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# Designing Independent Regulatory System of Food Safety in China

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#### Abstract

Food is closely related to the life and health of people. The establishment of an independent administrative agency for food safety is a bone of contention. The independent administrative agencies are independent from other branches or arms of the government with regard to their basis of legitimacy. Based on the theory of public administration and the economics of regulation, the paper intends to prove that industrial and political pressures on the independent administrative agency are relatively low, making policymakers more accountable to the public. Having analyzed the current food regulatory system in China, the paper points out that it does not actually support the overall goal of the food safety. The purpose of the paper is to bring together the basic principles underlying the successful regulatory system of food safety. In the end the paper makes some suggestions on how to establish the independent regulatory system of food safety in China.

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Keyword:food safety; independent administrative agency; regulatory system; China

#### 1. Introduction

Food safety has recently attracted significant attention worldwide, from consumers, media, public administrators and politicians. Food safety pertains to the prevention, reduction or elimination of the risk of ill health, or death, as a result of the consumption of foods, whether fresh or processed, obtained through the domestic market, or by international trade. Food safety is directly related to people's lives, health and other human rights, therefore the management system of food safety is a major issue. But limited to such factors as technological progress, complexity of the food sales there is serious asymmetry on food safety between consumers and food producers. The activities of commerce fraud and safety incidents related to food are increasing sharply around the world, such as mad cow disease (BSE), foot-and-mouth disease (FMD), dioxin (PCDD) and avian flu, and so on , which seriously damage the health of consumers. Recent trends in global food production, processing, distribution and preparation are generating an increasing demand for food safety studies and regulations in order to ensure a safer global food supply.

Entering into 21th century, there is an urgent need to address numerous problems in the regulatory system of

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China's food safety. The regulatory system and regulatory policy of food safety in China are attracting more and more attention from public and senior leaders. Nowadays, these problems have become central issues for media. The food regulatory agencies play a key role in ensuring China's food safety. The independence of the food regulatory agency has become a focus of controversy.

# 2. Analysis of Independent Regulation of Food Safety

The asymmetric information poses systemic risks in the food industry, so sub-optimal outcomes may occur (Hennessy, Roosen and Jensen, 2003). Consumers do not have adequate information on the safety attributes of the food that they purchase. A bulk of the literature has considered the causes and remedies of market failures caused by asymmetric information on product quality (Akerlof, 1970; Hart, 1983; Fraser, 2004), game- theoretic approaches to address incomplete regulation and tracing food risks (Hirschauer and Musshoff,2007), and consequences of regulation policy on food safety and welfare (Starbird 2005). With this market failure at hand government intervention is justified in order to enhance social welfare (Elbasha and Riggs, 2003; Roosen, Lusk and Fox, 2003; Kola and Latvala, 2003; Unnevehr and Jensen, 1999; Segerson, 1999). However, there are various policy options and alternative mechanisms of food safety. Independent Regulation of Food Safety is an issue greatly debated both in China and other countries.

# 2.1. Defining independent regulation

Not all agencies are regulatory agencies, some have only executive tasks, and others are simple consultative organizations for policy makers. Not all agencies are formally independent; some are in subordinate relationships with public administration and ministries. A regulatory agency is a public authority or government agency responsible for exercising autonomous authority over some area of human activity in a regulatory or supervisory capacity.

An independent regulatory agency is a regulatory agency that is independent from other branches or arms of the government. The existence of independent regulatory agencies is justified by the complexity of certain regulatory and supervisory tasks that require expertise, the need for rapid implementation of public authority in certain sectors, and the drawbacks of political interference. In theory, independent regulatory agencies differ from other regulatory institutions with regard to their tasks, their basis of legitimacy, the way they are held accountable to the public and how their relations with both the regulated industry and government are organized. It is better fit to overcome the problems of asymmetric information between the regulator and the regulated industry than general regulators (Gonenc, Maher and Nicoletti, 2000).

In 1997, the Organization for Economic Cooperation and Development has put forward six basic elements of independent regulation institution. Firstly, Ensure that the exercise of regulatory power is rule-based; Secondly, Regulated agencies have an effective means to defend themselves against unauthorized or arbitrary requirements or liabilities; Thirdly, regulator appointed by multiparty; Fourthly, regulator carrying out fixed term of office; Fifthly, establishing professional standards and attractive salary scales; Sixthly, setting up a stable source of funding. These elements have become policy guidance for developed countries when they establish independent regulation institutions.

