5: Meso-Pipeline System — Three-Layer Valve-Pipeline Interception and the Failed Transit Proposition

5.1 Analytical Framework

Rising from a single transaction to the entire system, the systematic attrition of TCR rights is not the profit-seeking behavior of individual institutions but the inevitable result of the institutionalized, systematized design of the entire pipeline system. Through three nested mechanisms—the upstream issuance valve, the mid-stream distribution black box, and the downstream circulation lock-in—the pipeline system forms a comprehensive, whole-process, highly path-dependent value-extraction network, filtering and continuously intercepting trade increments layer by layer, and constructing the meso-level operational foundation of Cross-Border Institutional Extraction.

5.2 Upstream Issuance Valve: Access Barriers and Capital-Biased Opportunity Monopoly

The upstream issuance valve is the first core gate for TCR rights to connect to the global pipeline and the source of the system's structural inequality. The valve access system encompasses five core evaluation criteria—whitelist qualifications, a high reserve fund pool, quotas bound to physical goods volumes, historical compliance credit records, and global operation capacity—and the evaluation logic exhibits extreme capital bias, serving primarily the capital-expansion needs of the global core economies rather than the industrial-development aspirations of peripheral participants.

Multinational capital, relying on strong financial resources, specialized globalized legal compliance teams, and scaled trade volumes, can easily break through the access barrier and obtain primary certificate issuance qualifications, seizing the "seigniorage" (铸币权) of the trade domain and top-tier profit-sharing rights.

Peripheral local enterprises, by contrast, generally suffer from weak capital, low tolerance for compliance costs, limited per-transaction trade volumes, and a lack of cross-border qualifications. Even when their products possess core market competitiveness and leading production efficiency, they cannot cross the core access threshold; they can only connect to the pipeline passively through OEM branding and agency arrangements, losing from the source the core capacity for independent entitlement confirmation and autonomous profit-sharing.

The logic of dynamic valve adjustment: the upstream valve is not constant but is dynamically adjusted according to the system's overall steady-state needs. When peripheral participants are more tolerant and geopolitical risk is low, the valve is moderately tightened to increase extraction intensity and expand capital gains; when peripheral resistance rises and geopolitical risk intensifies, the valve is moderately loosened, reducing some access costs and opening small conversion channels to relieve system pressure. This two-way adjustment corresponds to the dynamic equilibrium logic of the four-variable balance model (四变量天平模型) discussed in later chapters and is the core institutional design enabling the system's long-term survival.

The core value of the upstream valve lies not only in extracting immediate trade profits but in monopolizing long-term development opportunities. Controlling certificate issuance means controlling the value-definition power, allocation power, and access power of global trade, permanently locking in the possibility of peripheral participants climbing toward higher-order industrial chains and high-end value links, thereby achieving circle-level monopolization of development opportunities.

5.3 Mid-Stream Distribution Black Box: Pooled-Asset Manipulation and Information-Obscured Arbitrage

The mid-stream distribution link is the most concealed and most profitable value-interception node of the entire pipeline system, relying centrally on the "pooled-asset manipulation" (混池操盘) mechanism to achieve information obscuring and risk-free arbitrage.

Pooled-asset manipulation is not the physical mixing of goods but the consolidation of rights at the bookkeeping level and on-chain warehouse-receipt level. Goods of different origins, qualities, and risk grades are stored physically separately, but their corresponding on-chain rights are consolidated into a single rights pool, creating conditions for information-asymmetric arbitrage.

Relying on the pooled-asset scheduling authority granted by the upstream valve, pipeline operators achieve triple information obscuring, fundamentally destroying the fair-trading basis of the market: upward, they obscure the true terminal-market prices and demand information, suppressing the bargaining power of upstream producers for low-cost procurement; downward, they obscure the true quality, risk, and origin of the underlying assets, forcing downstream traders and financial institutions to rely only on the pipeline's overall credit in trading and passively accept monopolistic pricing; and toward external regulators, they obscure the true circulation paths, interception ratios, and arbitrage scales of TCR rights, evading regulatory constraints and market oversight.

Based on information-monopoly advantages, operators can flexibly conduct risk substitution and value arbitrage: packaging the rights of high-risk, low-quality assets into high-quality asset pools, completing high-priced circulation on the strength of the high-quality assets' credit while shifting the risk onto downstream participants; throughout, they need not hold the corresponding physical assets or bear market-fluctuation risk, obtaining stable excess income purely through rule-scheduling authority and forming a risk-free institutional arbitrage space.

5.4 Downstream Circulation Lock-in: Compound-Interest Attrition and Rigid Constraints on Capital Flight

The downstream circulation link is the key node where peripheral actors monetize rights, accumulate capital, and attempt to break free from systemic dependence. Through three rigid mechanisms, the pipeline system achieves value locking and capital control, completely blocking the breakout path of peripheral participants and maintaining the system's long-term steady state.

The compound-interest fee attrition mechanism: the pipeline system sets fee nodes at every link—warehousing, clearing, compliance review, rights circulation, pledge conversion, and so on. The more times rights circulate, the greater the accumulated fee attrition, continuously diluting the physical value created by the production end and causing peripheral trade income to drain away in circular circulation.

The lock-in–consolidation linkage mechanism: when peripheral participants attempt to monetize rights en masse and accumulate domestic industrial capital, the system automatically raises lock-up ratios, suppresses market liquidity, and raises financing and monetization costs, forcing peripheral actors either to bear high frictional costs or to sell their own rights at a discount to pipeline-internal institutions, achieving a second consolidation of existing value and continuously weakening peripheral capital-accumulation capacity.

The rigid capital-flight constraint: if the TCR rights accumulated by peripheral participants grow too large and show potential to break systemic dependence, the pipeline system activates punitive mechanisms—freezing entitlement confirmation qualifications, restricting point conversion, raising fiat monetization thresholds, and tightening cross-border clearing permissions—to completely block capital outflow and domestic capitalization paths, ensuring that peripheral participants remain in a structurally weak state of capital scarcity and passive dependence.

The downstream lock-in is not an absolute one-way oppression; the system also sets a minimum re-flow guarantee: peripheral actors can obtain stable basic income through compliant operations and small-scale transactions, ensuring basic subsistence and reproduction needs. This design of "pressing without bursting" is precisely the meso-level manifestation of the Surplus-Value Re-Flow Lock-in mechanism discussed in later chapters.

5.5 Transit Economy Failure Mechanism: Structural Termination of Production Relocation and Transit Evasion

One of the core fallback moves in traditional physical-trade gaming is evading tariffs and trade sanctions through production relocation, transit, and origin substitution. Under the rights-control logic of the VPS system, however, such strategies fail completely.

The transit-economy failure proposition: under the TCR title-circulation control system, production relocation, third-country transit, and origin-label changes can evade only surface-level tariff barriers, not the higher-order circulation barriers constituted by rights, qualifications, and rules.

The failure logic manifests at four levels. Rights-piercing traceability: the judicial and regulatory attribution of an enterprise's actual controllers, core capital, and management determines the essential attribution of TCR rights, not the surface-level origin label. Full-chain traceability blockage: the complete historical data of goods production, circulation, transit, and clearance are tracked to precisely identify transit economies and selectively downgrade their credit ratings and compress their circulation quotas. Dual rights leakage: in their overseas transit layouts, peripheral enterprises on the one hand adapt to host-country low-end rules and bear local compliance costs, while on the other hand they remain fully connected to the core pipeline; the points generated by overseas capacity are still forcibly consolidated and progressively attrited. Treaty-based channel locking: global core economies, through treaty arrangements, monopolize the core channels of transit-economy cross-border clearance, rights entitlement confirmation, and certificate circulation.

The failure of transit-economy strategies does not mean the pipeline system can never be broken. When peripheral participants simultaneously achieve three autonomies—core-technology autonomy, clearing-system autonomy, and capacity-qualification autonomy—the consolidation mechanism of the VPS pipeline partially fails.

These three breakthrough points are the core directions for peripheral participants to break out and also constitute the reverse constraint boundary of the pipeline system.

5.6 Higher-Order Innovation: ESG, Human Rights, and Geopolitical Treaty-Based Soft Valve System

Beyond physical-goods control, capacity control, and qualification control, the global core economies have built a soft valve system that operates without physical prohibition, with concealed compliance, amplified by public opinion, and institutionalized in effect. Relying on ESG, human-rights narratives, geopolitical treaties, and industrial standards, it forms higher-order access barriers and constitutes the most concealed, most difficult-to-defend, and most damaging rights-locking tool of the cross-border rights-extraction system.

The four core dimensions of the soft valve system: the human-rights and labor-ethics narrative valve directly classifies labor-intensive industries and developing-economy capacity into the "non-compliant" category, permanently depriving them of certificate-based rights allocation eligibility; the ESG and green-low-carbon standard valve implements tiered access for different economies through carbon-emission accounting and green-production standards, forming a soft lock-in of "capacity meets standards but rules do not"; the industrial R&D and compliance-standard valve monopolizes the power to define rules, leaving weak economies' industrial upgrading in a permanent state of passive adaptation; and the geopolitical treaty and camp-access valve constructs an internal-connectivity, external-isolation title-circulation circle, achieving circle-based rights isolation.

On the ESG controversy, as Li Li points out, many voices hold that the elevation of global ESG requirements is a form of "trade barrier" aimed at specific supply chains, while others argue that it at least provides enterprises with a path to "participate in trade through compliant standards." This work further notes: whatever the original intention of ESG rules, their actual function within the cross-border extraction pipeline is "complete physical release with precise rights locking"—compliance itself becomes an access barrier, and the power to formulate compliance standards rests with the central pipeline, leaving peripheral participants in a permanent position of passive adaptation. The global expansion of ESG investment philosophy reflected in the UNPRI annual reports constitutes, at the practical level, the institutional carrier of the soft valves.

The core feature of the entire soft valve system is: complete physical release, precise rights locking, compliance-package packaging, and concealed long-term value extraction. Its destructive power far exceeds traditional tariff barriers and physical inspection, making it the core instrument of future higher-order trade gaming.

5.7 Chapter Summary

Relying on the three-layer anchored architecture, qualification-tiering rules, the transit-failure mechanism, and the soft valve system, the pipeline system forms a fully automated, normalized, non-violent closed loop of value extraction and rights lock-in: multi-tier institutionalized fee attrition makes weak actors circulate through more tiers and suffer higher attrition ratios, naturally forming an unequal profit-sharing pattern; quota thresholds and long-term stranded lock-ups make small, scattered points permanently unable to break through the gold-conversion threshold, leaving large volumes of rights stranded on-chain; and dynamic qualification discretion and permission tiering achieve flexible, precise, and dynamic high-order control of title-circulation rights.

Chapter 6: Financial Layer Closed-Loop — Shadow Currency Dual Anchoring and Perpetual Cyclical Value Extraction

6.1 Analytical Framework

The ultimate value-extraction form of Cross-Border Institutional Extraction manifests as the closed-loop operation of a shadow currency independent of the sovereign monetary system.

Through the dual-layer physical anchoring mechanism of "commodity-native points + gold-equivalent certificates," the Shadow Currency System (SCS; 影子货币体系) constructs a self-stabilizing, closed-loop, controllable supranational financial system, achieving long-term consolidation and macro-control of global trade value, and serving as the core financial instrument of institutional rights extraction in the high-order certificate-based era.

6.2 First Anchor: Physical Underlying Constraint of Commodity-Native Points

The underlying credit of the Shadow Currency System is built entirely on commodity-native points (大宗商品点数), strictly following the core rule of "physical anchoring, total-quantity limitation, and category isolation."

The rigid issuance constraint on native points: the total issuance of all native points strictly corresponds to third-party-verifiable physical inventory and in-transit title rights. Issuance beyond the physical base is strictly prohibited. This is the system's most fundamental physical constraint and the core marker distinguishing it from purely speculative financial products.

Differentiated conversion and control rules: energy-type bulk commodities are subject to longer lock-up cycles, higher conversion thresholds, and stricter quota controls, owing to their violent price fluctuations and high geopolitical sensitivity; agricultural and other livelihood commodities enjoy relatively relaxed conversion conditions and higher circulation efficiency, owing to their flat prices and stable rigid demand. Native points possess both physical delivery and financial derivative attributes; their market trading prices can exceed physical goods values, producing excess premiums and creating a stable seigniorage space for the global core economies, realizing the core operating model of "controlling the virtual with the physical, arbitraging with the virtual."

Lucotte's research on the financialization of commodity markets provides the empirical foundation for this mechanism. He notes that the large-scale participation of financial investors has profoundly changed the price-discovery mechanism and risk-allocation structure of commodity markets. This work further notes: commodity financialization is not merely a change in market structure but an institutionalized tool of value extraction—through point pricing, mixed-batch asset securitization, and similar means, the pipeline system collects and reallocates in advance the future income of physical capacity.

6.3 Second Anchor: Credit Backstop Mechanism of Gold-Equivalent Certificates

To remedy the defects of large price fluctuations and insufficient credit stability in commodity-native points, the system adds gold-equivalent certificates (黄金等价凭证) as a second-layer credit anchor, constructing a doubly backstopped credit system.

The commodity-native points held by peripheral traders must simultaneously satisfy three conditions before conversion to gold-equivalent certificates may be applied for: fulfilling a lock-up cycle of a certain duration (during which only fixed interest is obtained and no physical gold may be withdrawn); continuously meeting compliance review; and keeping the conversion quota within the individual cap and the system-wide cap.

The dual core functions of this mechanism: using gold credit as the backstop for the shadow currency enhances the global recognition and stability of the certificates and increases peripheral actors' willingness to connect; and through institutional design it avoids bank-run risk—the prohibition on physical gold withdrawal during the lock-up period completely eliminates the risk of systemic collapse from concentrated redemption, achieving the permanent lock-in of physical gold resources.

The system implements a differentiated clearing rule of "lenient internally, strict externally": inside the pipeline, gold-equivalent certificates can be freely settled, pledged, profit-shared, and circulated with ample liquidity; externally, the channels for converting certificates into physical gold and into peripheral sovereign fiat currencies are strictly restricted, with onerous approval, high fees, and limited quotas, completely blocking the ultimate path of peripheral value re-flow.

6.4 Dual Closed-Loop Operation of the Point System

The Shadow Currency System is essentially a supranational financial closed loop nested atop national sovereign fiat systems: it relies on real fiat currencies for bookkeeping and pricing, on the dual-layer physical anchors for internal credit, and on the Valve-Pipeline System for whole-process control, forming an independent, closed, controllable value-circulation system.

The dual closed-loop structure of the points: the point system consists of two tiers of closed loops. In the physical primary loop, the primary issuer generates native points against real inventory → traders subscribe to the points → holders present certificates to take delivery of goods, and the physical goods enter production and consumption → institutionally, the points should be cancelled and fully written off, completing the real-economy cycle. In actual operation, however, the overwhelming majority of points are not genuinely written off upon delivery: physical delivery is completed and goods are settled, but the corresponding circulation points remain in the on-chain account system, independent of the consumed physical goods, and are repeatedly transferred, consolidated, profit-shared, and re-pledged within multi-layered agency pipelines, constituting a hidden "residual circulation layer" (残留流通层) beneath the physical primary loop. In the financial secondary loop, native points complete one lawful market transfer without choosing delivery and are deposited in an automated profit-sharing bank to participate in profit-sharing and pledge; only points meeting the lock-up, compliance, and quota conditions are permitted to convert into gold-equivalent certificates.

The system's operation forms an extremely strong path dependence: peripheral participants must connect to the pipeline to conduct cross-border trade; physical output is inevitably converted into commodity-native points and gold-equivalent certificates; local trade wealth continuously sediments within the Shadow Currency System; and the national sovereign fiat currency is gradually reduced to an auxiliary instrument of the shadow currency, losing the core functions of trade pricing and value control.

The system sets a rigid exit-punishment mechanism: if peripheral participants attempt to leave the pipeline and independently construct their own trade and financial cycle, they will directly face the fatal blows of asset-price collapse, liquidity exhaustion, trade-channel freezing, and complete rights write-off. This institutional design of "connecting means dependence, exiting means triggering systemic risk" gives the cross-border rights-extraction system the feature of perpetual self-reinforcement, achieving long-term lock-in of the economy.

6.5 System Stability Guarantees

Through four mechanisms, the Shadow Currency System achieves internal stability and avoids inflation, bubbles, and bank runs: the physical total-quantity ceiling keeps native points strictly anchored to physical inventory, eliminating unbacked issuance at the root; the tiered lock-up system sets differentiated lock-up cycles for different tiers and categories, dispersing liquidity pressure; the category-isolation rule prohibits arbitrary conversion across categories, blocking cross-market risk transmission; and the quota tiering management sets dual caps on individual and system-wide conversion quotas, preventing concentrated-redemption shocks. These four mechanisms jointly guarantee the system's long-term steady-state operation, distinguishing it from anchorless speculative financial products.

