

The Research on Externalities of the Pre-Prepared Food Industry and Its Legal Regulation from the Perspective of Economic Law

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Abstract: During the rapid expansion of the pre-prepared food industry, significant positive and negative externalities have emerged. Positive externalities are reflected in boosting agricultural value addition, enhancing social operational efficiency, and promoting employment and industrial upgrading; negative externalities manifest as market failures such as infringement of consumer rights due to information asymmetry, disruption of market order by vicious low-price competition, and socialization of environmental costs. Internalizing externalities is the core path for economic law to correct market failures. This paper applies externality theory to sort out the realistic manifestations and institutional causes of externalities in the pre-prepared food industry, and proposes institutional solutions for internalizing external costs from the dimensions of market competition regulation, consumer rights protection, macro-control, and social co-governance, aiming to regulate industry competition order and promote high-quality sustainable development of the pre-prepared food industry.

Keywords: Pre-Prepared Food; Externality Theory; Market Failure; Anti-Unfair Competition; Consumer Rights Protection

1. Introduction

Pre-prepared food, also known as pre-made dishes, is defined in accordance with the Notice on Strengthening Food Safety Supervision of Pre-Prepared Food and Promoting High-Quality Development of the Industry issued by the State Administration for Market Regulation and other five departments. Pre-prepared food refers to pre-packaged dish products made from one or more edible agricultural products and their processed products as raw materials, with or without the use of condiments and other auxiliary materials, without the addition of

preservatives, processed through industrial pre-processing (such as stirring, pickling, rolling, forming, frying, deep-frying, roasting, boiling, steaming, etc.), with or without seasoning packets, and ready to eat after heating or cooking. According to the depth of processing and the method of consumption, the industry classifies pre-prepared food into four major types: ready-to-eat, ready-to-heat, ready-to-cook, and ready-to-mix. Different types of products differ in industrial chain risks and externality manifestations. The specific classification is shown in Table 1.

Table 1. Classification Table of Pre-Prepared Food Product Types

Type	Ready-to-mix pre-prepared food	Consumption Features	Typical Examples
Ready-to-eat pre-prepared food	Fully processed and cooked; no heating required	Open and eat directly	Braised delicatessen foods
Ready-to-eat pre-prepared food	Fully cooked; only needs reheating	Simply reheat and serve	Frozen finished dishes
Ready-to-cook pre-prepared food	Pre-treated and seasoned, but not fully cooked	Consumers need to cook further	Marinated semi-finished meats
Ready-to-mix pre-prepared food	Only primary processing such as washing and cutting	Consumers need to season and cook themselves	Pre-cut clean vegetables, fresh ingredient packs

Externality theory is an important theoretical tool for economic law to address market failures and correct resource misallocation. The core logic here is that the economic activities of market participants can impose costs or bring benefits to third parties, yet these costs or benefits are not reflected through the market nor are they included in transaction prices, resulting in a divergence between private and social benefits, as well as between private and social costs. Prepared meals, as a complex industry that links agricultural production, food processing, catering services, and end consumption, has a long industrial chain and a wide market reach. Its production and business activities are particularly prone to generating externalities

affecting the public, the ecological environment, and market competition order.

Over the years, as the economy and society have continued to develop, consumption demands have also been constantly changing. The prefabricated food industry has rapidly grown accordingly, and the externality contradictions in the prefabricated food sector have become increasingly apparent [1]. On the positive side, the intensive production model can absorb agricultural product capacity and save social living costs, providing relatively strong public value. However, on the problematic side, some market players, in pursuit of maximizing profits, shift the operational costs they should bear themselves—such as information disclosure, pollution control, and quality management—onto others. As a result, issues such as false advertising, low-price vicious competition, consumer rights being harmed, and environmental pollution have emerged, constituting typical negative externalities. These problems are difficult to resolve solely through market self-regulation and must rely on economic law mechanisms to promote the internalization of external costs and the transparency of external benefits, in order to achieve a coordinated balance between industry development benefits and social public interests.

2. The Inherent Logical Connection between Externality Theory and Economic Law

2.1 The Basic Connotation of Externalities

Externalities are one of the core basic concepts in economics. Basically, an externality refers to the situation where the activities of an economic agent affect other people or society as a whole, even though they're not directly involved in those activities [2]. It's important to note that these effects usually aren't addressed through market transactions, nor are they compensated through prices, which leads to a mismatch between private costs and social costs, as well as private benefits and social benefits. In terms of types, externalities mainly include positive and negative ones. A positive externality happens when someone's production or consumption benefits a third party, but they can't get any reward for it. On the other hand, a negative externality is when someone's actions harm a third party, yet they don't have to bear the cost of the damage. Essentially, the root cause of externality problems is the failure of the price

mechanism.