Many nations have established or are in the process of creating independent regulatory agencies for such as their infrastructure sectors, food and drug safety. Examples of independent regulatory agencies are the Interstate Commerce Commission and U.S. Food and Drug Administration in the United States, Ofcom in the United Kingdom, and the TRAI in India.

# 2.2. Independent regulation of food safety

Over the past 20 years, independent food regulation has become the universal experience for developed countries, such as Canada, Denmark, Germany, Ireland, the Netherlands, Norway, New Zealand, and the United Kingdom, and so on. In the process of food safety regulation, these developed countries realized that from agricultural production to final consumption, regulation is an organic and continuous process. It means that regulation should include the whole process and reduce the regulation institutions as much as possible; Their approaches were similar in one

respect of established a single agency to lead food safety management or enforcement of food safety legislation. In order to ensure the effectiveness of food safety regulation, it should be established the only one independent regulatory agency to control the whole country's food safety. Independent regulatory authorities of food safety are set up to improve economic efficiency in imperfect markets and protect consumers' interests, shield public intervention from short-term political and administrative influence, as well as help to avoid the risk of capture by specific interests.

The Norwegian Food Safety Authority (NFSA) was established in 2004 as part of a new regulatory policy, by merging the Norwegian Animal Health Authority, one section of the Directorate of Fisheries, the Norwegian Food Control Authority, the Municipal Food Control Authorities and the Norwegian Agricultural Inspection Service. The main goals in establishing the NFSA are to ensure safe food, healthy plants, safe drinking water, and good animal health, improve cost efficiency, coordination, and a consistent regulatory approach.

Before 2002, New Zealand had two separate regimes for food safety. The Ministry of Health was responsible for the Food Act and the Ministry of Agriculture and Forestry was responsible for legislation concerning primary production, processing, and export of dairy, animal and meat products. It caused fragmented, inconsistent and duplicate effects. The New Zealand Food Safety Authority (NZFSA) was established in 2002 as a semi-autonomous body attached to the Ministry of Agriculture and Forestry, separated from it as Public Service Department in July 2007 because of accountability problems. It means that authority is transferred from the ministries to the NZFSA, which aims are to ensure safe food for consumers, increase coordination across the entire food production chain, reduce fragmentation and make more consistent regulatory policies.

Table 1.	Independent	regulators	of food	safety in	some countries
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Country	Independent regulators	Year created
Canada	Canadian Food Inspection Agency	1997
Ireland	Food Safety Authority of Ireland	1998
UK	Food Standards Agency	1999
Netherlands	the Food and Consumer Product Safety Authority	2002
Norway	Norwegian Food Safety Authority	2004
Denmark	Danish Ministry of Family and Consumer Affairs	2004
Germany	Federal Ministry of Consumer Protection, Food, and Agriculture	2005
New Zealand	Food Safety Authority	2007

#### 3. Theoretical framework

Several theoretical perspectives can explain different aspects of the phenomena under study. Here, the theories are used to interpret the empirical findings of independent regulation.

## 3.1. New public management

Political and administrative leaders act on behalf of formal organizations whose structures they can design and redesign to direct attention and behavior in certain ways. Both specialization and coordination are important organizational features. The patterns that emerge from the study of these organizational reforms will be viewed in light of the New Public Management (NPM) movement that emerged as an international trend in public administration during the late 1970s (Aucoin, 1990; Hood, 1991).

At the beginning of the 1990s, the term NPM was described public sector reforms in the UK and New Zealand. The OECD, the World Bank, and the International Monetary Fund (IMF) have been keen advocates of NPM reforms around the world, and NPM has been expanding to more countries. NPM principles have been introduced not only in industrialized OECD member countries, such as Australia, Canada, New Zealand, the UK, and the USA,

but also in developing countries, including India, Jamaica, and Thailand (McCourt, 2002; Talbot and Pollitt et al., 2000).

NPM is an umbrella term (Metcalfe, 1998) which encompasses a wide range of meanings, including organization and management design, the application of new institutional economics to public management, and a pattern of policy choices (Barzelay, 2002).NPM is guided by the principle that the economic market should be used as a model for political and administrative relationships. It has an emphasis on efficiency, promotes the public sector use of private sector management techniques. NPM is a movement away from input controls, rules and procedures toward output measurement and performance targets. NPM is a change in the machinery of government as the move from policy administration to policy management (Haynes, 2003).NPM wants the reduction of bureaucracy and to make organizations flexible, so at the same time it can attain with the economy, effectiveness and efficiency. NPM pays much attention to monetary incentives, demand led and customer driven ideas. The devolved system of financial accountability should help focus resource allocation and decision-making.