6.6 Clear Boundaries Between Shadow Currency and Real-World Financial Instruments

The shadow-currency thought-experiment model of this work differs essentially from real-world financial instruments: offshore dollars are the overseas circulation of a sovereign currency, centered on payment and reserve functions, whereas shadow currency is a trade-rights bookkeeping and allocation system centered on tiered profit-sharing functions; cryptocurrencies have no underlying physical anchor and aim at decentralized payment, whereas shadow currency is strictly anchored to physical trade and centered on centralized rights allocation; stablecoins anchor to fiat currencies and pursue price stability, whereas shadow currency anchors to physical assets and pursues stability of the allocation structure. Clarifying this boundary is an important foundation for avoiding conceptual confusion and preventing misreading of the theory.

6.7 Chapter Summary

The shadow-currency dual-anchored closed loop upgrades the micro-level interception of single transactions and the meso-level institutional attrition of the pipeline into a financial-level systematic, sustained, and automated consolidation mechanism. Once trade value is converted into points and gold certificates, it enters a one-directional consolidation track of "internal closed-loop appreciation, external limited connectivity": the trade wealth of peripheral participants can only sediment one-directionally into the pipeline system and cannot freely re-flow to the domestic economy, forming the ultimate closed loop of value consolidation. The long-term stable operation of this financial closed loop depends on the Surplus-Value Re-Flow Lock-in mechanism detailed in the next chapter—it is precisely the precisely controlled re-flow that makes the extracted neither resist, nor exit, nor collapse, allowing the system to operate perpetually.

Chapter 7: Surplus-Value Re-Flow Lock-in — The Core Maintenance Mechanism of Cross-Border Institutional Extraction

This chapter is the theoretical hub of the entire work—it answers the most central question of the cross-border rights-extraction system: why can this extremely unequal system operate stably over the long run without collapsing?

7.1 The Complete Definition of Surplus-Value Re-Flow Lock-in

Surplus-Value Re-Flow Lock-in (剩余价值回流锁定) is the core mechanism by which the cross-border rights-extraction system sustains itself. Its content is as follows: after extracting the surplus value created by workers and industry from the production end through certificate-based pipelines, the system does not consolidate everything at the top; rather, in a targeted, small-scale, and continuous manner, it re-flows a portion of the proceeds back to secondary participants, intermediate trade nodes, and bottom social groups. The purpose of the re-flowed value is not to enhance the developmental capacity of the actors, but to secure basic subsistence welfare, dissolve the motive for resistance, and raise the sunk cost of exit, ultimately achieving the institutional binding of all participants.

The mechanism comprises three inseparable core links. The first link, surplus value—specifying the origin of the value. The re-flowed income is not welfare generated out of thin air, not charity from the top, and not the natural result of market operation. Its origin is perfectly clear: it is the value increment created by workers and the real economy at the production end and captured by the pipeline system. In other words, the small sweetener given to you is, in essence, taken from the value you yourself created and returned to you. This is the fundamental point distinguishing Surplus-Value Re-Flow Lock-in from all welfare systems and aid programs.

The second link, re-flow—specifying the direction of flow. The system is not a one-directional overt value extraction; it involves a precisely controlled reverse flow of value. The proportion, direction, timing, and rhythm of the re-flow are all subject to precise institutional design and dynamic adjustment. What re-flows to secondary economies are processing-trade profit-sharing, foreign-exchange income, and employment positions; what re-flows to the bottom strata are cheap grain and oil, basic daily necessities, and minimum-level social security. The re-flow quota is strictly controlled at a golden-section point: sufficient to maintain social stability and continued production, but insufficient to support a complete autonomous industrial breakout, technological breakthrough, or class mobility.

The third link, lock-in—specifying the ultimate effect. The goal of the re-flow is not to improve the developmental situation of the extracted, but to prevent them from leaving the system through interest-binding and rising sunk costs. At the individual level, employment, income, and basic welfare are all deeply bound to pipeline trade; leaving the system means directly losing the guarantee of subsistence. At the national level, industrial structure, employment capacity, and foreign-exchange income are all deeply dependent on the pipeline system; actively decoupling would lead to overcapacity, rising unemployment, and fiscal rupture. When the dual lock-in takes effect simultaneously, participating actors cannot actively leave even with complete cognition of the system's asymmetric value-extraction nature, because the sunk costs are too high.

7.2 The Four-Layer Transmission Chain of Re-Flow Lock-in

First layer: pipeline-based surplus-value extraction. In the cross-border rights-extraction system, once physical goods enter the pipeline from export-industrial countries, the allocation process of their value increment is highly manipulated. The primary issuer systematically intercepts the excess value in the industrial chain through point pricing, pledge-fund rules, and mixed-batch asset securitization. The point-pricing mechanism locks commodity prices at a low level at the production end, ensuring the pipeline system can obtain the actual value of goods at minimal cost; the pledge-fund rule requires production actors to prepay a certain proportion of funds as a condition for accessing the pipeline, further weakening the production end's control over surplus value; and mixed-batch asset securitization incorporates future income expectations into the financialized operating framework, fully collecting the production actors' distribution rights and potential appreciation space.

Second layer: tiered, targeted value re-flow. The pipeline system allocates the extracted surplus value in tiers and re-flows it downward, at precisely calculated ratios, to secondary economies and bottom strata. At the level of secondary economies, countries serving as intermediate distribution nodes obtain a small share of distribution profits, part of which flows into local industry and fiscal systems and part of which is transmitted to ordinary workers. At the level of bottom strata, the re-flowed value ultimately reaches the most basic individuals of society in the forms of cheap grain and oil, basic daily necessities, and basic social security, guaranteeing their basic subsistence needs. The scale of the re-flow is strictly controlled to ensure it can only maintain the stability of social order, not support industrial upgrading or technological breakthrough.

Third layer: the social-contradiction-dissolution effect. The re-flow mechanism dissolves social contradictions in multiple ways and lowers the resistance motive of the rights-transferring party. The sharp antagonism of traditional colonialism and capital value extraction is materially diluted under the re-flow mechanism; adversarial class contradictions and ethnic contradictions are converted into basic living materials in individuals' hands. Grand narratives and institutional critique lose mobilizational force before the realistic choice of "food to eat and basic security." Individuals do not truly identify with the system's legitimacy; rather, they choose to accept the status quo in the trade-off between survival costs and resistance costs. The re-flow mechanism successfully bypasses the adversarial nature of traditional left-right narratives, allowing ideological conflict to ease under the buffer of material interests.

Fourth layer: sunk cost and path lock-in. As participation time extends, the re-flow mechanism continuously raises the exit costs at both individual and national levels. At the individual level, employment, income, and basic welfare are all deeply bound to pipeline trade; at the national level, industrial structure, employment capacity, and foreign-exchange income are all deeply dependent on the pipeline system. Ultimately, participating actors cannot actively leave even with complete cognition of the system's asymmetric value-extraction nature, because the sunk costs are too high, thereby achieving the self-maintenance of the cross-border rights-extraction system.

Preliminary limitation statement: the following content constitutes a structural risk-deduction early warning under the thought-experiment framework—an analysis of the logical possibility of mechanism transmission chains. It does not constitute an empirical judgment that such facts have occurred in any real society. This analysis only reveals one type of risk transmission pathway for the purpose of risk warning.

7.2.2 Important Warning: Internal Entitlement Segmentation's Prior Amplification Effect on External Narrative Intervention

From the isomorphic analytical framework of the Title-Circulation Right (TCR), a high-risk transmission chain can be deduced: when, within a society, the land assets and development value-added rights of ordinary workers and farmers are subjected to rights segmentation on the basis of identity and membership-status labels—that is, physical use rights remain in the hands of local actors, but the derived circulation value-added and development profit-sharing rights over the assets are institutionally stripped and consolidated—objective interest fissures and group perception gaps are created within the society.

This internally formed rights-tiering structure does not in itself necessarily mean that external intervention has already occurred. But it objectively constitutes a set of prior conditions, providing ready-made leverage points for the narrative-cutting instruments of external forces.

Within the geopolitical gaming logic of the entire Cross-Border Institutional Extraction (CBIE) system, external forces do not always need to directly launch high-intensity confrontational means such as sanctions or financial strikes. They need not directly change the real institutions themselves; they can instead capture and amplify the rights contradictions that already objectively exist within the society, subjecting the internal rights-allocation fissures to narrative reconstruction and label-based processing.

The specific risk transmission path (a potential pathway deduced by thought experiment): internal contradictions first take shape—certain groups retain physical use rights, but the circulation value-added and development-income rights over land and assets are stripped; the public can directly perceive the gap between nominal asset attribution and actual income rights, and dissatisfaction accumulates within society, as with domestic issues such as approval problems in the renovation and construction of rural housing land for workers and farmers.

External narrative intervention: external forces need not fabricate contradictions out of thin air; they merely take the rights contradictions already existing locally as narrative raw material, simplifying and dichotomizing the complex institutional-historical causes, and refashioning internal governance issues into adversarial political narratives. Warning: the Rwandan tragedy manifested outwardly as ethnic conflict, but the ethnic categorization itself was an artificial construct of colonial power; behind the conflict lay interwoven material contradictions such as land-resource allocation and class competition. The ethnic narrative became a tool for elites to divert domestic class pressure.

The narrative tools and the cross-border extraction pipeline resonate with each other: external narratives create internal social division, weakening the society's internal social consensus; once social consensus is weakened, the capacity for collective action in external gaming declines accordingly. At this point, the Valve-Pipeline System's (VPS) geopolitical discretion and the "re-flow and whip" dual-track mechanism (回流-鞭子双轨制) can exert greater leverage.

Final consequence: even if external forces do not directly intervene in designing internal rights rules, once the social fissures left by internal rights segmentation are exploited by external narrative tools, the ability of peripheral participants to resist external certificate-based extraction is objectively reduced.

Key distinction: this deduction does not argue that "all internal rights contradictions are manufactured externally." The origin of the contradictions is the product of internal institutional evolution; the risk point lies in the fact that already-existing internal fissures can be conscripted and amplified by external forces as ready-made weapons. Internal rights segmentation providing prior convenience does not mean that external forces are the root of the contradictions. The two are distinguished as "exploitable conditions" versus "the root of contradictions"; causality must not be conflated.

Extended risk implication: therefore, the defense line against the external certificate-based extraction system of Cross-Border Institutional Extraction is not built only at external-facing links such as customs, cross-border clearing, and foreign-trade policy. Protecting the complete asset-appreciation and circulation rights of domestic bottom groups, repairing internal rights fissures, and consolidating internal social consensus are themselves important internal defense lines against external narrative intervention and for enhancing external-gaming resilience. If the segmentation of internal asset rights continues to expand, it is tantamount to invisibly preparing an ammunition depot for external narrative weapons.

The deduction in this subsection merely exhibits one logically possible risk pathway; it is a risk warning, not a factual judgment of real-world developments.

7.3 Position within the CBIE Analytical Framework

The Surplus-Value Re-Flow Lock-in mechanism occupies the core tier within the analytical framework of Cross-Border Institutional Extraction. From the perspective of the overall architecture, the overall design of the cross-border rights-extraction system determines the goals and direction of Surplus-Value Re-Flow Lock-in. The system-dominating party, by formulating international trade rules and financial policies, specifies the concrete paths of surplus-value extraction and re-flow, thereby ensuring the coherence and consistency of system operation. At the same time, lower-tier technical instruments such as the Title-Circulation Right and on-chain certificates provide the concrete implementation means for Surplus-Value Re-Flow Lock-in, collecting the value increment of physical goods through financialized pipelines and converting it into controllable, traceable digital assets.

In terms of supporting mechanisms, Surplus-Value Re-Flow Lock-in and the risk-transfer architecture form a close complementary relationship. The re-flow mechanism reduces the risk of internal contradiction eruption through interest-binding; the risk-transfer mechanism, through commodity dumping and debt export, spills potential risks outward to bottom-tier countries, further enhancing the system's stability. This dual-guarantee mechanism enables the cross-border rights-extraction system to maintain strong adaptive capacity in the face of changes in the external environment.

7.4 Boundary Distinctions from Related Traditional Theories

The distinction from Marx's theory of surplus value. Marx's theory of surplus value reveals the essence by which the surplus value created by workers in capitalist production relations is appropriated by capitalists; the direction of surplus-value flow is mainly a one-directional concentration from workers to capitalists. The Surplus-Value Re-Flow Lock-in mechanism, however, presents a more complex flow pattern: after being extracted from the production end through certificate-based pipelines, surplus value is not entirely consolidated at the top but re-flows in a targeted, small-scale manner to secondary economies and bottom social groups. This re-flow link significantly differs from the one-directional value-extraction relationship described by Marx; its purpose is to dissolve resistance motives through interest-binding, thereby achieving the system's long-term stable operation. Furthermore, Marx's theory predicted that the intensification of internal contradictions in the capitalist system would lead to the intensification of class struggle, whereas the re-flow mechanism, by materially diluting contradictions, challenges to a certain extent the inevitability of class antagonism posited by traditional theory.

The distinction from welfare economics and UBI. Welfare economics focuses on how to improve overall social welfare through income-redistribution policies, and universal basic income (UBI) emphasizes guaranteeing citizens' basic living needs through unconditional cash transfers. By comparison, although the Surplus-Value Re-Flow Lock-in mechanism superficially shares similar redistributive features, its substantive goal is radically different—the core goal of the re-flow mechanism is not to improve the developmental situation of the extracted, but to achieve their institutional binding through precisely controlled value re-flow. In terms of quota control, welfare economics and UBI pursue a balance between fairness and efficiency, whereas the re-flow mechanism strictly limits the scale of re-flow, ensuring it can only maintain basic subsistence needs, insufficient to support industrial upgrading or class mobility.

The distinction from dependency theory. Dependency theory holds that peripheral countries, owing to their marginal position in the global economic structure, must depend on the capital and technology inputs of central countries. However, although peripheral countries under the re-flow lock-in mechanism are likewise in a dependent position, they can obtain a certain proportion of value re-flow by participating in the cross-border extraction pipeline, giving peripheral countries a state of being "dependent but survivable" (依附但能生存). Through tiered, targeted value re-flow, the re-flow mechanism provides peripheral countries with economic support for maintaining basic social order, thereby reducing the possibility of their leaving the system and further consolidating the existing unequal economic pattern.

7.5 Supporting Mechanism: Funnel-Shaped Risk Transfer Architecture

Within the cross-border rights-extraction system, the three-tier funnel structure of risk transfer is a delicately designed supporting mechanism, aimed at ensuring internal system stability through tiered risk dispersion and absorption. The top rule-making party, as the core of the funnel, transfers risks generated inside the pipeline downward to middle-tier and bottom-tier economies by formulating international financial, trade, and investment rules favorable to itself. The middle tier, composed of industrial countries and secondary economies, dumps surplus capacity to secondary economies through the industrial-chain division of labor, and the secondary economies further pass risk to bottom-tier countries. The bottom-tier pipeline-excluded participants, located at the lowest end of the funnel, often become the primary bearers of risk because they lack core control over the global value chain; through commodity dumping and debt export, they are incorporated into the risk-transfer chain of the cross-border rights-extraction system, serving as the "buffer pad" for the stable operation of the entire system.

The concrete process of risk transfer manifests as the concentration of pipeline-internal risk in bottom-tier countries through two channels—commodity dumping and debt export—and ultimately the dilution and reallocation of risk through debt re-flow pipelines. The top rule-making party and the middle-tier industrial countries transfer the risk of market saturation and overcapacity to bottom-tier countries by suppressing primary-product prices and raising manufactured-goods prices. The top rule-making party provides loans to bottom-tier countries through international financial institutions, often with harsh conditions that further weaken the economic sovereignty of bottom-tier countries. When bottom-tier countries fall into economic crisis under debt pressure, their assets are often acquired at low prices, forming a covert wealth-transfer mechanism. As Kindleberger and Aliber analyze in

Manias, Panics, and Crashes, the transmission of financial crises often proceeds along asymmetric structural channels—the risk funnel of Cross-Border Institutional Extraction is the institutionalized form of such asymmetric transmission channels.

The risk-transfer mechanism plays a crucial stabilizing role in the long-term operation of the cross-border rights-extraction system: by concentrating risk in bottom-tier countries, it effectively avoids the direct eruption of internal contradictions; it ensures the smoothness of the economic cycle, providing the pipeline system with ample demand space and capital re-flow channels; and it enhances the overall risk-resistance capacity of the cross-border rights-extraction system, effectively coping with local crises by dispersing risk across multiple tiers.

