

Legal Regulation of "Involution" Competition among E-commerce Platforms

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Abstract: In recent years, the "involutionary" low-price competition among e-commerce platforms has intensified, becoming a typical phenomenon of digital market failure. Unlike traditional healthy price competition, e-commerce involution is not a spontaneous behavior of merchants, but rather an irrational, closed competition where platforms, relying on their structural gatekeeper power such as algorithm weighting, traffic allocation, and transaction rules, force or induce merchants to engage in continuous low-price dumping, high-cost marketing, and bottomless price concessions. This model completely reverses the competitive logic of "winning through quality" in e-commerce, creating a vicious cycle of "low prices squeezing profits, profits compressing quality, continuous quality degradation, and continuous weakening of innovation." This directly leads to distorted market price signals, difficulties for small and medium-sized businesses, profit loss for the physical manufacturing industry, and long-term suppression of innovation and upgrading in the digital industry. Currently, China's traditional legal norms, such as the Anti-Monopoly Law, the Anti-Unfair Competition Law, and the E-commerce Law, are based on traditional offline competition models. Their high regulatory thresholds, narrow coverage, and weak penalties make them ill-suited to the systemic, covert, and dynamic characteristics of involutionary competition, resulting in fragmented enforcement and lagging governance. This article analyzes the operational mechanisms, manifestations, and multi-level harms of involutionary competition in e-commerce, precisely defining its legal nature, including malicious price-based traffic diversion, hub-and-spoke monopolies, and abuse of relative dominant position. It also systematically examines the institutional failures of current legal norms. Based on this, it constructs a three-dimensional regulatory system encompassing "anti-monopoly as a safety net, detailed anti-unfair competition measures, supplementary special laws, and supporting mechanisms." This system introduces rules on relative dominant position, adds new types of algorithmic unfair competition, improves special regulatory rules for fair transactions on platforms, and supplements this with penetrating supervision, compliance audits, and public interest litigation mechanisms. This aims to break the low-price involution trap in e-commerce, shift the platform economy from price-driven competition to quality and innovation-driven competition, and contribute to the high-quality development of the digital economy.

Keywords: Involutionary competition; E-commerce platform; Relative advantage; Hub-and-spoke protocol; Algorithm governance.

1. Introduction of the Problem

As the digital economy enters a phase of competition for existing market share, the traffic dividend in my country's e-commerce industry is gradually diminishing, and the problem of homogeneous competition is becoming increasingly prominent. To seize market share, major e-commerce platforms continuously guide merchants to engage in vicious competition such as low-price promotions, excessive discounts, and selling at a loss to increase volume. "Involution" competition has become the norm in the industry, severely disrupting the e-commerce market order, squeezing the profits of the real economy, and hindering the upgrading of consumption quality. The 2024 Central Economic Work Conference explicitly proposed rectifying "involution" competition, incorporating disorderly low-price competition in e-commerce into the key points of macro-governance, and providing an important policy basis for the legal regulation of platform competition. Academic consensus also emphasizes that breaking vicious involution competition is a necessary prerequisite for advancing the high-quality development of digital commerce [3]. Compared with traditional market price wars, e-commerce platform involution has obvious structural and systemic characteristics. Its competitive logic and harmful mechanisms are fundamentally different from traditional vicious competition, and it urgently needs to be regulated by specific laws.

"Involution," originating from sociological theory, refers to a cycle of ineffective, excessive competition and diminishing marginal returns within a closed system. In the context of e-commerce, involutionary competition specifically refers to platforms using algorithmic rules to increase the weight of product price in traffic rankings to over 60%, making price reductions the only way for merchants to gain exposure and maintain sales. This forces small and medium-sized businesses to continuously lower prices, overdraw profits, ultimately creating a passive closed loop of "no traffic without price reductions, and losses without price reductions." This type of competition completely abandons the positive dimensions of competition based on product quality, service level, and technological innovation, evolving into an irrational internal consumption that puts merchants under pressure to lose money—a typical example of platform-driven market failure.

my country's current market competition legal system is built upon the traditional offline market, focusing on static, one-way price competition, which is ill-suited to the dynamic, covert, and structured involutionary competition model of digital platforms. Traditional laws lack clear regulatory basis for new behaviors behind this involution, such as algorithmic price manipulation, traffic bullying, implicit monopolies, and abuse of relative advantages, resulting in problems such as outdated identification standards, excessively high evidentiary thresholds, insufficient penalties, and difficulties

for merchants in seeking redress. Uncontrolled low-price involution represents a typical "loss-loss competition that hurts both sides" and seriously restricts the high-quality transformation of the real economy [4]. Therefore, this paper, based on the realities of e-commerce involution, clarifies its operational logic and legal essence, analyzes the root causes of current regulatory failures, and constructs a systematic and implementable legal regulatory path.