The perspectives on which agency should become the centre of specialization and co-ordination depends on which sector of public policy the focus is on. Food safety reforms that bring narrow sector interests related to agriculture, fisheries and industry more to the forefront may be seen as problematic from a NPM perspective. NPM highlights the need for a central co-ordination of cross-cutting policy issues across levels.

Because safe food requires coordination between several public-sector organizations, NPM has been more important. It means to bring actors from several organizations to work together, coordinate their actions to create common results and give better citizen services.

For example, food safety in Canada had traditionally been regulated in four different federal departments along the horizontal dimension, Health Canada (HC), Agriculture and Agri-Food Canada (AAFC), Department of Fisheries and Ocean (DFO) and Industry Canada (IC), vertically involved all levels of government had jurisdiction over food safety. Different departments and levels of government had valid responsibilities in relation to the crosscutting issue of food safety. However, the federal government was responsible for ensuring food safety in Canada as a whole. The creation of a single and independent agency of food safety under Health Canada was seen as an effective response to the inefficiencies, or the lack of coordination and accountability for better service to the public and the need to reduce public expenditures. In 1986 the Canadian government directed the ministers of Health Canada, Agriculture and Agri-Food Canada, Fisheries and Ocean Canada, and Industry Canada to pursue a more integrated approach to federal and provincial food safety policies. Health Canada was assigned the role of key actor and coordinator in this process. So the cabinet decided to establish an Interdepartmental Committee on Food Regulation (ICFR) that would be chaired by the Deputy Health Minister which members came from Agriculture and Agri-Food Canada, Fisheries and Ocean Canada and Industry Canada. Despite the efforts of the ICFR to improve the coordination of Canadian regulation activities of food safety amongst the federal departments and with the provinces and municipalities, it was concluded that the mandate of the ICFR remained unfulfilled in 1994. The Office of Food Inspection Services (OFIS) was set up to study different options for improving the food safety regulatory system in 1995. The Canadian Food Inspection Agency (CFIA) began its operations in April 1997 as a single food inspection agency, consolidated the delivery of all federal food, animal, and plant health inspection programs previously provided by four different federal departments.

Canada has adopted a comprehensive farm-to-table approach to food safety responsibilities, shaped by concepts and practices associated with the NPM movement. The establishment of the CFIA is based on NPM rhetoric related to the need for the streamlining of government and the need to reduce costs (Prince, 2000). It was estimated that a saving of ten percent would result from reducing departmental overlap and duplication costs with the creation of the CFIA (Skogstad, 1998). The establishment of the CFIA does not imply that the responsibility of food safety regulation become more concentrated in accordance with the administrative doctrine underlying the NPM movement, also reflects a clear split between policy functions and administrative/enforcement functions advocated by NPM movement.

## 3.2. Theory of capture of regulation

The theoretical basis of establishing independent regulation is regulation capture. Stigler identified as regulatory capture where the regulatory regime reflected the interests of the regulated industry rather than the interests of consumers (Stigler, 1971; Pelzman, 1976). Political decisions are made simultaneously, which a

democratic process (through representatives) must involve all parties simultaneously that those very interested in a decision, those somewhat interested, and those uninterested. So the larger damage to majorities may not find expression against the smaller gains of minorities. An individual has no incentive to acquire costly information on issues of no concern to him or her, but the individual votes on these issues anyway, ordinarily through a full-time representative affiliated with a political party. Firms try to capture the regulatory process because each firm has a lot at stake. They have the incentive and the opportunity to successfully invest resources in lobbying for regulation, when such regulation provides direct monetary subsidies, constraints on substitute products or subsidies on complementary products, easier price-fixing, collusive atmosphere, and incumbent firms with the ability to control entry by potential new rivals.

One major way regulation is captured is when lobbyists representing industries or other special interests play a key role in drafting the legislation. Special interests often succeed in weakening regulations that are meant to control their conduct. After public interest in a given issue wanes, special interests have found ways to virtually eliminate existing regulations. When special interests were unable to persuade regulators to revoke the regulations that restrict their behavior, or to weaken enforcement, they sometimes affect the regulatory regime in their favor by either switching the regulations to a new jurisdiction or by playing regulators off against one another. Although regulations are often charged with hampering profitability of one industry or another, in several key cases captured regulations fulfill the opposite function—ensuring or bolstering profitability by setting higher prices and rates than the market would otherwise provide. This theory emphasizes that regulators have motivation to seek economic interest and political interest. In the decision-making process, interest groups concerned will take actions so as to forming the decisions for them, which maybe appear the negative phenomenon regulators captured by the interest group.