7.6 Chapter Summary

The Surplus-Value Re-Flow Lock-in mechanism is the core theoretical contribution of this paper. It answers the fundamental question of "why an extremely unequal system can remain stable over the long run": it is not that there is no extraction, but that extraction is followed by precise re-flow—making the extracted "alive but unable to overturn"; it is not that there is no resistance, but that cognitive lock-in dissolves the awareness of resistance—making the extracted "unaware that they are being extracted"; it is not that there is no alternative, but that the exit cost is designed to be unbearable—making the extracted "wanting to leave but unable to." The SVRL mechanism integrates micro interception, meso pipelines, the financial closed loop, geopolitical discretion, and steady-state equilibrium into a self-consistent, long-operable complete system. It is the key theoretical hub for understanding how "Cross-Border Institutional Extraction" differs from traditional colonialism and traditional imperialism.

Part III: Historical Comparison and Theoretical Differentiation (Ch. 8-9)

Chapter 8: Why Traditional Theories Lack SVRL — Intellectual Archaeology and Historical Constraints

8.1 Core Proposition: Why Traditional Theories Did Not Develop This Principle

Surplus-Value Re-Flow Lock-in is not the product of purely logical deduction but a real-world mechanism that matured only after the financialization of late globalization. The eras in which classical Marxism and dependency theory were born did not possess the historical conditions for the complete operation of this mechanism. This is not a logical oversight of earlier scholars but a constraint of historical reality.

8.2 The Era of Classical Marx: Colonialism as Direct Violent Expropriation

In the stage of liberal capitalism and early imperialism in which Marx lived, the external face of the system was territorial occupation, direct resource extraction, and the violent exploitation of colonial labor. Surplus value flowed mainly one-directionally back to the system-dominating party, and the colonies were left only with oppression and famine; there was almost no welfare re-flow that was actively and precisely calculated by the system. In that era, the external manifestation of value extraction was overt, and contradictions were directly intensified; the core proposition of theory was therefore the one-directional appropriation of surplus value, with intensified contradictions leading to resistance.

Worker welfare existed then as well, but it came from the compromises made by the domestic bourgeoisie of the system-dominating party to internal class contradictions—concessions won through domestic class struggle, not targeted value re-flow from colonial extraction binding peripheral countries. The system-dominating party's concessions to its own workers are not the same as directing small amounts of interest back to overseas colonized regions to lock in dependence—these are two different things.

8.3 Classical Dependency Theory: Post-War Early Financial Securitization Had Not Yet Become Globally Prevalent

Prebisch and Amin's dependency theory saw unequal exchange and value flowing from the periphery to the center. But in the early post-war globalization, financial securitization and deep global supply-chain fragmentation had not yet taken shape. Peripheral countries at that time were either colonies being directly extracted or newly independent states pursuing import-substitution industrialization. The system was not yet able to securitize the productive capacity of producer countries, precisely calculate how much material welfare to re-flow to maintain stability, or direct surplus capacity and financial debt to countries entirely outside the pipeline.

Dependency theory saw value flowing outward, but in reality the refined operation of "actively sprinkling a little sweetener in exchange for the periphery abandoning resistance" had not yet appeared on a large scale, so it would not take "re-flow–lock-in" as a core mechanism.

8.3.2 A Priori Extension: Cross-Domain Validation of the Title-Circulation Right (TCR) Theory Through AI Digital Assets — The Elimination of Personalized Rights in Cultural-Entertainment Assets and the Collapse of Long-Tail Profit-Sharing

This section is a priori thought deduction, not an empirical characterization of the current state of the cultural-entertainment industry. Its aim is to step beyond the physical research scenarios of traditional commerce and land governance and bring the evolutionary logic of new forms of human assets under digital-technological iteration into the Title-Circulation Right (TCR) analytical framework, completing a cross-domain validation of the theory. The core argument of this part: the central regularity revealed by TCR theory—"physical objects/physical labor persist while derived circulation rights are cut, consolidated, or even extinguished by technology and institutions"—is not a special case confined to the physical-economy domain but a general social operating mechanism covering physical assets, labor-personalized assets, and digital assets, and it effectively explains the value alienation and ecological restructuring of the cultural-entertainment industry under the diffusion of AIGC technology.

The value-operating system of the traditional cultural-entertainment industry is built upon the personalized-asset attributes of real human subjects, forming a complete commercial closed loop of "single production of a work + cross-cycle long-tail profit-sharing" that fully conforms to the original rights-structure logic of TCR theory. In this system, actors' film and performance labor is physical production behavior, corresponding to the one-time labor income of the filming stage—this is the overt, immediate value of labor; while the personalized IP attached to the real human subject, which cannot be stripped away, generates circulation value-added rights independent of any single work, covering diversified monetization paths such as variety-show recording, offline performance, brand endorsement, and fan economy. Such long-tail rights possess the features of cross-cycle, continuity, and cumulative appreciation, so that the value of a single cultural-entertainment work does not go to zero when its broadcast ends; industry income is distributed across multiple actors—producers, creators, performers—forming a stable value spillover and profit-sharing cycle.

More critically, the long-tail profit-sharing system of the traditional cultural-entertainment industry, relying on the irreplaceable value carrier formed by the real human personality, possesses natural rights continuity and autonomy. A real actor's personal reputation, performing vitality, and charisma can continuously activate the stock value of past works, achieving cross-time circulation and appreciation of assets—this is the core feature distinguishing personalized cultural-entertainment assets from ordinary commodity assets and the underlying support for the industry's long-term vitality and broad-based tiered income.

The scaled deployment of AI virtual actors and AIGC full-chain content-production tools has completely restructured the asset-rights structure of the cultural-entertainment industry, precisely reproducing the core mechanism of TCR theory of "property rights persisting, rights fissioning, profit-sharing perishing," forming a new paradigm of rights alienation in the digital scenario. From the production end, AI technology sharply lowers the access thresholds and production costs of video production, special-effects rendering, character performance, and content editing, breaking the technology, labor, and cycle barriers of the traditional cultural-entertainment industry and spawning an explosive growth of content supply. This appears to be an efficiency upgrade and industrial boom; in reality it is a systematic dismantling of the traditional personalized-rights system.

In accordance with the TCR rights-cutting logic, the AI cultural-entertainment model achieves two layers of core rights stripping. First, the stripping of physical labor from the value carrier: AI virtual images can completely replace real humans in content production, retaining the "physical carrier value" of works—their online traffic value and dissemination value—while completely stripping away the personalized-rights carrier on which real human subjects depend for survival.

Virtual digital images can only carry the static traffic value of online content; they have no physical body, no real personality, and no emotional connection, completely losing the full-dimensional commercial monetization chains of offline concerts, physical endorsements, and live performances. The most core long-tail profit-sharing foundation of the traditional cultural-entertainment industry is thereby completely dissolved.

Second, the stripping of immediate production income from long-term circulation profit-sharing. In the traditional model, work production income and IP long-term appreciation rights are highly bound and circulate synchronously; in the AI content system, producers and platforms need only pay extremely low AI production costs to complete mass content production and earn short-term broadcast, advertising, and traffic income; but the long-term appreciation, secondary development, and IP-derivative profit-sharing rights that were originally attached to works and personas no longer belong to any creator or performer—they are either centrally consolidated by technology holders and platforms or directly extinguished owing to the impersonal nature of digital assets.

On this basis, the digital cultural-entertainment industry forms a typical pattern of non-creative involution (非创造性内卷) and income collapse. Audience attention is a rigidly capped resource that cannot expand indefinitely with AI content supply; massive volumes of homogeneous, low-threshold, reproducible AI content flood public communication space, continuously diluting public traffic value. The traffic-allocation mechanisms of platform algorithms further exacerbate resource monopolization, with traffic and monetization resources continuously concentrating toward top production teams and large platforms, while the labor value of numerous small and medium creators and ordinary content practitioners is completely cheapened. The traditional upward path by which those relying on personal skill, creativity, and personality characteristics achieved tiered income and steady appreciation is sealed off; mid-tier creators are comprehensively marginalized, and the industry forms a deformed ecology of "unlimited output surplus, continuously shrinking monetization channels, and long-tail profit-sharing reduced to zero."

Based on the a priori deduction of this study, in the next five to ten years the AI cultural-entertainment industry will enter a structural inflection point of endless technological iteration accompanied by the extinction of commercial returns—not because technological development has stalled, but because of the hollowing-out of industrial value after the complete demise of personalized long-tail rights. AI technology can perpetually produce content, iterate visual effects, and lower production costs, but it cannot reconstruct the cross-cycle appreciation system of personalized IP or rebuild the long-tail profit-sharing closed loop of the cultural-entertainment industry. When the industry completely loses its capacity for long-term value sedimentation and retains only short-term traffic gaming and homogeneous stock competition, ordinary practitioners will completely lose stable income channels, and the industry as a whole will degenerate from a "value-appreciating industry" into a "traffic-consuming industry."

This deep deduction of the digital-industry scenario completes a high-order cross-domain validation of the Title-Circulation Right (TCR) theory and greatly extends the explanatory boundary of the theory. This paper has previously, through bulk-commodity trade and domestic land-resource governance, validated the operating regularity in the physical domain of "cutting between property rights and circulation value-added rights and the alienation of profit-sharing patterns"; the rights-collapse phenomenon of AI cultural-entertainment assets further proves that this mechanism is a general underlying logic running through both the physical and digital economies: technological progress only transforms the form of production; it does not naturally distribute benefits. What truly determines the pattern of social income distribution is always the attribution, cutting, and consolidation rules of derived circulation rights. Whether physical resources, commercial assets, or digital personalized assets, once an institutional and technological design of "carrier persisting, rights stripped" appears, it inevitably triggers the systematic consequences of intensified involution, collapse of middle-tier income, and social allocation imbalance.

At the same time, this a priori extension of the subsection breaks through the superficial analyses of existing social-science research that focus only on technological pros and cons, industrial phenomena, and copyright disputes; it steps beyond the single research paradigms of commerce, finance, and land, and, standing at the macro dimension of the iteration of human asset forms, constructs a unified analytical framework of "physical assets—land governance—digital personalized assets," fully reflecting the foresight, generality, and explanatory superiority of this theoretical system.

It should be noted that this part, like the whole paper, is a critical mechanism deduction aimed at revealing the various social risks that rights cutting may generate, not a set of institutions or financial instruments ready for direct implementation. The entire analytical framework of the Title-Circulation Right and Cross-Border Institutional Extraction is developed in an abstract, theory-leaning form that may appear obscure and dry to ordinary readers; but for financial practitioners, institutional designers, and even profit-seeking market actors, the same logic presents another face: the operating mechanisms dissected therein—certificate issuance, asset pooling, long-tail rights stripping, profit-sharing consolidation—are themselves susceptible to being refashioned into practical instruments. This also precisely illustrates the real-world warning significance of this study: a theory that only sees its critical face is insufficient; one must also confront the risk that its internal mechanisms can be diverted, repurposed, and refashioned into real-world gaming instruments. The analysis of the demise of long-tail profit-sharing for personalized assets is not merely a case observation of the cultural-entertainment industry but an advance warning that assets of all kinds may face rights restructuring in the future.

Further distinguishing two types of personalized-asset fission that already appear in reality can more clearly anchor the boundary of operation of the Title-Circulation Right. One type: some older actors or those who have left the screen have ceased supplying physical labor such as live performance, variety-show recording, and offline public performance, no longer participating in content production with their bodies; but the symbolic value attached to their facial images, personal-IP symbols, and even circle-network connections can be separately stripped and enter the market as independent licensing objects. An actor grants the digital-use right of their likeness, no longer appearing in person, but can continue to receive profit-sharing income from subsequent content on the basis of the licensing agreement. Ordinary practitioners can also license their facial features as digital assets for trading.

This scenario also conforms to the core logic of the Title-Circulation Right of "physical labor ceasing while derived circulation rights are separately cut and disposed of," but it belongs to commercial licensing transactions within an industry and has not yet risen to the tier of cross-border institutional consolidation—Cross-Border Institutional Extraction. In contrast, in the pure AI virtual-character model without real-person authorization, the original real human subject completely exits the entire value chain: not only does physical labor cease, but even the personality-derived rights are extinguished together; there is no corresponding profit-sharing re-flow channel, and the rights are directly consolidated by platforms and technology holders. Through the contrast of the two types of cases, it can be seen that the Title-Circulation Right is a general rights-cutting mechanism that can occur both within commercial contracts in a single industry and be further amplified, institutionalized, and evolved into the operational foundation of Cross-Border Institutional Extraction at the cross-border level.

Through the aforementioned multi-scenario cross-domain validation, the core operating regularities of TCR theory have received dual support from both the physical-governance and digital-asset domains, laying a theoretical foundation for explaining the systematic mechanism of high-order rights consolidation and value-allocation alienation.

Based on this general underlying logic, the following text will further trace and systematically analyze the material preconditions for the formation, operation, and iteration of the cross-border rights-extraction system, completing the closed loop from theoretical deduction to real-world mechanism.

8.4 The Material Preconditions for the Entire Cross-Border Institutional Extraction Mechanism

Surplus-Value Re-Flow Lock-in requires several indispensable modern conditions, all of which matured only after the 1970s: the fragmentation of global industrial chains, keeping production in late-industrializing countries while distribution and pricing power rests at the top; the large-scale cross-border circulation of goods, enabling cheap industrial consumer goods to penetrate deeply downward to the bottom strata; the securitization of assets and future income, packaging other countries' productive capacity into top-tier financial products; and the precise regulation of profit-sharing ratios, so that the quantity of re-flow is neither more nor less—just enough to maintain stability, insufficient to allow the bound party to leave the system.

Traditional theory faced an "old colonialism dominated by violent value extraction"; Surplus-Value Re-Flow Lock-in is a new control technology evolved in the era of financial globalization. Reality has evolved; the observational object of old theory was itself different, so this mechanism could not naturally grow out of it.

8.4.2 Integrated Mechanism Case: The Trade–Finance Nested Operating Logic of the Cross-Border Institutional Extraction System (Thought Experiment Deduction)

Based on the underlying logic of the Title-Circulation Right theory, a set of covert operating mechanisms of cross-border institutional extraction in contemporary global gaming can be deduced a priori. This mechanism differs from traditional tariff sanctions, quota restrictions, and commodity dumping as overt trade instruments: its core lethality lies not in depriving gains from the trade of physical goods, but in systematically converting normalized cross-border trade flows into underlying financial assets that external sovereign actors can leverage, securitize, and consolidate through multi-layer nesting, achieving a second, third, or even cross-cycle extraction of trade value. The content of this section is a purely a priori thought-model deduction; it does not refer to any institution that has landed in reality and serves only to reveal the potential evolutionary path and material preconditions of a new type of cross-border rights consolidation.

In the operating framework of this theoretical model, traditional bulk commodities and cross-border small commodities exhibit completely differentiated gaming attributes. Standardized bulk commodities—steel, energy, minerals—trade openly, with transparent pricing, enormous per-transaction volumes, and strong regulatory penetration, making it difficult to create time lags and information gaps, and almost impossible to conduct covert rights stripping and financial nesting. In contrast, the massive, fragmented, non-standardized, small-order, fast-turnover trade of cross-border small commodities objectively forms a natural blind spot of the traditional regulatory system: per-transaction volumes are tiny and do not trigger large-sum risk-control review; customs valuation retains elastic space; trade actors are extremely dispersed; and fund flows are fragmentary and concealed, resisting unified consolidated regulation. For this very reason, small-commodity trade is not a low-end circulation activity without gaming value; on the contrary, it becomes the highest-quality source of underlying assets for the new type of cross-border institutional extraction system and the core carrier through which external actors progressively consolidate trade points, accumulate rights pools, and build the chassis of financial leverage.

The complete nested operating path deduced by this model can be sorted as follows. At the upstream production end, commodity production is completed and standardized lawful warehouse receipts are generated, forming corresponding physical title certificates. Under the trade–finance system of the new type of cross-border institutional extraction, downstream exporters do not directly purchase physical goods; instead, they lock in title, export quotas, and customs-clearance access qualifications by purchasing and pledging upstream warehouse-receipt certificates through advance distribution—forming a tiered circulation structure of "entitlement confirmation first, physical goods clearing later." By undertaking the distribution quotas of upstream warehouse receipts and purchasing pledge certificates, downstream actors deeply bind their own export-trade quotas, customs-declaration qualifications, tax-rebate rights, and warehouse-receipt rights, completing advance entitlement confirmation in trade and financial credit extension. At the same time, this nested mechanism has a clear endogenous bias: it naturally favors the original point-issuing enterprises and brand actors, providing institutional conditions for their goods to achieve lock-up, targeted consolidation, and scaled dumping clearance. Through the certificate-based circulation of warehouse receipts, issuers convert physical inventory into pledgeable, transferable point assets, completing large-batch goods circulation while avoiding violent spot-price fluctuations, further strengthening the issuer's dominant position over rights within the entire asset pool.