2.2 The Theoretical Basis of Economic Law in Correcting Externalities

Economic law has been oriented toward social welfare from the start. It aims to protect the overall interests of society and achieve substantive fairness, so it inherently has the institutional function of correcting externalities.

First, it allocates rights, obligations, and responsibilities. Economic law clarifies through legal norms what market participants can and cannot do, while also specifying everyone's rights, duties, and the corresponding legal consequences. This way, operators have to bear the social costs caused by their actions, curbing opportunistic behavior that tries to shift costs onto society.

Second, it regulates interests. Economic law uses macro-control tools like taxes, subsidies, and industrial guidance to do this. For business activities that generate positive externalities, it provides incentives and support, while it restricts behaviors that create negative externalities. This helps narrow the gap between private interests and overall social interests.

Third, it regulates market competition. This function is mainly implemented through mandatory information disclosure, fair competition reviews, and enforcement against unfair competition. These measures can reduce information asymmetries in the market and correct distorted price signals, maintaining a fair competitive environment and lessening the external damage caused by market disorder.

Fourth, it supports multi-stakeholder governance. Economic law aims to build a governance framework where government regulation, industry self-regulation, and social supervision work together. Within this framework, multiple stakeholders participate in managing externalities and share governance costs, which enhances the law's effectiveness in correcting market failures [3].

It should be noted that economic law's correction of externalities does not completely replace the market mechanism; rather, it remedies defects in the price mechanism through institutional repairs. It is necessary to avoid excessive government intervention that suppresses industrial innovation vitality, while also preventing the free rein of the market that could harm social public interests, grasping the appropriate balance between regulation and development to achieve moderate

intervention. Unlike administrative law, which emphasizes administrative order, economic law focuses more on the re-matching of private costs and social costs. Through two-way institutional design of incentives and constraints, it guides market entities to spontaneously make business choices consistent with social overall interests, rather than relying solely on mandatory penalties to achieve regulatory goals.

3. Positive Externalities of the Pre-Prepared Food Industry and the Problem of Insufficient Supply

3.1 Positive Externalities of the Pre-Prepared Food Industry

(1) Agricultural Industry Chain Optimization and Value-Added Effect. The pre-prepared food industry uses large quantities of fresh agricultural products as basic raw materials, which can effectively absorb surplus agricultural production capacity, reduce post-harvest losses of agricultural products, stabilize primary agricultural product market prices, force upstream agriculture toward standardized and scaled production, increase farmers' income, broaden sales channels for agricultural products, assist in rural industry development, and release strong positive externalities in the agricultural economy [4].

(2) Social Operational Efficiency Enhancement Effect. Pre-prepared food simplifies catering production processes, saving labor and time costs for households and catering institutions; scaled production lowers unit product production costs, allowing consumers to access catering services at relatively low prices, effectively alleviating dining pressure under fast-paced lifestyles and enhancing overall social welfare.

(3) Food Processing Industry Demonstration Effect. Pre-prepared food drives the transformation of traditional catering from manual production to industrialized, standardized production, forcing the iteration and upgrading of production and cold-chain logistics systems, forming production control models that can be referenced by the food processing industry, providing references for other agricultural and sideline product processing, and driving overall industry management level improvement.

(4) Employment and Regional Economic Driving Effect. The pre-prepared food industry covers the entire industrial chain including raw

material production, food processing, catering enterprises, cold-chain logistics, and sales services, absorbing a large amount of labor employment, especially providing nearby employment opportunities for rural surplus labor, promoting the cluster development of agricultural product processing industries, helping local specialty agricultural products gain market recognition, and becoming an important driving force for regional economic growth [5].

3.2 Economic Law Causes of Insufficient Positive Externality Supply

Although the pre-prepared food industry possesses multiple positive social benefits, in a market environment, operational behavior generating positive externalities is under-supplied, and the endogenous motivation of compliant enterprises to improve quality and innovate is weak, with institutional inducements existing at the economic law level.

(1) Difficulty in Converting Positive Social Returns into Enterprise Private Returns. Enterprise investment in building standardized production lines, improving traceability systems, and conducting technological innovation generates enormous social returns, but these returns cannot be fed back to enterprises through product transaction prices, and input costs cannot be compensated by the market, weakening enterprises' motivation to sustain high-quality operations.