Independent regulation is needed mainly to tackle the hold-up risks that arise in the regulatory arrangement between the regulated firms, the government, and the regulator. Independent regulation can cut the benefit relation between them and political power; reduce the possibility of stakeholders influence through robbing government. Independent regulatory authorities are set up to improve economic efficiency, shield public intervention from short-term political and administrative influence, and avoid the risk of capture by specific interests in food industry.

## 4. Institutional Arrangement for China's Regulation of Food Safety

Food Safety Law of China was enacted at the 7th Session of the 11th Standing Committee of the National People's Congress of China on February 28, 2009. Shortly thereafter, on April 24th, the State Council published the first draft of implementation measures for the Food Safety Law. The Food Safety Law became effective on June 1, 2009, and the Final Food Safety Law Implementation Measures went into effect on July 20, 2009, which include requiring monitoring and supervision; increasing regulatory standards; establishing recall and notification systems; providing increased consumer rights; and creating liability for offenders.

According to Food Safety Law, the State Council Food Safety Commission was established as a high-level coordinating organization including three vice premiers and a dozen minister-level officials in charge of health, finance, and agriculture among others, aims to improve government coordination and enforcement and to solve systemic food safety problems on Feb 11, 2010. China's State Council has established a Food Safety Commission according to the Food Safety Law of the People's Republic of China. The main duties of the State Council Food Safety Commission analyze the food safety situation, guide and coordinate food safety work, make food safety policies, and urge the relevant departments to fulfill their responsibilities in food supervision.

The most salient feature of China's food safety regulatory system is the fragmentation of regulatory authority among different government agencies. It involves several key agencies, all of which must work together to supervise the entire food supply chain. The most important players are Ministry of Health (MOH), State Food and Drug Administration (SFDA), Administration of Quality Supervision, Inspection, and Quarantine (AQSIQ), State Administration of Industry and Commerce (SAIC), and the Ministries of Agriculture (MOA), and Ministry of Commerce (MOC). Other agencies also have a role in this process, including the State Environmental Protection Administration (SEPA), National Development and Reform Commission (NDRC), General Administration of Customs, etc.

The departments shoulder different responsibilities for food safety. MOH under the State Council is responsible for overall coordination of food safety, food safety assessment, food safety standards development, food safety information dissemination, development of the qualification requirements and inspection regulations for food

inspection and testing agencies, and dealing with serious food safety events. The departments of quality supervision, industry and commerce, food and drug administration under the State Council are responsible for the supervision and management of food production, distribution and catering service, respectively. SFDA issues catering service license, is responsible for routine supervision and administration of catering service activities, health foods, disposes of food-related illegal activities. AQSIQ issues food production license, authenticate the qualifications of agencies for food inspection and testing, supervises food production activities, food related products, food import and export, assists MOH in dealing with food safety events, disposes of food-related illegal activities. MOA regulates and inspects planting, growing and harvesting crops, and animal husbandry. But when foods leave factories for sale, they are monitored by the industry and commerce administration. SAIC regulates and inspects "market circulation" including the movement of food products from farmers and processors to middlemen, wholesalers, retail operations, and individual consumers. In addition to the government agencies described above, many other PRC institutions and organizations are involved in food safety and inspection, which include testing and certifying laboratories and centers, industry associations, and specialized research organizations.