After downstream actors complete the purchase and pledge of warehouse receipts and obtain compliant export qualifications, the pledged goods formally enter the export-declaration process; after completing compliant export-tax rebates, the exporting actors may freely choose either direct fiat-currency clearing and re-flow or settlement re-flow through in-system trade points. Under the traditional conventional-trade view, the transaction is closed at this point: the physical manufacturer and downstream exporter obtain only meager operating profits from commodity processing and trade circulation.

But in the financial-nesting logic of cross-border institutional extraction, the downstream operating pattern of batch purchasing, concentrated pledging, and unified customs clearance amplifies the financial operating space of the warehouse-receipt window period. The time windows of goods in transit, customs inspection, and pledge duration, as well as the empty-window period during which warehouse-receipt pledges are not fully released, constitute the core operating space of cross-border title cutting. External sovereign actors can exploit this time lag to anchor the trade value of the corresponding batch—concentrated and pledge-locked downstream—to hard-currency targets such as gold, and derivatively issue market-based securities certificates with circulation, trading, and pledge attributes, completely stripping the physical delivery right purchased downstream from the financial income-circulation right at the system level.

At the financial tier: downstream actors bear the physical circulation functions of physical distribution, title undertaking, trade landing, and compliant customs clearance; whereas the external sovereign system, relying on the scaled pledge warehouse receipts consolidated downstream, completes the higher-order financial operations of asset-pool consolidation, securitization nesting, leverage amplification, and cross-period profit-sharing. Downstream actors lock in only the immediate trade-clearance rights and short-term purchase-sale price spreads, and do not participate at all in the subsequent circulation, pledge, secondary financing, or cross-period profit-sharing of warehouse-receipt derivative securities—ultimately forming the typical TCR title-cutting pattern of "downstream doing the physical logistics-trade, upstream consolidating the title certificates, and overseas consolidating the financial rights."

What deserves special emphasis is that the key to this mechanism lies in the fact that even if the domestic exporter does not participate at all in subsequent securities circulation, leveraged pledging, or cross-period profit-sharing, and completes only the basic physical export transaction, the entire rights-consolidation and value-consolidation system can still operate as an independent closed loop. Viewed from the perspective of domestic financial compliance, such operation models—multi-layer nesting, separation of title from income rights, and securitization of trade instruments—are completely inconsistent with the current regulatory framework and belong to typical non-standard financial operations. But once this mechanism is implemented under the leadership of an external sovereign state and refashioned into the supporting institutional thresholds of tariff access, market access, and cross-border customs clearance, its nature upgrades from an ordinary commercial arbitrage instrument into a sovereign-level institutionalized financial gaming instrument.

Because no mandatory treaty constraint exists between the two sides, our regulatory system has a natural jurisdictional boundary and cannot pierce through to regulate the institutional rules led by an external sovereign. To avoid direct regulatory conflict and sanction risk, the system can complete a circuitous landing by relying on transit economies and transit free-trade zones, without direct bilateral trade contact, greatly increasing the difficulty of regulatory tracing and blockage. Compared with large and conspicuous bulk-commodity transactions, external actors need not rely on a single huge trade order to complete asset consolidation; through the continuous cross-border circulation of massive small commodities, they can accumulate large volumes of trade points and underlying assets in daily, fragmented increments, progressively building a leveraged rights pool of considerable scale.

This set of potential operating mechanisms completely reconstructs the gaming dimension of traditional international trade. Traditional trade theory and mainstream social-science analytical paradigms have long been confined to the surface dimensions of tariff gaming, trade surpluses and deficits, gains from physical industry, and labor-cost competition, unable to identify the covert risk that "physical trade operates normally, people continue to labor and produce, industry continues to export value, while the core circulation value-added rights are institutionally extracted externally." Traditional narratives tend to evaluate developmental performance by macro aggregate indicators and take individual effort and labor input as the core logic for breaking developmental constraints, ignoring the structurally real lock-in mechanism constructed by cross-border institutional gaming and title cutting: the people continue to produce in involution, over-supply, and cheap export, retaining ultimately only extremely low physical processing gains, while the cross-period value-added, circulation leverage, securitization profit-sharing, and cross-border derivative income corresponding to the goods are all absorbed into the rights chassis of the external cross-border institutional extraction system.

It follows that the core competition of cross-border gaming in the new era is no longer the shallow confrontation of commodity capacity, production costs, or tariff levels, but the underlying contest over the power of discourse in the assetization of trade flows, the securitization of assets, and the institutionalization of securities profit-sharing. Whoever can dominate the title-cutting rules, certificate-issuance rules, leverage-nesting rules, and cross-period profit-sharing rules of trade will be able to complete the covert, sustained consolidation of other countries' physical labor value in the globalized system. The a priori deduction of this model is precisely a supplement to the blanks of the existing theoretical system, revealing in advance the deep evolutionary trend of future international trade from "physical-goods trade gaming" toward "title-circulation gaming and cross-border institutional extraction gaming."

8.5 Supplementary Distinction: The Scale Difference Between Labor Aristocracy Theory and Re-Flow Lock-in

Traditional theory does not deny that the bourgeoisie makes concessions and binds the working class through interests—the labor-aristocracy theory had already raised this phenomenon. But the labor-aristocracy theory concerns the interest-binding of a minority of workers within the system-dominating party's own interior, whereas Surplus-Value Re-Flow Lock-in operates at the cross-border level: the material interest-binding and institutional lock-in of an entire secondary economy's society as a whole, enlarging interest-binding from within a single country to the global system. This is a leap in scale of enormous magnitude.

8.6 The Four Blind Spots of Traditional Theory

Synthesizing the above analysis, traditional theory exhibits four blind spots: the "production-site lock-in" of the labor theory of value—confining the principal site of value extraction to the physical production link and failing to see the independent value-added of the circulation link; the "commodity-trade lock-in" of dependency theory—focusing on "who produces, who exchanges, who prices" without touching "who confirms entitlement, who circulates, who profit-shares"; the "currency-neutrality assumption" of international financial theory—treating money as a neutral medium of exchange and failing to see the control function of shadow currency; and the "rules-neutrality assumption" of institutional economics—treating institutions as "neutral" instruments for reducing transaction costs and failing to see the extraction function of institutions themselves. The blind spots of traditional theory are not accidental—they are the structural failure of the cognitive legacy of the "physical-trade era" in the "certificate-based era."

Lin Guangbin and Xiong Youcheng's research on "how non-productive platforms participate in the allocation of surplus value," together with Sun Jiemin's analysis of "new changes in productive and non-productive labor in the digital-economy era," jointly provide a contemporary footnote for understanding this theoretical blind spot. Sun Jiemin points out that the digital economy extends capital's economic power over labor across the boundaries of production organization. This work extends this judgment from domestic labor–capital relations to the global division of labor: in the cross-border institutional extraction system, capital's control over labor crosses not only firm boundaries but national borders—workers of peripheral participants are not "hired" by central capital in the physical sense, yet the surplus value they create is institutionally extracted through certificate-based pipelines.

Chapter 9: Homologous Logic and Generational Leap — Essential Differences between SVRL and the Marshall Plan

9.1 Core Judgment

Surplus-Value Re-Flow Lock-in ≠ Marshall Plan 2.0. The Marshall Plan was a targeted, time-limited state-aid binding instrument of the Cold War era; Surplus-Value Re-Flow Lock-in is a normalized, automated, distributed global-system mechanism of the financial-globalization era. The two share a kinship in technical logic, but exhibit a generational leap in material conditions, scope of operation, degree of closed-loop completeness, and mode of risk transfer; yet the economic-structure replacement, sovereignty erosion, and narrative predicament they produce are highly comparable, so the historical lessons of the Marshall Plan can be used to deduce the implementation path and confrontation difficulties of Cross-Border Institutional Extraction in contemporary global gaming.

9.2 Revisiting the Underlying Mechanism of the Marshall Plan

The Marshall Plan (1948–1951) was essentially a post-war "aid–profit-sharing–binding" instrument directed by the United States at Western Europe. It already displayed an early prototype of "value re-flow + institutional lock-in," but, constrained by its era, it had clear boundaries.

The value-flow chain: the United States exported grants (90 percent) plus low-interest loans (10 percent); the funds were not delivered directly to recipient-country treasuries but were mandatorily used to purchase American grain, industrial equipment, and materials. At the same time, a counterpart fund was established—recipient countries deposited equivalent local currency into closed accounts, whose use rights were subject to American intervention, thereby achieving economic control.

The purposes of the re-flow: in the short term, to absorb America's wartime overcapacity, with goods orders flowing back to American firms; geopolitically, to confront the Soviet Union, bind Western Europe into the dollar and the capitalist camp, and push the hegemony of the dollar to land; institutionally, to require lower tariffs, open access for American capital, restrict nationalization, give strategic materials priority supply to the United States, and remodel Western Europe's economic-institutional framework.

Historical limitations (the key to why it cannot be equated with contemporary Surplus-Value Re-Flow Lock-in): time-limited—it was a four-year targeted program with a clear beginning and end, not a perpetual spontaneous cycle; limited objects—it targeted Western European industrial economies whose recipients themselves possessed complete industrial foundations, and the aid goal included rebuilding their own self-generating industries, with Western Europe subsequently completing industrial upgrading rather than being permanently locked into mere OEM nodes; no complete risk-spillover funnel—Marshall Plan risk was mainly absorbed within Western Europe, with no dedicated "pipeline-external risk-bearing layer"; and politics took precedence over economics—the primary goal was Cold War geopolitical containment, with economic binding as a supporting instrument, whereas in the cross-border institutional extraction system the economic-financial cycle comes first, and geopolitics is a derived outcome of the cycle.

9.3 Points of Similarity Between the Two

The two share a set of underlying political-economy logic of "giving sweeteners in exchange for compliance." Both use positive material re-flow to dissolve resistance—the Marshall Plan provided Western European publics with grain and consumer goods, quelling post-war famine and social turmoil; Surplus-Value Re-Flow Lock-in delivers cheap grain and oil, daily necessities, and basic welfare to the bottom strata of transit economies. Re-flow is the means, lock-in is the end—Marshall Plan aid bought market opening, dollar settlement, institutional remodeling, and geopolitical alignment; Surplus-Value Re-Flow Lock-in binds countries within the global pipeline division of labor. Both reconstruct regional economic division patterns—the Marshall Plan swept away Europe's indigenous trade system; cross-border institutional extraction, through re-flow lock-in, fixes secondary industrial countries into mere production nodes.

Both bring a homologous narrative dilemma—the counterpart can package institutional binding as "aid, the dividends of globalization, and free trade"; voices criticizing structural dependence are easily stigmatized as refusing development, closing off, and regressing.

9.4 Core Essential Distinction: Why It Is Not 2.0

The most important essential difference: the Marshall Plan is "I pay out of my own pocket to bind you with interests"; Surplus-Value Re-Flow Lock-in is "I take away your output, then return a small part to you, thereby binding you with interests." The source of the sweetener has fundamentally changed. The Marshall Plan required the United States to first bear fiscal costs outward; the top tier of cross-border institutional extraction bears almost no initial cost, for the re-flowed materials themselves are extracted from the production end. This difference in source determines the fundamental difference of the entire logic—the former has a clear fiscal-constraint boundary, while the latter is a theoretically unlimited, self-cycling extraction–re-flow mechanism.

9.5 Drawing on Marshall Plan Historical Lessons: Deducing the Implementation Pathway

Cross-Border Institutional Extraction is a distributed system; it needs no unified treaty, relying on trade, finance, and supply chains to complete lock-in imperceptibly, with far stronger gaming concealment. Its implementation can be decomposed into several layers of steps.

First step: connect to the pipeline and complete value extraction. Secondary industrial countries join global supply chains, and their physical capacity connects to the top-tier trade-finance pipeline; when their goods are exported, the overwhelming majority of surplus value is captured at the top through distribution, pricing, and securitization. Compared with the Marshall Plan: Western Europe accepted aid and opened markets; contemporary transit economies need not sign aid agreements—normal participation in international trade automatically enters this value-extraction chain.

Second step: precise surplus-value re-flow to dissolve internal contradictions. The top re-flows a small portion of the extracted value downward: at the national level, processing-trade profit-sharing and foreign-exchange income; at the social level, cheap imported goods and employment positions sinking to the bottom. The re-flow quota is automatically adjusted by the system: just enough to maintain social stability and continued production, but insufficient to support a complete autonomous industrial breakout. Once a society's livelihood becomes highly dependent on the cheap goods and employment brought by this re-flow, the costs of external gaming become internalized.

Third step: institutional lock-in, risk spillover, and closed-loop formation. At the asset level, the quality industries and future income of secondary economies are packaged and securitized, with title transferred to the top of the pipeline; the risk funnel starts, and when overcapacity and financial volatility arise inside the pipeline, surplus goods are dumped outward to pipeline-excluded participants; and the narrative solidifies, packaging dependency as globalization and market freedom.

Fourth step: gaming leverage. When secondary economies attempt to seek equal rules and defend sovereign interests, the system has two classes of leverage: the contraction-re-flow lever—reducing orders and tightening circulation, raising domestic livelihood pressure; and the risk-amplification lever—proactively exporting inflation and debt pressure outward to prove that "leaving the pipeline means systemic risk."

9.6 Game-Theoretic Difficulties and Strategic Implications Drawn from the Marshall Plan

The historical lesson of the Marshall Plan tells us: simply refusing external engagement is not feasible; fully connecting without defense will progressively surrender economic sovereignty.

At the narrative level, two erroneous narratives must be avoided: wholesale denial of the livelihood dividends of global trade would detach from the real experience of ordinary people; and seeing only material dividends while ignoring structural lock-in would mistake the improvement in living standards brought by re-flow for the kindness of the system itself. The viable strategy is to distinguish "trade cooperation itself" from "the lock-in mechanism of Cross-Border Institutional Extraction," acknowledge the real gains of participating in the global division of labor, but reveal the costs.

At the economic level, the re-flow–lock-in chain must be interrupted: the country's own industries and public-welfare reserves must not allow the basic survival guarantee of the bottom strata to become highly dependent on pipeline-distributed cheap goods and jobs; the external securitization and packaging of the country's physical capacity and future income must be strictly controlled; and a risk-isolation wall must be established.

At the geopolitical level, one cannot single-handedly challenge the entire closed-loop pipeline; one should promote a diversified network of trade, settlement, and industrial cooperation to reduce dependence on a single pipeline; and unite the transit economies locked in by re-flow and the underdeveloped countries entirely outside the pipeline that bear risk-dumping and systematic debt risk, jointly exposing the funnel-shaped global allocation mechanism.

Part IV: Title-Circulation Right and Compound Risks (Ch. 10-12)

Chapter 10: Cross-Border Institutional Architecture — Two-Layer Safety Cushion and Dual-Track Settlement

10.1 The Core Kernel of Title-Circulation Right and the Underlying Logic of Cross-Border Institutional Extraction

Viewed from the core kernel of the Title-Circulation Right, its essence manifests as the institutional cutting of property rights from functional disposition rights: the legal attribution of assets can remain unchanged, while the circulation rights over transfer, disposition, and profit-sharing income can be differentially allocated and managed through access thresholds and identity labels. When this mechanism migrates from domestic social-governance scenarios to the global economic-trade domain, it constitutes the underlying logic of the cross-border institutional extraction system.

The Cross-Border Institutional Extraction framework and the Title-Circulation Right framework cannot be simply classified as a kind of financial-tool innovation; their kernel simultaneously possesses the institutional capacity of international gaming. Outwardly, the system presents a behavioral logic of voluntary participation, and actors have the freedom to choose to join or refuse; but objectively, refusing to connect to this pipeline system means losing the institutional channel for pledge financing and on-chain profit-sharing income based on point certificates.

10.2 Two-Layer Institutional Safety Cushion

The pipeline system internally sets up two mutually cooperating institutional safety cushions, corresponding respectively to the legal-compliance level and the financial-asset level.

First layer: the legal-compliance safety cushion. The on-chain certificates used to participate in on-chain trade require actors to actively purchase them. When exporting actors ship physical goods, the certificate value may not fully cover the goods' value, and a circulation pledge payment still must be paid by conversion according to institutional rules. The certificate is simultaneously endowed with the function of a cross-border-trade identity-credit certificate, usable as a compliance screening instrument that directly forms an institutional obstacle to the circulation of traded goods.

Even if trade actors conduct circuitous trade through transit economies, this is only an evasion measure at the gaming level; once identified, the goods and their corresponding on-chain rights face the risk of seizure. The pipeline builders have established multi-layer blocking mechanisms: anti-circumvention investigation, which, through review standards independent of general rules of origin, directly traces upstream raw-material source countries; escalation to criminal prosecution, which upgrades "origin-label substitution" from civil fines to criminal sanctions; and coercion of transit economies, which, through diplomatic pressure and market-access threats, forces transit economies to actively cooperate in blocking. These three blocking mechanisms jointly constitute the institutional reality of "one-way valve circulation in the pipeline": forward circulation is unobstructed, reverse circulation has its valve closed, and lateral circulation space keeps narrowing.