2. The Operating Mechanism and Real-World Harms of "Involutionary" Competition on E-commerce Platforms

The involutionary competition among e-commerce platforms is not a spontaneous market phenomenon, but rather a structural vicious competition mechanism built by platforms leveraging their position as gatekeepers of the two-sided market through triple control of algorithms, traffic, and rules. It possesses a complete operational logic, behavioral patterns, and multi-level harmful consequences.

2.1. Market foundation: the power of the two gatekeepers on both sides of the platform and the monopoly of traffic

E-commerce platforms, as the core hubs of a two-sided market, control core operational resources such as search ranking, homepage recommendations, traffic distribution, and activity access, forming an absolute monopoly on traffic. For small and medium-sized merchants, platform traffic is unique and irreplaceable, creating a highly dependent transactional relationship. Taking Taobaos "personalized recommendations" algorithm as an example, price factors account for as much as 58% of the weight of product homepage exposure, and are linked in real time with conversion rate and DSR rating. Similar vicious low-price competition driven by algorithmic traffic rules also widely exists in tourism e-commerce platforms, bringing consistent negative industrial impacts [2]. Lowering prices can improve ranking and gain traffic, while not lowering prices will directly result in demotion and no sales. This algorithm mechanism creates a forced price reduction cycle, forcing merchants to continuously engage in low-price competition from an institutional perspective, which is the underlying institutional root of vicious competition in e-commerce.

2.2. Competition methods: Platform-led, diversified, mandatory, low-price involution mechanism

Through continuous rule iteration, platforms have developed three typical methods of coercive low-price competition. First, the super subsidy mechanism. Platforms routinely launch low-price channels such as billions in subsidies and limited-time flash sales, suppressing product prices to below 80% of the purchase price. While ostensibly a platform subsidy, this actually shifts the majority of losses to merchants, forcing them to participate in promotions at a loss. Second, the abuse of the "refund only" rule. Since the end of 2023, mainstream e-commerce platforms have fully implemented a "no returns, only refunds" mechanism. Originally intended to optimize the handling of minor disputes, this system has been distorted into a tool for forcing merchants to offer discounts. Relevant research points out

that unreasonable application of the refund-only rule has become an important inducement of e-commerce price involution, which needs targeted institutional optimization [6]. Consumers can get refunds without returning the goods, with all losses borne by the merchants, further squeezing their profits. Third, the traffic penalty mechanism. Platforms incorporate low-price participation and discount levels into store performance evaluations. Merchants who refuse to participate in low-price competition are directly penalized with lower search rankings, blocked exposure, and disqualified from promotions, effectively forcing merchants to accept low-price rules and depriving them of their pricing autonomy.

2.3. Consequences of Damage: Multi-level Negative Transmission at the Micro, Industrial, and Macro Levels

The involutionary competition in e-commerce generates negative effects at the micro, industrial, and macro levels, resulting in systemic market damage. At the micro level, merchant profits continue to shrink. In 2023, the average gross profit margin for womens clothing merchants on Tmall was only 18.7%, a decrease of 9.2 percentage points from 2019. Many small and medium-sized merchants operate on thin margins or even at a loss, severely squeezing their market survival space. At the industrial level, low-price competition forces merchants to reduce R&D, quality control, and after-sales costs. The industrys R&D investment ratio dropped from 2.4% to 0.9%, trapping the industry in a "low price-low quality" low-end lock-in, seriously hindering the transformation and upgrading of the real economy. At the macro level, persistently low prices distort market price signals. According to Ouyang Rihui (2024)[1], for every 1 percentage point increase in e-commerce penetration, the PPI for consumer goods decreases by 0.16 percentage points, disrupting macroeconomic order. At the consumer level, the short-term low-price benefits are followed by long-term quality degradation, lack of after-sales service, and the withdrawal of high-quality brands, resulting in continuous damage to overall consumer welfare.

3. Legal Characterization of "Involutionary" Competition among E-commerce Platforms

The involutionary competition among e-commerce platforms is not simply a price dispute, but a complex illegal act caused by the alienation of platform power. It simultaneously touches on three types of legal issues: unfair competition, new types of monopoly, and abuse of relative dominant position, and has clear illegal attributes.