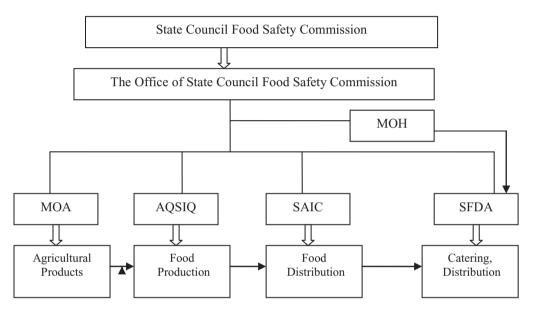


Fig. 1. Supervision and administration system of food safety in China

The way in which the MOH should interface with other groups charged with responsibilities under the Food Safety Law is unclear. No details are supplied about the membership of this committee and how it will coordinate with the MOH. The fragmentation of regulatory authority and responsibility for food safety among at least six government ministries and administrations offers a daunting challenge for regulatory implementation, which is reflected in incongruities among the regulations and standards adopted by the different agencies. In certain aspects, there may be excessive enforcement; in others, shirking of responsibility and shifting of blame may be the outcome. China's food safety regulators exists problems of duty not clear. Although the function orientation of administration for industry and commerce is market operation regulation, in reality process, its regulation has widely infiltrated into every aspects of food safety. As the special food safety regulator, the State Food and Drug Administration only play the rule of comprehensive supervision, organization and coordination; it has no right of food approval and routine supervision. The job of coordinating these agencies and ministries assigned to SFDA is complicated, and agencies sometimes disagree over jurisdiction or responsibility. For example, if an unsafe food product turns up on supermarket shelves, it is not always clear where the problem originated and where inspection needs to be strengthened—in the "market circulation" step (regulated by SAIC) or in earlier food processing steps (regulated by AQSIQ). Though the SFDA was created to alleviate these problems through better coordination of existing agencies, its position as a vice-ministry-level administration makes it difficult for SFDA to coordinate multiple ministry-level

organizations. In addition, SFDA must find the time, energy, and resources to tackle all of the issues covered in its broad mandate. In a word, the non-independence regulation of China's food safety leads to the problems of food safety field.

# 5. Designing Independent Regulation of Food Safety in China

China's food safety system is far from perfect due to inadequate coordination, poor law enforcement and supervision of government departments. Setting up independent regulation presents a number of advantages with respect to both the economy and social attitudes toward food safety regulation in China, which is the most efficient approach to meet consumer, national, and corporate interests. As for construction of independent regulation of food safety in China, we should learn basic experience from developed countries, pay attention to international development trend. China should establish the relatively independent food-control system under the existing administrative framework.

## 5.1. Strengthening legislation of food safety

China's food regulatory agencies should have a clear legal status. The establishment of food regulatory agencies is based on the corresponding laws. It is the institutional basis to ensure the independent status of food regulatory agencies. New legislations should be adopted to confirm the legal status of food regulatory agencies, give the agencies corresponding power and function, determine the specific procedures for food regulation, reduce regulation arbitrary, inhibit the abuse of power, then create conditions for the independence of the regulation.

## 5.2. Setting up the relatively independent food regulatory agency

At present, it is impossible that food regulatory agency is completely independent from the government in China. It can be considered setting up an independent food regulatory agency. It is directly under the State Council and relatively independent from the government, maintained independence of legal status, organizational structure and personnel. It is a specialized food regulatory agency, which will take full responsibility for the general affairs of food safety regulation in order to ensure the independence. So it realizes the rationality of vertical power allocating; ensure the uniform and coordination of food control implementation, reducing the resistance of local protection. Moreover, it will not cause the role conflict of local governments between development and regulation.

# 5.3. Composition of regulators

The independence of food safety regulation also requires the corresponding system of personnel appointment and removal. We should prevent the public interest objectives from deviation by controlling regulators' appointment and composition. Effective food control requires a certain number of special talents and experts, especially legal and economic expertise, rather than simply the food professionals. Experts and professionals take care of day-to-day issues.

In the selection of personnel of food regulatory agency, the original administrative departments' staff should be restricted to a certain ratio; a wide range of experts in related fields should be absorbed to the new regulatory agency, in order to cut off the priori link between regulators and regulated firms. The economic interests between regulators and regulated firms should be expressly prohibited, such as prohibiting the regulators to hold shares of the regulated firms. At the same time, the government should design strong administrative law enforcement responsibility system so as to seriously violate the offenders.

# 5.4. Establishing the mechanism of checks and balance

Establishing an open and transparent decision-making process of food control, namely, decision-making process, reasons and results should be declared to public. Transparency means that control policies and a specific decision process should be open, consistent and predictable. Food regulatory agencies should provide stakeholders an opportunity to express their views in decision-making process, announce the decision result and the detailed reasons.

Important decisions should be consulted to the experts, So that the relevant parties can fully understand the consequences of the decision-making.

Strengthen the addressing inquiries and supervision power of National People's Congress, the State Council, CCDI, prosecution authorities and other departments to food safety. National People's Congress should listen to duties reporting; review the budget for food control. In addition, the food regulatory agencies should also be undergone regular external audit. Encourage the public to participate in the rule-making and specific control processes actively through a public hearing and other channels so as to improve the effective and scientific food control.

#### 6. Conclusions

Food safety is an import symbol of economic development and people's living quality. Independence is an important guarantee for food safety. If the regulatory agency has no independence, its objectives will be aberrant. Setting up independent regulators is a dynamic process where institutional building takes into account countries specific legal and judicial frameworks and often crafting innovative solutions. The independence of food safety regulation has a strong neutral feature, which can reduce the impact of interest groups and government, minimize the external interference.

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