Second layer: the financial-consolidation safety cushion. After trade actors obtain on-chain points, the exit channel is not limited to physical delivery; actors may choose not to make physical redemption, but to convert the points into fiat currency, deposit them in an automated profit-sharing bank, and further convert them into gold-equivalent assets. This institutional channel objectively provides an institutional carrier for cross-border asset transfer and financial arbitrage. The function of the cross-border extraction pipeline is composite: it can both track and control the origin of goods and the direction of trade flows, and simultaneously serve as a financial leverage instrument, completing the consolidation of late-developing economies' local assets.

10.3 Dual-Track Settlement Mechanism and the "Bridge-Water" Effect

The on-chain system does not directly prohibit cross-industry market actors from engaging in certificate resale. The automated profit-sharing bank provides only the basic institutional channel of point storage and conversion; a large volume of cross-actor circulation and speculative trading can be completed through the over-the-counter market. The core design of the settlement mechanism manifests as a dual-track parallel structure of "physical delivery + rights delivery": physical delivery means traders can actually withdraw the physical goods of the corresponding category, corresponding to the actual output capacity of the production line; rights delivery means that while obtaining the physical goods, traders are in fact bound to the future-income rights of the entire asset package behind the goods—the package may cover port-use rights, power-generation income, land-planting income, mining output, and other diverse heterogeneous assets.

The "bridge-water" effect (过桥水效应): physical delivery writes off only the "goods" layer of rights, like bridge water skimming away the surface. But the delivery rights over other quality assets or the equity profit-sharing income that traders receive in hand are the truly locked part. Traders take the goods, yet do not achieve complete write-off—the rights corresponding to the goods are drawn off, while the other asset rights bound behind them remain in the pool, continuing to generate profit-sharing for the system.

The gold re-flow closed loop: foreign-trade exporters must convert their gains into gold equivalents; after obtaining the gold redemption certificate, the system releases the physical delivery right. This physical delivery right is not a simple delivery right but is bound to a financial package of quality assets. At the moment of delivery, traders are also bound into the entire profit-sharing system. Funds circulate within the system and cannot flow out freely.

10.4 Settlement Liquidation Mechanism and Risk Isolation

The system sets a settlement-liquidation mechanism as a rigid risk constraint, used to limit pure financial idle circulation completely detached from the physical base. Market actors participating in certificate trading and resale do not automatically obtain physical protection by holding on-chain rights; at the delivery-maturity node, holders must prepare logistics, shipping, warehousing, and other supporting conditions themselves to complete physical withdrawal. If they lack the ability to perform delivery at maturity, the system executes forced liquidation, the corresponding held rights directly lapse, and all trading risk is borne by the holders themselves. This mechanism achieves a cutting at the rule level: the system permits market speculation and certificate circulation, but provides no institutional backstop for the risks arising from over-the-counter trading and intermediary capital pools.

10.5 Market Stratification and Risk Isolation Valves

The entire certificate-trading system exhibits pronounced market-tier stratification: the primary market is centered on the native-point issuers, whose institutional responsibility boundary is limited to the underlying physical assets corresponding to their own issued certificates; the secondary market consists of various third-party agencies and physical-delivery intermediaries, with certificate speculation and price-amplification effects occurring mainly in the secondary market. Primary issuers and automated profit-sharing banks do not possess complete control authority over the secondary market; they can only moderately mitigate extreme market conditions by issuing market-guided prices and bear no obligation of direct market-support backstop.

This tiered architecture constitutes the system's core risk-isolation valve. At the institutional level, only the enforceability of the processes of paying money and delivering goods under the contract framework is guaranteed; but whether trading actors possess the real-world conditions—vessels, warehousing, logistics—to complete delivery receipt is a matter of the market participants' own performance capacity. If maturing traders cannot complete delivery receipt because of their own insufficient conditions, all resulting losses are borne by the secondary-market participants themselves. Through this division of rights and responsibilities, the risks arising from secondary-market speculation and performance failure are isolated outside, preventing reverse impact on the institutional chassis of the primary issuance end and the automated profit-sharing banks.

10.6 Asset Pooling and Mixed-Batch Mixed-Source Mechanism

The underlying asset pool behind the primary native-point issuers is not confined to a single category of physical goods. The pool may incorporate mines, land-income rights, and other diversified quality assets, constituting a mixed rights-asset package; the internal composition structure of the pool need not be fully disclosed externally, and market trading actors cannot learn the true composition of the underlying mixed pool.

The core function of the mixed-batch mixed-source mechanism lies in the thorough blurring of property-boundary lines: heterogeneous-asset packaging packs power-generation income, port-use rights, land-planting income, mining output, and other heterogeneous assets into the same financial delivery pool; point-weight generation establishes weights in the mixed pool, then distributes them downward after mixing batch and source; when participants receive points, they cannot tell which specific asset lies anchored behind them; untraceable property rights mix the income of assets of different origins, which participants cannot separate or individually withdraw.

Secondary participants and overseas distribution actors may inject non-physical income rights—mining rights, land income, port-use rights—into the asset pool. Such rights themselves lack direct physical-delivery capacity, but can be packaged into the pool together with physical bulk-commodity assets in the form of income-right pledges. Market participants superficially hold delivery points for a certain category of goods, yet the underlying asset pool has already mixed cross-region, cross-category physical assets and various operating-income rights packages. Different asset pools can also carry out mutual pledges and weighted income averaging, forming a risk-sharing aggregation structure and creating a market appearance of "too big to fail."

Chapter 11: Internal-External Isomorphic Logic — TCR Cutting from Cross-Border to Domestic Resource Allocation

11.1 Core Proposition: The Collective as an Institutional Essence of Distribution Tools

The core manifestation of the Title-Circulation Right in domestic social-governance scenarios is not a change in the attribution of property rights, but the institutional cutting of circulation rights from development rights. The legal attribution of assets can remain unchanged, while the functional rights of transfer, disposition, appreciation, and profit-sharing can be differentially allocated through identity labels, membership-status determination, and access thresholds.

In grassroots governance practice, the typical operating form of this cutting mechanism is: taking the "collective" (集体) as the institutional shell, and through the determination and deprivation of membership status, deciding who is qualified to enjoy land-appreciation rights, asset-circulation rights, and development rights, and who is excluded. The "collective" is not a naturally existing homogeneous community but a distribution instrument—its institutional function lies in demarcating the boundary of rights circulation, deciding which actors may enter the tiers of title circulation and which actors are locked at the bottom with only the function of labor supply. When this distribution instrument serves only the profit-locking of a circle rather than the development of all members, its institutional legitimacy foundation is hollowed out.

11.2 The Cutting Chain: Four Progressive Steps from Appreciation Rights to Development Rights

Title-Circulation Right cutting is not a one-off, single-point operation but a complete institutional progression chain. Step one, cutting the appreciation right—"the appreciation of your property does not belong to you": the asset appreciation created by micro actors is institutionally stripped away.

Step two, cutting the circulation right—"you are not a collective member, so your assets cannot freely circulate, be pledged, or be traded": the micro actors' assets are locked and cannot enter the circulation tier. Step three, cutting the development right—"without the appreciation right, you have no development right": micro actors are fixed in the functional position of labor supply and cannot accumulate. Step four, locking the tier—the bottom permanently loses the qualification for asset circulation, the tiers solidify, and the bottom can only sell labor, unable to enter the asset profit-sharing tier.

This four-step progression constitutes a complete institutional closed loop: cut off appreciation → cut off circulation → cut off development → lock you into selling only labor. Bottom-tier micro actors are systematically excluded from the title-circulation system, retaining only the single function of labor supply.

11.3 Information Asymmetry Structure: Three Sources of Institutional Concealment

The reason the Title-Circulation Right cutting mechanism has long gone under-recognized and unquestioned centers on the superposition of three layers of information asymmetry: the conceptual information gap—the word "collective" is endowed with an institutional shell of natural justice, and the interest-allocation structure within it is not interrogated; the chain information gap—the micro actors at the bottom cannot learn the complete chain from resource generation, to consolidation, to income distribution; and the framework information gap—existing discussion is confined within the legal framework, whereas the law itself is a product of the interest structure. The only path to break through this information gap is to step outside legal discourse and turn to consequence deduction: if this institution keeps operating, what will happen to the bottom? What will happen to society?

11.4 Consequence Deduction: Not Appealing to Law, but to the Objective Results of Institutional Operation

Consequence One: the one-directional compression of internal title-circulation space. Under the current institutional operating logic, the internal title-circulation space is exhibiting a marked one-directional compression trend. At the macro level, the scale of resources that upper-level power actors can deploy and integrate keeps expanding—through administrative instruments such as quota collection, land consolidation, and farmland requisition-compensation balance, large volumes of originally dispersed resources are gathered centrally; in sharp contrast, the title space that bottom-level people can autonomously control and circulate is continuously squeezed. The resources consolidated in the name of the "collective" at the upper level grow ever larger, while the asset rights that bottom-level individuals can actually control and use for wealth accumulation steadily shrink.

This trend of upward resource concentration, at a deep level, tears apart the theoretical narrative of "distribution according to labor" and the reality of institutional execution. The assets accumulated through the hard work of ancestors and the contemporary public should be the direct embodiment of distribution according to labor; but in actual operation, these fruits of labor face the risk of being institutionally zeroed out by an administrative provision. When an individual's labor output can at any moment be redefined or even deprived by non-marketized administrative force, distribution according to labor loses its due institutional guarantee and incentive foundation.

The inevitable result is the structural alienation of the allocation logic. Nominally, society still upholds the principle of distribution according to labor; but in the actual allocation of development-gain rights, the acquisition of resources and the attribution of income have quietly shifted to allocation by identity, class, and position in the power hierarchy. This enormous gap between name and reality not only dissolves the legitimacy of distribution according to labor but also solidifies inequality between strata at the institutional level, so that bottom-level people, amid the one-directional compression of title-circulation space, gradually lose the institutional channel of upward mobility through labor.

Consequence Two: the one-directional extraction of development income. In the actual operation of resource allocation and quota circulation, development income is exhibiting a highly asymmetric one-directional extraction feature. This asymmetry first manifests in the serious imbalance of rights and responsibilities: if top-level resource allocation leads to unfinished buildings or wasted land-use quotas because of decision errors or mismanagement, substantive accountability mechanisms are often lacking; yet when quota increments are generated under grand names such as farmland protection, ecological governance, and desert development, the operating-income rights after recovery are rapidly consolidated upward, with no effective feedback mechanism established to re-flow them to the bottom value creators.

The deeper contradiction lies in the fact that the same land-management system exhibits diametrically opposed operating logic toward different actors, forming a structural double standard of "open upward, closed downward." For bottom-tier micro actors, the land cultivated and accumulated by generations of ancestors is strictly locked in the name of "protection," deprived of the rights to autonomous development, market monetization, and free circulation, reduced to an ecological or agricultural burden that can only be passively borne; conversely, top-tier or specific powerful actors can, by virtue of institutional privilege, freely develop similar or even superior resources, smoothly generate quotas, and complete marketized transactions, converting institutional dividends into enormous development income.

This double standard not only causes injustice in wealth distribution but essentially constitutes the institutional deprivation of the bottom's development rights. Bottom-level people bear the rigid costs of land protection yet cannot share the appreciation income brought by the marketization of land factors; the top tier, by monopolizing the channels of quota generation and trading, achieves the legalized extraction of development income.

Over time, this one-directional extraction mechanism will further solidify the wealth gap between strata, so that the bottom, under the narrative of "protection," gradually loses the possibility of accumulating wealth and ascending in class through land assets.

Consequence Three: functional zeroing after automation superimposition. Under the double squeeze of one-directional compression of title-circulation space and continuous extraction of development income, the deep intervention of automation technology is becoming the last straw that crushes bottom-tier micro actors, plunging them into a state of complete "functional zeroing." When intelligent machines and algorithms begin to replace human labor on a large scale, bottom-level people are stripped not only of asset-circulation rights and labor-bargaining power but even of the final function of supplying "labor power."

This functional zeroing has extremely strong superimposed destructiveness. In the traditional capital–labor relationship, laborers could still maintain a survival floor by selling their labor; but under the double blow of "proletarianization" and "intellectualization," bottom groups can neither share development dividends through asset appreciation nor exchange survival resources through labor input. They are completely excluded from the value-creation and distribution system, demoted from factors of production to systematically redundant populations.

This deep structural deprivation means that systemic risk is no longer a long-term hypothesis in academic deduction but a real crisis accelerating its accumulation. When the vast bottom group simultaneously loses asset income and labor income, its survival floor will be breached, triggering a chain reaction of consumption contraction and intensifying social contradictions. This structural collapse jointly produced by technological substitution and institutional squeezing is pushing the economic society toward an extremely dangerous critical point.

Consequence Four: the superimposition of internal-external dual consolidation and the modern alienation of "weakening-the-people" governance (弱民治理) thinking. Against the backdrop of one-directional compression of internal title-circulation space and continuous extraction of development income, the formation of the external cross-border extraction pipeline is superimposing with internal mechanisms to constitute a tight dual-consolidation structure. In this structure, internal institutions, by cutting title-circulation rights, cause micro actors to lose asset-accumulation capacity; the labor output of bottom-level people is converted into aggregate statistics in macro figures but cannot be converted into disposable private wealth. At the same time, the external system, through certificate-based trade mechanisms, converts the physical goods at the export end into underlying assets for financial leverage; the country's sustained production activities are alienated into a sustained supply to an external profit-sharing system. The internal extraction finishes, then the external extracts again—forming a closed-loop chain of value deprivation.

The underlying logic of this dual-consolidation structure shares a deep isomorphism with the "weakening-the-people" governance thinking of the feudal era.

The principle of "profit from a single aperture" (利出于一孔) established by Guan Zhong in the Guanzi · Guozhu (《管子·国蓄》) had as its core meaning the concentration of the generation and distribution power of social wealth in the hands of the state, so that the people could not form an independent economic force. Successive dynasties' state-operated economic systems, through institutional squeezing, continuously compressed the space of the private economy, keeping bottom-level people in a state of "weakness" to ensure the absolute stability of ruling power. This governance logic has not disappeared in the contemporary era but has completed a modern transformation in a more refined form: internally, administrative means cut title-circulation rights so that micro actors cannot accumulate assets; externally, the financial certificate system intercepts circulation value-added income so that labor output cannot re-flow to the value creators. The superimposition of the two mechanisms evolves "weakening the people" from a governance means into a structural state.

The consequences of the modern alienation of "weakening-the-people" governance thinking are far more profound than in the feudal era. In the traditional agricultural society, land-rights consolidation was cruel, but the bottom could still maintain basic survival through farming, and social contradictions, after accumulating to a critical point, were violently cleared through dynastic replacement. Under the contemporary dual-consolidation structure, by contrast, bottom-level people not only lose the possibility of asset accumulation but, with the superimposition of automation technology, lose labor-bargaining power as well, and are even excluded from the value-creation system itself. This "functional zeroing" means the bottom can neither improve its situation through labor, nor share development dividends through assets, nor form effective gaming chips through collective action. Social contradictions no longer erupt in overt forms but continuously accumulate in hidden forms—consumption contraction, declining fertility, and the withering of social vitality—forming a gradual, path-dependent systemic crisis.

Even more worthy of vigilance, this dual-consolidation structure has the feature of self-reinforcement. The compression of internal title-circulation space prevents the bottom from forming an effective domestic-demand market, further strengthening dependence on external markets; the establishment of the external certificate system, in turn, requires the interior to continue supplying low-cost physical goods, further consolidating the internal "weakening-the-people" structure. The internal and external mechanisms interlock with each other, forming a closed loop difficult to break. When the external system converts the country's physical goods into its own assets through financial leverage, the country's production activities are completely reduced to a supply source for the cross-border extraction system, and the bottom-level people, in this process, are continuously deprived, ultimately falling into the structural predicament of "the country is rich while the people are poor."

From the deep logic of governance thinking, this dual-consolidation structure is essentially a modern upgrade of the art of "weakening the people." It no longer relies on overt administrative coercion; through the precise coordination of institutional design and financial instruments, it embeds value deprivation into every link of economic operation, so that bottom-level people are continuously extracted within a "lawful" framework yet find no clear object of resistance. The consequence of this governance thinking is to push society toward an unsustainable critical point: when the bottom's survival floor is breached, when the dual deprivation of labor and assets reaches its limit, systemic crisis is no longer theoretical deduction but an approaching reality.