3.1. Malicious price manipulation: predatory pricing practices that violate the Anti-Unfair Competition Law

Platforms force goods to sell below cost through subsidies and promotional price suppression, which essentially constitutes predatory pricing, prohibited by Article 11 of the Anti-Unfair Competition Law. However, traditional regulations focus on direct sales operators, while platforms evade accountability by acting as "subsidizers" and "rule-makers," creating a regulatory loophole. In reality, platforms are the rule-makers, enforcers, and biggest beneficiaries of

these low-price activities, while merchants passively bear the losses. Platforms subjectively intend to disrupt competitive order, objectively causing vicious infighting within the industry, constituting covert unfair competition.

3.2. Hub-and-spoke agreement: Platform-led vertical price monopoly behavior

The platform-driven, all-encompassing low-price promotion model constitutes a typical hub-and-spoke monopoly. The platform, as the "core," uniformly sets promotional prices, discount standards, and minimum price requirements, while a massive number of merchants, as the "spokes," passively execute these rules. This achieves price coordination across the entire platform without the need for horizontal collusion among merchants. During major promotional events like 618 and Double 11, the platform forces merchants to uniformly lower prices through traffic penalties, effectively establishing a vertical price constraint agreement. This aligns with Article 17 of the Anti-Monopoly Law, which prohibits fixed resale prices and minimum price restrictions, and is a core reason for the widespread and large-scale proliferation of involution in e-commerce.

3.3. Abuse of relative dominant position: Gray-area infringement of platform power

Mainstream e-commerce platforms deliberately keep their market share below 50% to circumvent traditional anti-monopoly standards for "market dominance." However, for small and medium-sized businesses, these platforms are their core, or even sole, sales channel, leading to a high degree of economic dependence. This gives the platforms de facto control over transactions and a relative advantage. Platforms using this advantage to force merchants to offer lower prices and accept unfair rules constitute a typical abuse of their relative dominance. Article 35 of the E-commerce Law explicitly prohibits platforms from using transaction rules and technical means to impose unreasonable restrictions and conditions on merchants, providing a direct legal basis for regulating such gray-area infringements.

4. Examination of the Failure of Current Legal Norms

The current three-tiered regulatory system of "Anti-Monopoly Law - Anti-Unfair Competition Law - E-commerce Law" shows obvious institutional failure in the face of new forms of involutionary competition in e-commerce, making it difficult to achieve effective governance.

4.1. Anti-Monopoly Law: The regulatory threshold is too high and the burden of proof is extremely difficult.

Traditional antitrust regulations suffer from prominent problems such as excessively high thresholds and difficulties in providing evidence. First, defining the relevant market is challenging; comprehensive e-commerce platforms cover all business areas and have highly overlapping users, making it difficult for traditional testing methods to accurately define market boundaries. Second, the standards for determining market dominance are rigid, with platforms deliberately circumventing the 50% market share threshold, resulting in a disconnect between actual influence and legal recognition. Third, new types of algorithmic monopolies and hub-and-spoke agreements are highly concealed; the black box nature

of algorithms makes it difficult for regulators and merchants to prove illegal activities by platforms, leaving many hidden monopolistic behaviors untraceable.

4.2. Anti-Unfair Competition Law: its rules are closed and outdated, and its coverage is narrow.

The Anti-Unfair Competition Law adopts a closed enumerative legislative approach, resulting in rules that are severely outdated in the digital economy. Traditional predatory pricing clauses only regulate sales operators and cannot cover the indirect predatory pricing competition model led by platforms. New types of unfair competition, such as algorithmic discrimination, traffic demotion, and rule bullying, have not been incorporated into the statutory types. The catch-all clauses are vaguely applied and the adjudication standards are inconsistent, leaving a large number of malicious competitive behaviors by platforms in a regulatory vacuum.

4.3. E-commerce Law: Weak penalties and insufficient rights remedies

While Article 35 of the E-commerce Law can regulate platforms abuse of their dominant position, the penalties are extremely weak and the remedies are lacking. A maximum fine of 2 million yuan has virtually no deterrent effect on platforms with revenues in the hundreds of billions; the cost of violating the law is far lower than the illegal gains. Meanwhile, merchants can only rely on administrative complaints and lawsuits to protect their rights, which are time-consuming, difficult to prove, and costly. The lack of efficient remedies such as class-action lawsuits and public interest litigation has led to the long-term prevalence of unfair trading and forced competition by platforms.

5. Reconstructing the Legal Regulation Path for "Involution" Competition among E-commerce Platforms

To address the shortcomings of current legal regulations, it is necessary to construct a three-dimensional regulatory system that is adapted to the characteristics of digital platforms, is layered and collaborative, and combines rigidity and flexibility. The governance path should be reconstructed from four dimensions: anti-monopoly as a safety net, detailed provisions on unfair competition, special laws to strengthen the system, and multi-party co-governance to achieve source governance and systemic governance of involutionary competition.