(2) Insufficient Supply of Positive Incentive Systems. Policies such as financial subsidies, tax incentives, and financial support targeting the pre-prepared food industry lack specificity, with limited implementation effectiveness, and the policy treatment gap between high-quality compliant enterprises and low-level operating entities is not obvious, making it difficult to form effective positive guidance.

(3) Prominent Adverse Selection Phenomenon. Compliant enterprises must bear higher safety, quality, and environmental costs, while non-compliant enterprises seize market share through low-cost, low-price competition, squeezing the survival space of compliant enterprises, leading to the suppression of positive externality behavior and difficulty in improving overall industry development levels [6].

4. Main Manifestations of Negative Externalities in the Pre-Prepared Food

Industry and Economic Law Causes

4.1 Main Manifestations of Negative Externalities

(1) Cost Externalization Gives Rise to Unfair Competition Negative Externalities. In the process of running their businesses, some operators deliberately keep their internal control costs very low, using cost-shifting to gain a competitive edge for themselves. Those non-compliant players, without having to bear the full costs of quality control and pollutant disposal, can undercut prices to grab market share, messing up the rules of fair competition. Compliant companies are then forced to get dragged into this irrational price war, which ends up driving up the compliance costs for the whole industry and hurting its overall market reputation, ultimately harming the legal rights of all businesses trying to operate honestly [7].

(2) Information Asymmetry Brings Negative Externalities in the Consumption Sphere. In the daily operations of the restaurant industry, many businesses deliberately hide the fact that they're using pre-made dishes, and some even go as far as making up claims like 'cooked fresh to order.' When consumers pay without having full information, their right to know and to make their own choices gets violated. This information gap can further distort market signals, and deceptive business practices end up having room to survive, while those who operate honestly are pushed into a competitive disadvantage.

(3) Production and Processing Give Rise to Environmental Negative Externalities. During the processing and production of ready-made meals, a huge amount of wastewater from cleaning, kitchen waste, packaging waste, and various air pollutants are generated. Some small and medium-sized restaurants and processors, in order to save costs, try to bypass environmental disposal regulations and discharge these pollutants directly without any treatment, causing serious pollution to the natural environment. As a result, the cost of pollution control falls on the government and the public, while the polluting companies themselves don't pay any equivalent price, which is a pretty typical case of environmental negative externality.

(4) Disordered Competition Amplifies Systemic Risks of the Industry. The ready-made food industry has a low entry barrier, attracting a lot of operators. As a result, unfair competition like

counterfeiting, misleading advertising, and business slander happens quite often [8]. When a few market players break the rules, it drags down the overall reputation of the industry, but all operators end up sharing the related risks, creating negative external effects at the industry level.

4.2 Economic Law Roots of Negative Externalities

(1) Vague Basic Industry Rules and Unclear Responsibility Boundaries. At this stage, there isn't a unified standard for pre-made dishes when it comes to concept definitions, classification criteria, or business disclosure obligations [9]. Take the raw material part, for example—there's long been a lack of unified national mandatory standards, which allows some companies to legally use lower-quality ingredients in production. Plus, the responsibilities of operators at different stages are pretty vague, making it easy for them to pass on their costs. And for consumers trying to protect their rights or regulators trying to enforce the law, there's also a lack of clear rules to rely on.

(2) Imbalance between Illegality Costs and Illegality Gains. Under the current legal framework, penalties for things like false advertising and unfair competition in the pre-packaged food market are actually pretty limited. Most of the time, the fines are nowhere near the huge profits operators make through illegal practices. Because the legal consequences aren't much of a deterrent, the cost of breaking the law ends up being much lower than the potential gains, which is why a lot of businesses are willing to take the risk and make money through non-compliant methods.

(3) Deficiencies in Cross-Departmental Regulatory Coordination Mechanisms. The ready-to-eat food industry chain spans several regulatory departments, and the segmented supervision model can easily create information barriers, making it inevitable to have gaps in regulatory coordination. When it comes to unfair competition and cost shifting across different parts of the industry chain, it's hard to achieve closed-loop supervision for the whole chain, so negative externalities can't be corrected in time.

(4) Insufficient Use of Economic Adjustment Tools. Right now, the ready-made food industry doesn't have fully developed differentiated regulations, credit incentive constraints, or

economic adjustment tools, and there aren't many market-based ways to encourage operators to internalize their external costs. Most of the current governance relies on after-the-fact administrative penalties, and this single approach can't really solve the externality problems in the ready-made food market at their root.