Consequence Five: the false prosperity of GDP and the overdraft of rights. Under the analytical framework of the Title-Circulation Right and Cross-Border Institutional Extraction, the explanatory power of traditional GDP statistical indicators needs to be reexamined. A bright macro-level GDP growth rate is not naturally equivalent to the synchronous accumulation of disposable wealth for the whole society; under specific institutions and cross-border gaming conditions, it can completely evolve into a type of rights-overdraft growth.

The underlying logic of this type of growth model is built on the institutional cutting of micro-market actors' title-circulation rights.

Of the commodity value created by ordinary workers and small and medium production actors through high-intensity, excess labor, a large part of the derived circulation value-added rights does not re-flow along the production chain to the value creators themselves. This portion of long-tail profit-sharing income, through internal institutional pipelines or cross-border certificate-based mechanisms, is intercepted and consolidated by internal powerful actors or the external cross-border extraction system, ultimately counted into the country's macro-economic statistics and shaping a picture of prosperity at the aggregate level.

In other words, macro-statistical economic expansion is completed at the cost of overdrafting micro individuals' development rights, derived asset-income rights, and the free space of future economic choice. One generation's labor output is transformed into an economic aggregate that they themselves cannot fully control, giving rise to the structural contradiction of "a rich country with poor people." In this context, GDP is no longer simply a yardstick for the improvement of society's overall well-being; it can also become a measurement carrier for continuously extracted rights and value transferred outward.

The entire institutional conception of Cross-Border Institutional Extraction and the Title-Circulation Right is a potential iterative form built upon existing geopolitical gaming instruments such as tariffs, sanctions, and trade barriers. It is not an inevitable outcome of globalization gaming; it is a priori risk deduction under this research framework. Yet once such a mechanism is fully implemented, it will completely reshape the cross-border value-allocation landscape. In an external environment of persistently pressured external demand, if the country continues to rely solely on the export-development model of labor involution, depressed factor returns, and low-price competitive selling, it will find it hard to resist the covert value extraction of this high-order certificate-based mechanism.

The corresponding policy implication follows: before external gaming begins, the development rights of the country's bottom production groups should be secured first, the domestic income-allocation chain should be straightened out, internal social recuperation should be completed, the institutional gaming chassis should be consolidated, internal structural gaps should be compressed as much as possible, and local institutional loopholes should be prevented from being exploited by the external profit-sharing system.

Conversely, existing social-science analytical paradigms, in handling the compound contradiction of external economic-trade gaming and internal labor distribution, have long exhibited two notable cognitive biases. The first research path relies excessively on macro aggregate indicators and grand narratives, treating GDP growth as the core or even sole yardstick for evaluating development performance, lacking a priori risk assessment of the long-term attrition of workers' rights and the potential extraction of future derivative income by the external system. This type of analysis unconsciously adopts the observational perspective of an elite looking down, placing aggregate growth before individual rights and ignoring the value-allocation structure behind the aggregate. The second is the cognitive presupposition of naive individualism, one-sidedly magnifying the role of individual subjective agency and assuming that individual labor input and personal struggle alone can hedge against systematic institutional constraints and cross-border gaming pressure. This perspective fails to see that internal institutional arrangements and external cross-border rules can superimpose on each other, jointly building a rights-lock-in mechanism that cannot be broken through by individual effort alone.

As various extraterritorial unilateral trade sanctions and trade-access acts have landed one after another, the explanatory shortcomings of existing theoretical paradigms have been further exposed. When the external side already possesses the institutional possibility of building a certificate-based trade system and achieving cross-border institutional extraction through title fission, if public narratives still one-sidedly emphasize labor input and production expansion without examining whether the circulation profit-sharing rights attached to labor output face the risk of external stripping and extraction, then the country's sustained production activities may be alienated into an inexhaustible supply source feeding the external profit-sharing system. Traditional theory has neither fully identified the new type of risk that "production behavior itself can be refashioned into a carrier of rights outflow," nor can it completely explain the fission chain of the separation of property rights from circulation rights revealed by the Title-Circulation Right—constituting an unavoidable and important explanatory gap of the old analytical paradigm when confronting contemporary globalization gaming.

Consequence Six: the gaming failure of the certificate system and the structural predicament of internal-external dual gaming. Based on the overall analytical framework of the Title-Circulation Right and Cross-Border Institutional Extraction, the core competition of international trade and financial gaming has long left traditional capacity competition, labor competition, and price competition, finally landing on the top-tier gaming over trade-certificate issuance rights, financial-rule interpretation rights, and value profit-sharing control rights. Under the suppression of a high-order cross-border extraction system, the path by which exporters attempt to break through the rules by building parallel certificate systems faces real structural choke points and cannot achieve short-term closed-loop landing. Compared with external gaming resistance, the breeding of internal institutional loopholes and interest-arbitrage pipelines is the more covert and more lethal core risk in the current gaming system, ultimately forming the dual-gaming predicament of "external rules locking in, internal resources idling away," thoroughly confirming that a development model relying solely on human involution and low-price export cannot confront a mature financial rule system.

From the external breakout path, an autonomous parallel trade-certificate system faces three hard choke points in real scenarios that cannot be broken in the short term, constituting the core barrier to system landing and the main short board of the current rule-gaming breakout. The first is insufficient undertaking capacity: the financial infrastructure, judicial-execution systems, cross-border clearing mechanisms, and trade-dispute arbitration systems of potential undertaking regions such as Southeast Asia and Africa are not yet mature, and the underlying basic capabilities of certificate custody, value clearing, risk backstopping, and compliance endorsement are severely lacking; bilateral agreements and policy visions alone cannot support the landing and operation of a standardized, recyclable, risk-controllable cross-border certificate system. The second is ambiguous contracting actors: cross-border certificate cooperation lacks stable and credible contracting subjects; signing with host-country governments is subject to regime change, policy shifts, and political gaming, lacking long-term continuity; signing with local enterprises lacks sovereign-credit endorsement, with low market recognition and enormous risk exposure, and the cooperative foundation of resource anchoring and rights binding is extremely unstable. The third is the inability to close the loop of income sources: the value anchoring of a parallel certificate system has a natural paradox—anchoring to physical goods is subject to price-fluctuation shocks of bulk and small commodities, with insufficient value stability; anchoring to sovereign fiat currency still depends on the existing dollar financial system, unable to achieve genuine autonomy and control; anchoring to future trade flows lacks rigid performance guarantees, and future trade scale, transaction frequency, and cooperation stability cannot be quantified and backstopped, ultimately leaving the certificate value without solid support and the system an air castle.

Beyond the landing short boards of its own system, European and American capital, relying on centuries of financial iteration and accumulation, has formed absolute first-mover advantages and mature counter-measure systems, building comprehensive rule barriers. From the East India Company's trade monopoly and modern colonial capital extraction, to the construction of global monetary rules in the Bretton Woods system, to the current dollar cross-border settlement network and international trade certificate systems, Europe and America have completed multiple rounds of financial-rule iteration and upgrading, proficiently mastering the full operating logic of trade-flow assetization, risk transfer, and leverage profit-sharing. More critically, they have long monopolized the global interpretation rights of rules and the international public-opinion adjudication power, and can strangle the development space of emerging parallel certificate systems through multiple soft means: by questioning the source of system funds, twisting autonomous financial layouts into fiscal-subsidy arbitrage and the overdraft of public tax sources; by hyping risk-transfer rhetoric and pinning the public-opinion hat of "institutional rights alienation"; and by denying the international compliance of emerging certificate systems through the compliance standards of the IMF and the World Bank. Such public-opinion and rule suppression requires no substantive evidence; by merely manufacturing international cognitive noise, raising compliance thresholds, and amplifying market risk, it can block the landing and promotion of emerging rule systems at the germination stage.

The core essence of the cross-border extraction system is a high-order control instrument integrating risk transfer, financial leverage, and rule control—not a simple trade barrier or financial arbitrage tool. Through mature cross-border certificate systems, Europe and America transfer all the market risk, exchange-rate-fluctuation risk, cross-border compliance risk, and trade-performance risk of international trade outward to the export production end, while simultaneously amplifying their own profit-sharing income through the financial operations of certificate pledging, asset packaging, and multi-layer leverage nesting; finally, through institutionalized access rules, distribution control, and channel lock-in, they complete the long-term control of global trade flows and asset pools. This closed-loop mechanism possesses the dual attributes of financial consolidation and administrative control; it is a higher-order gaming dimension that mere physical capacity, human labor, and low-price export cannot resist, and it directly causes the continuous diminishing of the marginal returns of human involution while the leverage returns of financial rules keep increasing, forming a dimensional-crushing asymmetric gaming.

Compared with the technical barriers and rule blockades of external gaming, the core risk most worthy of vigilance and most destructive under the current system comes from the structural hidden danger of internal interest groups building arbitrage pipelines under grand narratives and extracting public resources. Under the packaging of grand narratives such as "building a parallel financial system, advancing RMB internationalization, improving the financial infrastructure of the Belt and Road, and achieving autonomous and controllable rules," the interior readily breeds all kinds of inefficient construction, duplicate construction, and resource-arbitrage behavior.

Some market actors and interest groups, riding policy tailwinds to apply for dedicated fiscal funds, build empty-turning platforms and financial systems that have no landing, no actual circulation, and no industrial empowerment, using the names of external gaming and autonomous control to conduct internal resource transfer and public-interest arbitrage. The final result is serious resource misallocation and public-resource attrition, producing the embarrassing situation of "no progress whatsoever in external rule breakout while the internal institutional chassis keeps loosening," further intensifying the structural predicament of title loss, rights overdraft, and development involution.

Based on the underlying gaming logic of the Title-Circulation Right (TCR) theory, the core of resolving the dual predicament is by no means blindly building immature parallel certificate systems, but jumping out of the traditional thinking of "passively receiving moves and fighting through involution" and shifting toward the active contention for rule-making power and the consolidation and reconstruction of the internal chassis. First, build a progressive parallel certificate network on the basis of regional cooperation: relying on the Belt and Road, ASEAN, and African cooperation frameworks, with digital-RMB cross-border clearing as the underlying support, build a small-scope, landable, risk-controllable trade-certificate mutual-recognition system, gradually breaking the single rule monopoly of Europe and America. Second, deeply bind the core interests of resource-exporting countries: anchor the autonomous certificate system to strategic bulk commodities such as lithium, cobalt, and nickel, construct a community of shared interests, shake off dependence on a single market and a single currency, and consolidate the certificate-value foundation. Third, upgrade the transit-gaming model: upgrade the traditional passive detour model of relabeling and re-branding to substantive capacity layout, brand layout, and channel layout in third countries, exploiting the natural elasticity of non-closed-loop trade structures to reduce external regulatory penetration and rights-consolidation risk. Fourth, prioritize completing internal recuperation and institutional repair: straighten out the domestic income-allocation chain, plug institutional arbitrage loopholes, and protect the title-circulation rights of bottom production actors, reducing internal public-resource loss and rights overdraft at the root, and building a solid core chassis for external gaming.

In sum, the ultimate competition of contemporary trade-financial gaming is the competition of rule-discourse power and title-allocation systems. Human labor, physical capacity, and low-price export can only complete value production; they cannot confront a mature financial-leverage and institutionalized cross-border extraction system. Blindly benchmarking the external system and following the trend to build empty-turning parallel certificate mechanisms will only aggravate resource waste and development involution; only by first consolidating the foundation and then breaking through, first plugging internal arbitrage pipelines and perfecting the title-protection system, and then progressively contending for the rule-making power of certificate issuance, clearing, and profit-sharing, can the long-term structural predicament of "labor consolidated, rights overdrawn, growth consumed in vain" be truly broken.

11.5 Ultimate Questioning: The Purpose of Institutions and the Attribution of Consequences

The legitimacy questioning of the Title-Circulation Right cutting mechanism ultimately reduces to an unavoidable question: is the operating purpose of this institution the development of all members, or the profit-locking of a circle? If it is the development of all members—why has development income not re-flowed to the bottom? If it is farmland protection—under the name of protection, why is the bottom locked in while the top can freely develop? If it is collective interest—why can collective membership be unilaterally determined and deprived? This questioning does not depend on the validity of legal provisions but on the objective test of the consequences of institutional operation. When an unbridgeable fissure appears between the nominal purpose of an institution and its actual consequences, the legitimacy of the institution itself faces fundamental questioning.

11.6 Isomorphic Relationship with Cross-Border Institutional Extraction

The internal Title-Circulation Right cutting mechanism and the external cross-border extraction system constitute an isomorphic relationship in structure: in terms of cutting objects, the internal system cuts micro actors' appreciation rights, circulation rights, and development rights, while the external system cuts the profit-sharing rights, settlement rights, and exit rights of exporting economies; in terms of institutional shells, the internal uses the "collective" name and membership-status determination, while the external uses "voluntary participation" and compliance certificates; in terms of lock-in mechanisms, the internal uses identity labels and access restrictions, while the external uses on-chain points, pledge lock-up, and sunk costs; in terms of income flow direction, the internal consolidates upward to the circle, while the external consolidates to the pipeline builders; in terms of bottom-layer situation, the internal leaves only the labor-supply function, while the external leaves only the physical-goods-export function; in terms of exit costs, internal membership once deprived cannot be restored, while external points are dispersed and buyback is nearly impossible. The internal and external mechanisms share one and the same underlying logic: through institutional cutting, strip micro actors of their circulation rights and development rights, fix them in a single functional position, and consolidate the rights of circulation, profit-sharing, and accumulation upward or outward.

Chapter 12: Compound Risk Deduction — Asset Pooling, Gradual Lock-in, and Dual Value-Convergence Tensions

12.1 Internal-External Dual Pressure and Endogenous Development Foundation

The practical problem-consciousness behind the analytical framework of Cross-Border Institutional Extraction and the Title-Circulation Right originates from the structural constraints encountered by the export-oriented economic model. When the incremental space of outward trade is compressed by geopolitical gaming, relying solely on expanding external output can no longer sustain the overall development of the economy. The foundation of an economy's endogenous development lies in micro actors holding assets and capital that they can autonomously dispose of, safeguarding household consumption capacity and individual development space, and preventing the asset rights held by the people from being one-directionally endorsed as a passive backing for macro governance objectives.

After some land, farmland-quota, and other resources undergo collection, consolidation, and remediation, the corresponding income rights are consolidated upward, and the incremental income finds it hard to re-flow sufficiently to bottom-tier micro actors, giving rise to the structural contradiction of continuously expanding resource scale deployable at the upper level while the title-circulation space available to the people keeps narrowing.

This structural contradiction can be further refined as: the internal dimension—the four-step cutting of Title-Circulation Rights causes bottom-tier micro actors to lose asset-accumulation capacity, retaining only the labor-supply function, and when automation further replaces labor, this function also tends toward zero; the external dimension—the cross-border extraction pipeline takes voluntary participation as its surface appearance and certificate-based rights extraction as its substance, with export-end physical goods continuously enriching the external rights chassis while exporting actors cannot obtain equivalent on-chain profit-sharing circulation rights; the superimposition effect—while internal title-circulation space is compressed, the external certificate-based profit-sharing pipeline forms an institutional impact, constituting internal-external dual consolidation.

12.2 Gradual Release, Path Dependence, and Sunk Cost Lock-in

On-chain delivery certificates are not released to the market in a single large batch; a gradual-release supply model is adopted, and all certificates are given fixed validity periods. If market actors fail to complete physical settlement and rights-redemption processes, the corresponding title-circulation rights remain continuously retained in the on-chain ledger. The income generated by pledging is likewise not immediately redeemed; the contract sets a pledge lock-up period, and only after holding the pledge for the stipulated number of years can actors unlock and obtain the corresponding income.

The income quotas allocated to participants in the system's early stage are often extremely meager; through layer-by-layer accumulation across a large number of cross-border trade transactions, traders, without awareness, gradually accumulate on-chain rights of considerable scale that can later be used again for pledging, redemption, and other operations. Through small-scale, sustained income feedback, this mechanism causes trade participants to gradually form interest-binding with the entire pipeline system, building strong path dependence. As the scale of the pledged rights held by actors expands, sunk costs rise accordingly, also raising the real threshold for actors to voluntarily exit this institutional closed loop.

12.3 Internal Stability Maintenance Mechanism and Risk Boundaries

When secondary participants, at the scale of a nation-state, incorporate their mines, land, ports, and various income rights into a unified asset pool, this will precipitate a rapid expansion of the underlying asset pool, forming a strong risk-resistance expectation at the level of market cognition.

If the market experiences liquidity shrinkage and insufficient external taking-over capacity, the system possesses the operational space of internal stability maintenance: by additionally incorporating quality assets such as bulk commodities and new mining rights into the asset pool, and relying on internal trading scheduling to complete income support, it can achieve closed-loop rescue within the institution at the level of assets and liabilities.