5.1. Anti-monopoly dimension: Introduce the rule of relative advantage and lower the regulatory threshold.

Drawing on the mature experience of Germany's Anti-Restriction of Competition Law, my country's Anti-Monopoly Law should include a rule on "abuse of relative transactional advantage," breaking through the threshold for determining dominance in a single market. In cases where merchants exhibit high transactional dependence and platforms possess substantial control, the platforms relative advantage should be directly presumed. Forced low-price promotions, algorithmic downgrading, traffic blocking, and standardized pricing templates—behaviors that induce

involution—should be included in the presumed illegal list. Simultaneously, the burden of proof should be reversed, requiring platforms to prove the legitimacy of their rules and algorithmic controls, thus overcoming the difficulty of proving new forms of monopolistic behavior and curbing structural involution within platforms at its source.

5.2. Anti-unfair competition dimension: Adding new statutory types of unfair competition

The revised Anti-Unfair Competition Law adds a separate clause on "Algorithmic Unfair Competition and Malicious Price Manipulation" to specifically regulate platform-led low-price competition. It explicitly includes platforms using methods such as super subsidies, biased algorithmic weighting, and differentiated traffic treatment to force merchants to engage in low-price dumping and disrupt fair competition within the scope of legally defined unfair competition. It clarifies that e-commerce platforms are independent responsible entities, defines the boundaries of responsibility between platforms and merchants, prevents platforms from evading responsibility by claiming "merchant self-management," and refines the standards for identifying new behaviors such as algorithmic discrimination, traffic bullying, and malicious traffic control, filling gaps in traditional legal regulations.

5.3. Special Legal Dimension: Add a special chapter on fair trading on platforms and improve special regulations.

Leveraging the legislative opportunity presented by the "Regulations on Promoting the Digital Economy," a dedicated chapter on "Platform Fair Trade Regulation" has been added to establish a specialized regulatory system for the digital economy. First, an algorithm compliance audit system has been established, requiring platforms with transaction volumes exceeding hundreds of billions of yuan to commission third-party institutions annually to conduct fairness audits of search ranking, traffic allocation, and subsidy rules, and to file these audits with regulatory authorities, thus eliminating the "black box" of algorithms. Second, a penetrating, pre-emptive supervision system has been established, requiring platforms to submit their plans, cost-sharing mechanisms, and risk control measures 30 days in advance for high-risk, competitive activities such as super subsidies, refund-only schemes, and across-the-board low-price promotions, achieving pre-emptive governance. Third, a public interest relief mechanism has been improved, granting industry associations, federations of industry and commerce, and consumer associations the right to file public interest lawsuits against platforms abusing their dominant position, and establishing a merchant relief fund to compensate small and medium-sized businesses for losses.

5.4. Supporting mechanisms: Building a long- term regulatory system based on multi- party co-governance

To build a multi-faceted and long-term governance mechanism, the following measures should be taken: First, promote appropriate transparency in algorithms, publicly disclose the core weights and assessment rules for traffic

allocation, and accept public supervision while protecting trade secrets. Second, establish an industry-specific arbitration mechanism, absorbing legal and economic experts and merchant representatives to form an arbitration team to efficiently resolve rule disputes between platforms and merchants. Third, improve the credit punishment system, incorporating malicious infighting and abuse of dominant positions by platforms into public credit records and linking them to platform financing, ratings, and qualification approvals. This market-based constraint will force platforms to operate in compliance with regulations, forming a governance pattern that coordinates administrative supervision, judicial punishment, and public oversight.

6. Conclusion

In summary, the "involutionary" competition among e-commerce platforms is not a typical market price war, but rather a systemic market failure caused by the aberration of power held by platform gatekeepers. Its essence lies in platforms leveraging their algorithmic, traffic, and rule advantages to forcibly squeeze merchants profits, ultimately resulting in an imbalance where merchants suffer losses, the industry is downgraded, and consumers rights are harmed in the long term. Traditional competition laws, due to rigid entry barriers, outdated rules, and weak penalties, are ill-suited to the new chaotic competition on digital platforms. Only by improving anti-monopoly rules regarding relative dominance, refining new types of unfair competition, constructing a special regulatory system for the digital economy, and improving a multi-party governance mechanism can we comprehensively constrain the powerful influence of platforms, regulate platform transaction rules, and completely break the vicious cycle of low-price involution. Through rule-of-law and systematic governance, we can guide the e-commerce industry from low-price, self-destructive competition to quality, service, and innovation competition, realizing the transformation from single price competition to comprehensive value competition [5], promoting the standardized, healthy, and high-quality development of my country's platform economy.

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