5. Implementation Paths for Internalizing Externalities in the Pre-Prepared Food Industry from the Perspective of Economic Law

5.1 Refine Existing Legal Rules and Clarify the Responsibility Boundaries of Multiple Subjects

There is no need to pursue dedicated industry legislation; instead, building upon existing economic law normative systems such as the Anti-Unfair Competition Law and the Consumer Rights Protection Law, the relevant operating rules for pre-prepared food should be refined. The respective legal obligations of producers and processors, catering operators, and cold-chain service providers should be clarified, with emphasis on refining the information disclosure obligations of pre-prepared food in catering operation scenarios and clarifying the responsibility division among various subjects. Barriers to rights-protection normative grounds should be removed, institutional gaps for operators to shift costs outward should be reduced, and the institutional foundation for internalizing external costs should be consolidated.

5.2 Strengthen Market Competition Regulation and Correct Distorted Prices and Competition Order

First, improve industry access and exit constraints, set differentiated operating requirements based on operational risks, establish a mandatory exit mechanism for entities seriously engaged in unfair competition, and filter out inferior market entities. Second, implement a mandatory information disclosure system. Relying on existing rules of the Consumer Rights Protection Law and the Anti-Unfair Competition Law, clarify that catering operators should truthfully inform consumers of the use of pre-prepared food through menus, online ordering pages, in-store notices, and other means, and severely crack

down on false advertising behaviors of concealing or fabricating processing methods [10]. Third, increase the intensity of competition enforcement penalties. Strengthen the investigation and handling of low-price vicious competition, false advertising, and imitation and confusion behaviors, implement a joint credit punishment system, impose credit penalties on seriously illegal entities, increase the cost of operator illegality, repair distorted market price signals, and enable product prices to basically reflect real social costs.

5.3 Use Macro-Control Tools to Incentivize the Output of Positive Externality Behavior

First, implement differentiated fiscal and tax adjustment. Tax incentives should be granted to pre-prepared food enterprises that adhere to compliant operations, engage in technological innovation, and pursue green production; explore the implementation of differentiated regulatory charging mechanisms based on corporate environmental and credit conditions, forcing high-risk entities to internalize costs. Second, optimize fiscal and financial support. Financial subsidies and credit support should be more inclined toward high-quality players who can drive agricultural upgrades, do tech research, and engage in green production. Let companies with significant positive external effects really enjoy the benefits of these policies to make up for the gap in their private returns. Third, accelerate the improvement of the industry standard system. Promote the implementation of relevant national and industry standards for pre-prepared food, unify production and labeling norms, reduce regulatory costs through standardization, and guide benign industry competition.

5.4 Construct a Whole-Chain Traceability Mechanism to Achieve Attributable and Traceable Damage

Relying on economic law institutional constraints, promote the implementation of a whole-process traceability mechanism for pre-prepared food. Require operating entities to completely retain operating records of each segment including raw material procurement, processing, logistics, and sales, and open traceability inquiries to regulatory departments. When disputes such as unfair competition and infringement of consumer rights occur, the responsible entity can be quickly identified

through the traceability chain, enabling precise attribution of external damage, and promoting the internalization of external costs at the institutional and technical level.

5.5 Improve the Social Co-Governance System and Enhance Externality Governance Effectiveness

Construct a pattern of coordinated co-governance among government competition regulation, industry self-discipline, social supervision, and judicial protection. Give play to the role of industry associations in issuing industry self-discipline conventions and establishing industry credit evaluation systems; smooth reporting channels for consumers and social media and implement reporting incentive mechanisms; support consumer organizations and procuratorial organs in initiating public interest litigation, with illegal operators bearing damages and social governance costs, and multiple forces jointly resolving the externality dilemma of the pre-prepared food industry.

6. Conclusion

The rapid development of the pre-prepared food industry has released prominent economic and social benefits, but the imbalance of externalities has become a prominent obstacle constraining high-quality industry development. The insufficient supply of positive externalities stems from the absence of positive incentive systems; the proliferation of negative externalities is a market failure jointly triggered by softening responsibility constraints, disordered competition order, and insufficient regulatory coordination. Externality theory provides an economic analysis tool for dissecting the competition chaos in the pre-prepared food industry, while economic law, through diversified institutional tools such as competition regulation, macro-control, and social co-governance, provides feasible paths for correcting externalities and safeguarding social overall interests. Only by truly internalizing external costs and fixing the distorted market pricing mechanisms and competitive order can the prepared meals industry develop healthily within the framework of legal regulations, and in turn provide strong support for national economic growth and social welfare.

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