This internal stability-maintenance capacity is mainly used to protect the institutional chassis of the primary issuance and the platform itself, and does not extend to secondary-market participants. The platform serves only as a trading-infrastructure provider, and the narrative logic it transmits externally is: on-chain financial instruments naturally carry trading risk; risk judgment and bearing obligations belong to the participating actors; connecting is a voluntary choice, and no compulsory contractual relationship exists.

12.4 Hidden Access Screening of Settlement Currencies

Under this gaming framework, the choice of settlement currency constitutes another layer of hidden access screening. The exporting side outputs physical goods outward; the counterparty may accept settlement of the payment in the exporter's local currency. But once the local currency is used to directly settle the payment, the entire set of derivative institutional channels corresponding to that trade is closed to the exporting actor. The trade actor will be unable to obtain on-chain points and will consequently lose the qualification to participate, on the basis of that trade, in Title-Circulation Right financing, securitization operations, gold pledging, and related derivatives trading. The physical goods have been delivered outward and their value flows out, while all the profit-sharing, pledge-arbitrage, and asset-swap permissions attached to the asset pool are not opened to that transaction; the exporting actor obtains only the payment corresponding to ordinary goods trade, isolated from the entire rights closed loop.

The counterparty's acceptance of local-currency settlement does not represent a gaming concession; it is essentially a realization form of institutional screening: only by conducting transactions in compliance with the certificate and settlement rules designated by the system can market actors unlock the full set of derivative financial rights; if spot delivery is completed directly in the local currency, the transaction stops at ordinary commodity trading and is directly excluded from the rights chain of Cross-Border Institutional Extraction.

12.5 Capital Arbitrage Risks of Technology Narratives and Long-Cycle Constraints

Some public-opinion and research discourse hypes grand development narratives of advanced productive forces, depicting industrial prospects around technology tracks such as new energy, chips, artificial intelligence, and humanoid robots. But observed from the perspective of institutional gaming, the core demand of some market actors participating in the relevant tracks is not to promote the landing of the real industry but to conduct equity-capital arbitrage on the strength of the track concept. After completing capital cashing-out, they choose to exit; whether the industrial project can achieve long-term landing and development is not their core concern.

Some market actors given a high-tech positioning, after obtaining social investment and financing, do not invest the funds sufficiently in substantive R&D and production links, instead allocating them to financial wealth-management assets, with limited output scale at the physical level. Grand narratives can objectively become a carrier for consolidating social resources, while the technology industry itself is subject to multiple real-world constraints—energy constraints, geopolitical gaming patterns, household consumption capacity—and its actual industrial scale is hard-pressed to reach the idealized expectations of the narrative level. When technology projects develop below expectations, bad-debt risk of considerable scale will form, and eventually part of the risk will be transmitted downward for social micro actors to bear. At the same time, new technologies such as artificial intelligence will bring labor-occupation substitution effects, further amplifying structural contradictions at the social level. Technology-driven industrial transformation itself has a long-cycle feature; one cannot hope to dissolve multiple complex economic and social contradictions at a stroke through short-term technological breakthroughs.

Part V: Geopolitical Narrative and Counter-Pathways (Ch. 13-14)

Chapter 13: Narrative Dilemma and Discourse Game — How CBIE Blunts Anti-Extraction Narratives and Manufactures Legitimacy Asymmetry

13.1 The Most Dangerous Aspect of Cross-Border Institutional Extraction

The most dangerous aspect of Cross-Border Institutional Extraction is not merely the economic extraction of surplus value and the outward transfer of risk, but its blunting, at the discursive level, of traditional anti-colonial and anti-value-extraction narratives, manufacturing enormous obstacles to symmetrical gaming.

13.2 Traditional Anti-Colonial Narrative's Factual Basis Is Partially Blunted

In the old colonial era, the oppressed society could directly see occupation, plunder, and oppression. "We are being extracted" was a reality directly perceivable by the masses, and the anti-colonial narrative possessed powerful social legitimacy. Under the re-flow lock-in mechanism, ordinary people can obtain cheap goods and basic survival materials. Even if scholars can demonstrate unequal value extraction at the national level, the ordinary individual's felt experience is that life is getting better. At this point, outputting the narrative "this is institutional rights alienation, we are being extracted" encounters a practical rebuttal: "But I really am getting benefits." It is not that the critical logic is wrong, but that a huge fissure has appeared between individual survival experience and macro-structural value extraction. The macro structure is obscured, and individual material experience becomes the dominant cognition.

13.3 Geopolitical Opponents Wield "Welfare Bait" as a Diplomatic Tool

The top-tier system can influence the internal social mentality of secondary economies by adjusting profit-sharing, cheap-goods supply, and debt conditions. If a late-developing country chooses to confront the system, the cost is not only external sanctions but also the disappearance of cheap consumer goods, employment shocks, and rising livelihood pressure brought by supply-chain decoupling. The opponent need not dispatch troops; merely contracting that portion of the "re-flow sweetener" can manufacture livelihood anxiety within your society, forcing internal public opinion to oppose tough external gaming. An asymmetry thus forms: the system side holds a livelihood lever, a large part of the cost of gaming is transferred onto your own people's heads, and your external gaming is constrained by internal livelihood pressure.

13.4 Legitimacy Game: Opponents Frame Value Extraction as "Inclusive Trade, Globalization Dividends"

Cross-Border Institutional Extraction packages value extraction as free trade and market reciprocity. The re-flowed materials are propagandized as welfare bestowed by globalization. Traditional anti-dependency and anti-value-extraction discourse is easily stigmatized as closed, anti-development, and the refusal of a good life. This creates a discourse-power predicament: you speak of structural value extraction, the opponent speaks of individual life improvement; you speak of damaged sovereignty, the opponent speaks of market freedom. The ordinary public more readily accepts the latter, so your symmetrical gaming lacks a social narrative foundation.

13.5 Risk Transfer Architecture Amplifies Bargaining Disadvantages

When a crisis occurs inside the system, it can export surplus goods and debt crises outward. Even if late-developing countries do not actively involve themselves in the conflict, they passively bear inflation and debt pressure. The opponent's systemic crisis becomes your domestic governance problem. Geopolitical gaming is no longer state against state; it is your confrontation with an entire global machine that can digest crises by itself.

13.6 Strategies for Narrative Reconstruction

Facing this system's discursive advantage—using individual short-term material gains to obscure long-term structural losses—the counter-narrative cannot simply negate the real material improvements ordinary people have obtained; otherwise, the narrative detaches from reality and loses persuasiveness. Do not simply say "these commodity dividends are all fake"; instead, distinguish two things: short-term material gains, and long-term sovereignty, industrial, and risk costs. Acknowledge that individuals have indeed received tangible benefits, but explain what costs accompany those benefits: industry locked in, future income securitized away, and risk falling on the home country when a crisis comes.

Rewrite the narrative from "rejecting globalization" to "striving for a more equal globalization": the object of critique is not trade itself but the institutional rules of unequal allocation and risk transfer that constitute Cross-Border Institutional Extraction. Bring the forgotten "pipeline-excluded participants" into the narrative alliance—many developing countries entirely excluded from the pipeline bear systematic dumping and debt risk; their experience differs from that of secondary industrial countries, but the root is the same system. Unite with them to jointly expose the entire funnel-shaped risk allocation and break the opponent's monopolized globalization narrative.

Chapter 14: Four-Dimensional Breakthrough Framework — Economic Structure, Narrative, Risk Isolation, External Solidarity

14.1 Core Principles

Facing a self-closed-loop cross-border extraction system that can dissolve internal resistance and transfer risk outward, the counter-move cannot simply replicate the struggle instruments of the old era. One must be clear-headed: the old anti-colonial path cannot be simply copied. The old era confronted territorial occupation and direct violence; now one confronts a self-sustaining composite system of economy-finance-narrative. A direct "hard disconnection" often triggers the disappearance of re-flow dividends and causes domestic livelihood turmoil, precisely falling into the opponent's expectation. The core of confrontation is not to smash the system at one blow but to dismantle its two pillars: "Surplus-Value Re-Flow Lock-in" and the "closed loop of outward risk transfer."

14.2 Economic Level: Breaking the Core Logic of "Re-Flow Lock-in"

The key condition of re-flow lock-in: the power to allocate value, the right to securitize assets, and the key nodes of the industrial chain are held externally, and you can obtain only just enough scraps to survive.

Break through industrially upstream and reduce being locked into mere production nodes: not only OEM production—master pricing power, distribution power, brands, and technology so that the surplus value created by domestic production stays at home as much as possible. This is not refusing to participate in global trade but changing the allocation pattern of "output belongs to others, only a little livelihood material comes back."

Isolate harmful risk-transfer channels: control external debt, control the disorderly dumping of surplus goods, and prevent the country from becoming the system's risk trash can. Stay vigilant against imported securitized assets, and do not allow the country's physical capacity to be bound by external financial instruments.

Use domestic redistribution to hedge against external lock-in effects: the little sweetener the external system gives the people is essentially used to buy the abandonment of resistance. Through the country's own distribution and public-welfare construction, provide a source of livelihood security that does not depend on the external pipeline. The key point: the people's survival guarantee cannot be built on the external system's alms-style re-flow. Once domestic livelihood becomes highly dependent on external re-flow, the initiative in gaming is handed to the other side.

14.3 Narrative Discourse Level: Repairing the Rift Between Macro-Structure and Individual Experience

This system's discursive advantage is using individual short-term material gains to obscure long-term structural losses. The counter-narrative cannot simply negate the real material improvements ordinary people have obtained; otherwise, the narrative detaches from reality and loses persuasiveness.

Do not simply say "these commodity dividends are all fake"; instead, distinguish two things: short-term material gains, and long-term sovereignty, industrial, and risk costs. Acknowledge that individuals have indeed received tangible benefits, but explain what costs accompany those benefits: industry locked in, future income securitized away, and risk falling on the home country when a crisis comes.

Rewrite the narrative from "rejecting globalization" to "striving for a more equal globalization": the object of critique is not trade itself but the institutional rules of unequal allocation and risk transfer that constitute Cross-Border Institutional Extraction.

Bring the forgotten "pipeline-excluded participants" into the narrative alliance: many developing countries entirely excluded from the pipeline bear systematic dumping and debt risk; their experience differs from that of secondary industrial countries, but the root is the same system. Unite with them to jointly expose the entire funnel-shaped risk allocation and break the opponent's monopolized globalization narrative.

14.4 Geopolitical Level: Avoiding One-on-One Confrontation with the Entire System

The power of Cross-Border Institutional Extraction comes from a highly centralized unified pipeline. What it fears most is not a single country making a fierce show of defiance but the dismantling of the pipeline and the emergence of alternative circulation, financial, and trade networks.

Diversify external economic channels and reduce dependence on a single pipeline: reduce dependence on a single top-tier distribution and financial-securities system, and build trade-settlement and industrial-cooperation networks not centered on the counterparty's rules. When we have other channels to obtain income and materials, the counterparty cannot coerce us by contracting the "re-flow sweetener."

Distinguish gaming targets: not rejecting all external engagement, but stripping away the parts of "lock-in, securitization binding, and risk transfer." Trade is permissible, but refuse to package the country's future income into the counterparty's financial products; importing goods is permissible, but refuse to accept the counterparty's surplus crisis without limit.

Recognize the long-term nature of gaming: this system is self-closed-loop and cannot be toppled in an instant. Confrontation is gradual gaming; every step reduces its lock-in intensity over you, rather than fantasizing about destroying the entire global system once and for all.

14.5 Internal Bottom Line: Guarding Against Systemic Infiltration and Domestic Division

Re-flow lock-in acts not only between countries but also shapes cognition within society. The system will cultivate a public opinion: as long as the current state of dependence is maintained, tangible benefits can be continuously obtained; any confrontational behavior will harm livelihood. Internally, therefore, one must maintain clear cognition: the costs of external gaming need to be publicly discussed, and "exchanging small benefits for dependence" must not be packaged as the only viable path. At the same time, prepare risk contingencies: when the external side tightens the re-flow dividend, the country has reserves and substitute capacity to bear the short-term pain of gaming.

Part VI: Risk Early-Warning, Civilization Deduction, and Conclusion (Ch. 15-16)

Chapter 15: Long-Term Institutional Lock-in Hypothesis — Long-Term Evolution, Class Segmentation, and Tech-Narrative Arbitrage Traps

15.1 Definition of Long-Term Institutional Lock-in and the Five Dimensions of Lock-in

Long-Term Institutional Lock-in (长期制度锁定) refers to the state in which peripheral participants, under the long-term operation of the cross-border extraction pipeline system, progressively lose autonomous development capacity, technological-innovation capacity, institutional-innovation capacity, and cultural subjectivity, and are permanently locked into the structural position of "low-end production—passive dependence—limited re-flow," unable to achieve civilizational ascent through endogenous force.

Long-Term Institutional Lock-in is not the consequence of any single policy but the systemic end-state in which the five dimensions—economic, institutional, cognitive, technological, and cultural lock-in—superimpose over the long run and reinforce each other.

The evolutionary path of economic lock-in: in the early phase (1–20 years), trade income is intercepted and capital accumulation is slow; in the middle phase (20–50 years), the industrial structure solidifies at the low end and high-end industries cannot sprout; in the late phase (50–100 years), local capital completely depends on pipeline financing and autonomous investment capacity is lost; in the terminal state (100+ years), the economic structure entirely serves pipeline demand and autonomous economic logic disappears.

The core mechanism of technological lock-in is that the pipeline system, through a "technology-assistance window," always opens "the previous generation" of technology to the periphery, keeping the periphery forever in a state of "chasing but always one generation behind." As Acemoglu and Restrepo's research on the race between machines and humans shows, the income distribution of automation technology is highly dependent on who controls the power to set technology standards—when the standard-setting power is monopolized by the system-dominating party, peripheral participants, even by importing technology, cannot obtain equal value-allocation rights.

Institutional lock-in manifests as the periphery's legal system being built around pipeline compliance requirements, its education system designed around pipeline talent demand, its financial system operating around pipeline clearing demand, and its industrial policy formulated around pipeline access standards. Even if peripheral participants change governments or amend policies, as long as the underlying institutional architecture is not changed, they still operate within the pipeline system's framework.

Cognitive lock-in is the deepest, most enduring, and most difficult-to-break of the five dimensions. In the first stage, one accepts "the global division of labor is natural; our responsibility for production is reasonable"; in the second stage, one internalizes "our backwardness is because we did not work hard enough / were not open enough"; in the third stage, one feels gratitude—"the pipeline system gave us the opportunity to participate in globalization; we should be grateful"; in the fourth stage, one self-censors—"questioning the pipeline is questioning globalization, is being closed and conservative." When cognitive lock-in reaches the fourth stage, peripheral participants not only do not resist but actively defend the system that locks them in.

Cultural lock-in manifests as indigenous knowledge systems being regarded as "backward," indigenous values as "irrational," indigenous aesthetic standards as "vulgar," indigenous languages marginalized in academic, commercial, and technological domains, and indigenous historical narratives overwritten by "modernization narratives." Even if all external lock-in conditions are lifted, the locked-in civilization has already lost the capacity to "imagine another possibility."

15.2 Self-Reinforcement and Intergenerational Transmission of Lock-in

Once Long-Term Institutional Lock-in forms, it possesses the capacity for intergenerational self-transmission: the first generation, having experienced the lock-in process, retains partial autonomous memory; the second generation, born into lock-in, internalizes it and views it as the "natural order"; the third generation actively defends the lock-in system, viewing it as "its own interest"; the fourth generation, unconscious of lock-in, is entirely unaware that "another possibility" exists.

Breaking Long-Term Institutional Lock-in requires five conditions to be simultaneously satisfied: cognitive breakthrough—at least one generation of elites completing a systematic unmasking of the lock-in structure; technological breakthrough—achieving generational parity or transcendence in at least one key field; institutional breakthrough—establishing entitlement, clearing, and standard systems independent of the pipeline; economic breakthrough—accumulating sufficient autonomous capital to escape liquidity dependence; and cultural breakthrough—rebuilding civilizational subjectivity and restoring the capacity to "imagine another possibility." Among the five conditions, cognitive breakthrough is the premise, technological breakthrough the key, institutional breakthrough the guarantee, economic breakthrough the foundation, and cultural breakthrough the end.

15.3 Three Phases of the Window Period

Before the advent of final Long-Term Institutional Lock-in, the system's evolution divides into three phases, corresponding to different breakout windows: the breakable phase (present to the next 10 years)—human factors still possess residual gaming value, traditional manufacturing and capacity still have bargaining power, and the pipeline system has not yet fully closed; the consolidation transition (10–20 years)—automated capacity replaces labor on a large scale, certificate-based trade becomes universal, the system gradually closes, and breakout costs rise sharply; the permanent lock-in period (20+ years)—the system fully solidifies, tiers and qualifications transmit across generations, peripheral participants completely lose the possibility of breakout, and civilizational-grade divergence becomes highly path-dependent.

The current residual gaming value of human factors is the last correction, upgrading, and breakout window for weak economies; after full automation lands and the certificate-based profit-sharing system takes shape across the board in the next twenty to thirty years, the global industrial strata and rights-allocation landscape will be completely locked in.

15.4 The Six-Step Causal Chain of Long-Term Institutional Lock-in

Under conditions of no major external shock, the long-term evolution of the cross-border extraction system will pass through six progressive steps. First, the gaming value of human factors falls to zero—humanoid robots and full-domain automation technologies mature and land, and the marginal contribution of traditional human labor in core production fields plunges to near zero. Second, the monopoly of automated capacity qualifications solidifies—the supply rights of robot core technologies, industrial mother machines, and high-end equipment are thoroughly monopolized by global core economies. Third, global trade becomes fully certificate-based—all bulk trade and core manufactured-goods trade are incorporated into the TCR entitlement pipeline. Fourth, the shadow currency operates across the board—the shadow-currency system of commodity-native points plus gold certificates becomes the de facto pricing, clearing, and reserve instrument of global trade. Fifth, global class structure is institutionally locked in—qualification tiering, circle profit-sharing, and valve discretion constitute a complete institutional system of global class fixation. Sixth, civilizational grades diverge in a highly path-dependent manner—global core economies advance toward interstellar civilization, brain-computer interfaces, biological immortality, and other higher civilizational grades, while peripheral participants fall into a low-grade trap, and the civilizational gap deteriorates from a "development gap" into a "species-level gap."

Three disturbance variables may alter the evolutionary path: disruptive general-purpose technological breakthroughs, the splitting of interest groups inside the central system, and the reconstruction of the global geopolitical landscape.

15.5 The Path Dependence of Long-Term Institutional Lock-in

Long-Term Institutional Lock-in is not a fatalistic prophecy but a risk early-warning. The core message of this paper is not "you are destined to be locked in" but "if no action is taken, path lock-in is the high-probability trend; if action is taken, breakout is possible, but the window is limited and the conditions are harsh." This is a warning, not a prophecy.

Chapter 16: Conclusion — Analytical Perspective Extension from Ownership to Circulation Right Narrative, and the Possibility of a New Order

16.1 The Core of the Analytical Perspective Extension

The core work completed by this paper is to advance the political-economy allocation paradigm from the "ownership-centered narrative" to the "circulation-right-centered narrative."

Over the past century, the grand debates over public versus private ownership have, to a large extent, fallen into the cognitive blind spot brought by the ownership narrative. Both sides of the debate concentrated all their attention on the question "who owns the means of production," as if once ownership attribution were answered, all the riddles of value allocation would be solved. Yet, as history entered the twenty-first century, as globalization and financialization have become deeply nested, the locus of value extraction has undergone a fundamental shift—it occurs less and less in factory workshops and more and more hidden inside the financial pipelines of entitlement confirmation, registration, pledge, profit-sharing, and multi-tier circulation embedded in cross-border goods flows.

Even if the legal ownership of physical assets remains unchanged, if the derived circulation rights of assets entering the circulation pipeline are monopolized by external actors, value extraction can continue unabated. Ownership matters, but it cannot be equated with the totality of allocative power; circulation rights constitute the other dimension of power long obscured by the old paradigm.

16.2 Five Core Original Conclusions

Synthesizing the model-building deductions, mechanism comparisons, reverse validations, and trend predictions of all chapters, this paper forms five core original conclusions.

First, the property-right–circulation-right decoupling proposition (货权-流通权脱耦命题). In the certificate-based trade system, the lawful transfer of physical property rights does not bring about the synchronous transfer of derived circulation rights. The institutional decoupling of property rights from circulation rights is the micro-foundation of the new type of value interception.

Second, the Surplus-Value Re-Flow Lock-in (SVRL) proposition. Through the precise re-flow control of "enough to live, not enough to overturn, not allowed to leave" (给够活、不给翻、不让走), the pipeline system permanently locks in the extracted without triggering systematic resistance. Re-flow is not a gift but a core component of the lock-in mechanism.

Third, the impossibility triangle of the pipeline system (管道体系不可能三角). High extraction efficiency, low resistance risk, and low maintenance cost cannot be simultaneously achieved. This structural constraint determines the system's long-term evolutionary direction and ultimate fate.

Fourth, the fivefold superimposition proposition of Long-Term Institutional Lock-in. The five lock-ins—economic, technological, institutional, cognitive, and cultural—superimpose and reinforce each other, constituting a highly path-dependent lock-in matrix. Breakthrough requires all five conditions to be satisfied simultaneously; none is dispensable.

Fifth, the proposition of institutional emergence, not conspiracy (制度涌现非阴谋命题). Structural inequality does not need conspirators. The pipeline system is the result of countless individual profit-seeking behaviors emerging under specific initial conditions through institutional competition and path dependence. Changing the structure, rather than hunting for conspirators, is the correct direction of breakout.

16.3 Applicable Boundaries and Limitations of the Theory

This paper must honestly confront its own limitations: the inherent limitation of thought experiments means that moving from thought experiment to empirical verification requires extensive data collection and case studies; the single-pipeline assumption does not consider the multi-pipeline competition landscape; the static power-structure assumption does not fully handle situations of drastic power-structure change; the uncertainty of technological change may fundamentally alter the physical form of the pipeline; and the simplification of cultural diversity does not fully distinguish the differential responses of different civilizational traditions to lock-in effects.

As the research of the National Institute for Global Strategy of the Chinese Academy of Social Sciences on "weaponized interdependence" points out, the evolution of network structures will profoundly affect the transformation of power structures. The analytical framework of this paper needs to be further extended along dimensions such as multi-pipeline competition and network-structure evolution.

16.4 Final Reflection: Civilization at the Crossroads

The writing of this paper stems not from hostility toward any system but from concern over one possibility: if this logic continues to operate, unrecognized and uncontested, what kind of world will our descendants live in fifty years, a hundred years from now?

In this world: producers are creating, but do not know where the value they create has gone; trade is circulating, but the rules of circulation are defined by an invisible pipeline; money is flowing, but the channels of flow are locked into a single system; technology is advancing, but the direction of progress is determined by others' standards; civilization is continuing, but the content of its continuation has been overwritten by others' narratives.

This is not the fate of any single country; it is the structural risk commonly faced by all civilizations on the periphery of the pipeline.

But this paper equally emphasizes: lock-in is not destiny. History has repeatedly proven that when cognition is lit up, when structures are unmasked, when action is organized, even the most precise lock-in can be broken. The difference lies not in "luck" but in whether correct action was taken within the window period.

The final message of this paper is not despair but lucidity.

Only by clearly seeing the structure can one clearly choose action. Only by clearly identifying lock-in can one clearly plan breakout.

Only by clearly understanding the costs can one clearly bear responsibility.

Lucidity remains: even if the capital and geopolitical actors who control cross-border trade pipelines do not accept, or deliberately avoid, the conceptual terminology created by this paper, they cannot escape this framework's deconstruction logic of real-world behavior. At the level of reality, it is not necessary to build a complete Cross-Border Institutional Extraction institution for the fragmented interception of Title-Circulation Rights to occur. Through instruments such as compliance review, access certification, and standard-format trade contracts, and by invoking geopolitical-gaming rationales, the transfer of derived circulation rights can be progressively completed. The value of this paper's framework lies not in preventing such practices from occurring but in completing in advance the cognitive deconstruction of such evolutionary paths.

Afterwards, even if relevant practices change their commercial names and narrative packaging, their kernel of rights stripping can still be reduced and recognized, thereby forming a cognitive-level early warning.

16.5 Closing Words

Global trade is undergoing a quiet paradigm shift: from "whoever produces profits" to "whoever confirms entitlement profit-shares," from "physical trade" to "certificate-based gaming," from "visible tariff barriers" to "invisible pipeline interception."

This shift has no gunpowder, no manifesto, no signing ceremony. It occurs in the fine print of every contract, in the fee schedules of every clearing node, in the discretionary space of every compliance review, and in the word choices of every rating report.

Some participants in global economic-trade governance are not incapable of observing the allocation consequences of the decoupling of property rights from circulation rights; but, constrained by the interest-binding of the existing system and the cost of institutional change, they tend to reinterpret and reconstruct this phenomenon within narrative frameworks such as the spontaneous evolution of markets and the efficiency gains of the global division of labor, avoiding direct discussion of the power-allocation structure behind it. Even if some actors can identify this structural problem, constrained by the complex interest entanglements of the global system, they find it difficult to generate an effective systematic correction path.

Many trade-financial practices have already produced the objective fact of the separation of property rights from derived circulation rights, yet existing discourse tends to attribute this to the spontaneous evolution of the free market, rarely inquiring into the power structure behind this rights allocation, or into whose interests this set of institutional arrangements actually serves.

This entire framework is a hypothetical thought experiment and does not reject being viewed externally as a theoretical conception with deductive coloring.

The core criterion for evaluating the value of this research is not judging whether the entire "Cross-Border Institutional Extraction" picture has been fully implemented in reality, but examining whether the set of sub-mechanisms it decomposes possess analytical utility. Even if one rejects the umbrella concept of "Cross-Border Institutional Extraction," local analytical units—such as pipeline-valve-style resource regulation, the cutting of property rights from derivative rights, and certificate-based surplus-value re-flow—can still be taken out independently to observe real-world economic and governance phenomena. In real society, tax receipts and various deduction certificates have already achieved certificate-based value re-flow; this research merely extends this class of already-known real-world mechanisms, by deduction, to the new domain of globalized certificate trade.

What this paper attempts to do is to make the invisible structures visible, the unspeakable logic speakable, and the unimaginable end-state imaginable.

Seeing is the first step of change.

References

This paper was posted as a working paper for academic discussion purposes. It represents a thought-experiment-based theoretical deduction in political economy and does not constitute empirical judgment on real-world institutions or actors. The author welcomes scholarly comments, critiques, and collaborative engagement.

Anonymous Author | Independent Researcher

Email: tinkboathuang@sina.com

Author Page / ORCID: HuangZhenHua

References

[1] Karl Marx. Capital (Volumes I and III) [M]. Beijing: People's Publishing House, 2004.

[2] Vladimir Lenin. Imperialism, the Highest Stage of Capitalism [M]. Beijing: People's Publishing House, 2015.

[3] Max Weber. Methodology of the Social Sciences [M]. Beijing: Central Compilation & Translation Press, 2005.

[4] Immanuel Wallerstein. The Modern World-System (Volumes I-IV) [M]. Beijing: Social Sciences Academic Press, 2013.
[5] Theotonio Dos Santos. Imperialism and Dependence [M]. Beijing: Social Sciences Academic Press, 1999.
[6] Giovanni Arrighi. The Long Twentieth Century: Money, Power, and the Origins of Our Times [M]. Beijing: Social Sciences Academic Press, 2022.
[7] David Harvey. The New Imperialism [M]. Beijing: Social Sciences Academic Press, 2009.
[8] David Harvey. Seventeen Contradictions and the End of Capitalism [M]. Beijing: CITIC Press, 2016.
[9] David Ricardo. On the Principles of Political Economy and Taxation [M]. London: John Murray, 1817.
[10] Bertil Ohlin. Interregional and International Trade [M]. Harvard University Press, 1933.
[11] Paul R. Krugman, Maurice Obstfeld, and Marc Melitz. International Trade: Theory and Policy (11th Edition) [M]. Pearson, 2017.
[12] John Maynard Keynes. A Tract on Monetary Reform [M]. Macmillan, 1923.
[13] Charles P. Kindleberger. A Financial History of Western Europe (2nd Edition) [M]. Oxford University Press, 1993.
[14] Barry Eichengreen. Golden Fetters: The Gold Standard and the Great Depression, 1919-1939 [M]. Oxford University Press, 1992.
[15] Pierre-Laurent Lucotte. The Financialization of Commodity Markets [J]. Journal of Economic Surveys, 2018, 32(1): 253-283.
[16] Giray Gozgor. The Effects of Supply Chain Finance on International Trade [J]. Finance Research Letters, 2022, 48: 102912.
[17] Albert O. Hirschman. National Power and the Structure of Foreign Trade [M]. University of California Press, 1945 (expanded 1980).
[18] Andrew Slaughter. A New World Order [M]. Princeton University Press, 2004.
[19] Henry Farrell and Abraham L. Newman. Of Privacy and Power: The Transatlantic Struggle Over Freedom and Security [M]. Princeton University Press, 2019.
[20] Henry Farrell and Abraham L. Newman. Weaponized Interdependence: How Global Economic Networks Shape State Coercion [J]. International Security, 2020, 44(4): 42-79.
[21] Daron Acemoglu, Simon Johnson, and James A. Robinson. Why Nations Fail: The Origins of Power, Prosperity, and Poverty [M]. New York: Crown Publishers, 2012.
[22] Daron Acemoglu and Pascual Restrepo. The Race Between Machine and Man: Implications of Technology for Growth, Factor Shares and Employment [J]. American Economic Review, 2018, 108(6): 1488-1542.
[23] Carl Benedikt Frey and Michael A. Osborne. The Future of Employment: How Susceptible Are Jobs to Computerisation? [J]. Technological Forecasting and Social Change, 2017, 114: 254-280.
[24] David Autor. Why Are There Still So Many Jobs? The History and Future of Workplace Automation [J]. Journal of Economic Perspectives, 2015, 29(3): 3-30.
[25] Charles Mackay. Memoirs of Extraordinary Popular Delusions and the Madness of Crowds [M]. 1841; Harmony Books reprint, 1980.
[26] Charles P. Kindleberger and Robert Z. Aliber. Manias, Panics, and Crashes: A History of Financial Crises (6th Edition) [M]. Palgrave Macmillan, 2011.
[27] Satoshi Nakamoto. Bitcoin: A Peer-to-Peer Electronic Cash System [R]. Whitepaper, 2008.
[28] UNPRI. Principles for Responsible Investment: Annual Report [R]. United Nations, 2023.
[29] BCI (Better Cotton Initiative). Standard System Overview [R]. 2021.

[30] Mahmood Mamdani. When Victims Become Killers: Colonialism, Nativism, and the Genocide in Rwanda [M]. Princeton University Press, 2001.

[31] Alison Des Forges. Leave None to Tell the Story: Genocide in Rwanda [M]. Human Rights Watch, 1999.

[32] Zhang Wuchang. The Economic System of China [M]. Beijing: CITIC Press, 2009.

[33] Zhou Qiren. Urban and Rural China (Revised Edition) [M]. Beijing: CITIC Press, 2017.

[34] He Xuefeng. The Logic of Land Rights: Where Is China's Rural Land System Going? [M]. Beijing: China University of Political Science and Law Press, 2010.

[35] UNCTAD. Trade in Value Added Database: Methodology Notes [R]. United Nations, 2023.

[36] ILO. Global Wage Report 2022-23: The Impact of Inflation and COVID-19 on Wages and Purchasing Power [R]. International Labour Organization, 2022.

[37] IFR (International Federation of Robotics). World Robotics Report 2023: Industrial Robots & Service Robots [R]. Frankfurt, 2023.

[38] Wen Bin. The Pricing Logic of Bulk Commodities Under the Interweaving of Financialization and Grand Narratives [N]. 21st Century Business Herald, 2026-06-22.

[39] Dong Feng. Leveraging the Advantage of the Real Industrial Base to Seek RMB Pricing Power for Bulk Commodities [N]. Economic Observer, 2022-09-20.

[40] Jin Yingji. Supply Chain Finance Innovation in the Restructuring of Cross-Border Industrial Chains [J]. China Finance, 2025(21).

[41] Liu Chenghao and Bai Jie. The Generation and Regulation of Monopoly Prices of Digital-Platform Capital: An Analysis Based on Marx's Thought of Distributive Justice [J]. Research on Financial and Economic Issues, 2025(11).

[42] Lin Guangbin and Xiong Youcheng. How Non-Productive Platforms Participate in the Allocation of Surplus Value [J]. Marxist Studies, 2026(3).

[43] Sun Jiemin. New Changes in Productive and Non-Productive Labor in the Digital-Economy Era: From the Perspective of the Evolution of Production Organization [J]. Journal of Tsinghua University (Philosophy and Social Sciences), 2026(4).

[44] Fang Jian and Shen Kaiju. The Legal Attributes of Land Development Rights and Their Localized Construction of Rights [J]. Study and Practice, 2019(1).

[45] National Institute for Global Strategy, Chinese Academy of Social Sciences. Weaponized Interdependence, Network-Structure Evolution, and Network-Based Power: Case Analyses of Semiconductors and International Financial Networks [J]. World Economics and Politics, 2024(8).

[46] Li Li. ESG Outlook 2026: China's Supply-Chain Test Under Global Regulatory Tightening [N]. Southern Weekly, 2026-01-17.

Working Paper Statement

Working Paper Statement

Contact

Contact