



Assessment of Regulation of Food Safety in E-Commerce: Global Good Regulatory Practices and Implications for China's Regime

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I. Executive Summary

E-commerce and food safety are two critical areas of national focus in China. Propelled by robust private innovation and investment, a trusted and ubiquitous digital payment system (e.g., WeChat and Alipay), and the purchasing power of 415 million millennial consumers, China has become the world's largest e-commerce market. Indeed, e-commerce is a key driver of China's economic development and innovation and has helped support over 10 million jobs, both directly and indirectly. China's emerging legal framework for the digital economy, with an E-Commerce Law effective January 1, 2019, is significant both as new body of law and in relation to other aspects of the Chinese economy that are increasingly shifting to digital platforms, such as agriculture and food safety.

While food safety is primarily regulated through its own set of requirements (even when food sales occur online), the E-Commerce Law is relevant in that it could affect the conditions for food sales in the online space, for example through registration requirements. Overall, the E-Commerce Law is the first overarching law that governs China's vast and highly developed e-commerce sector. Akin to other laws with similarly large scopes, such as China's Food Safety Law and Advertising Law, the E-Commerce Law lays down broad-stroke principles and requirements. The core elements include requirements applicable to e-commerce operators, conclusion and fulfillment of e-commerce contracts, dispute resolution, and promotion of e-commerce. Subsequent regulations and administrative measures will likely supplement the e-commerce legal framework in a more detailed fashion.

¹ The New York Times, In Urban China, Cash Is Rapidly Becoming Obsolete. Web. July 16 2017.

² PricewaterhouseCoopers, *Total Retail 2017, E-Commerce in China – The Future Is Already Here* (2017). Web. November 17 2017; United States Department of Agriculture Foreign Agricultural Service, China's Cross-border E-Commerce Opportunities for U.S. Exports. August 17 2015.

³ Li Yi, "National Report on E-Commerce Development in China," *United Nations Industrial Development Organization*, Department of Policy, Research and Statistics Working Paper 16/2017, 11, 2017.

⁴ The E-Commerce Law of the People's Republic of China (2018).

⁵ Ibid.

This emerging legal framework for e-commerce will inherently intersect with the legal framework for food safety, given that online food sales are becoming increasingly popular with the rise of distribution channels such as online delivery services and cross-border e-commerce. China has pursued ambitious legal and institutional reforms to boost food safety with an amended Food Safety Law (2015) (FSL) as the centerpiece and the newly established China Food Safety Administration as the core institution. Notably, online food safety is a relatively new regulatory focus for China and an area of regulatory experimentation globally, marking it as an area of significant regulatory reform. The reform experience in China is also part of a larger global context and could be of great interest to the public and private sectors in other countries as new rules and regulations are developed.

This assessment of good regulatory practices for online food safety is part of an ongoing series of work on China's legal and regulatory system for food safety done by the New Markets Lab (NML) in partnership with the Syngenta Foundation for Sustainable Agriculture (SFSA). The series includes case studies on important value chains (horticulture, Chinese medicinal herbs, potatoes, kiwi, and dairy) and an assessment of global best practices in food safety.⁶ As China progressively refines its online food safety regime, this paper highlights relevant online and offline good practices both within and outside of China that could be leveraged and tailored to food safety in the e-commerce ecosystem (summarized in Table 1 below). The paper covers three pillars of food safety management: regulatory approaches and principles, market entry (the front end of food safety regulation), and enforcement (the back end of food safety regulation and a perennial challenge in China).

Several cross-cutting suggestions are noteworthy. First, as the rules surrounding food safety in the context of e-commerce become more comprehensive and precise, it will be important that they remain flexible in order to respond to evolving markets and particular local circumstances. One dimension of flexibility relates to how laws and regulations are designed and whether this structure can respond to future technological and business innovations. Given the rapidly evolving e-commerce business models and attendant shifts in responsibilities and resources, overarching rules should be established that are sufficiently flexible to accommodate future changes. This type of flexibility is present in the European Union, which has an umbrella baseline law and more specific set of accompanying regulations. This type of structure alleviates legislative burden (regulations are easier to promulgate and change than laws), minimizes potential legal conflicts, and mitigates uncertainties that stem from regular enactment of new legislation.⁷

Another dimension of flexibility encompasses variations in local approaches to regulation. Local jurisdictions differ widely in terms of their economic and technological capabilities, sophistication and market penetration of e-commerce products and services, and relevant social considerations (e.g., employment rates). Thus, local jurisdictions should be permitted to preserve ample policy

⁶ See, Katrin Kuhlmann, Mengyi Wang, and Yuan Zhou, *Chinese Medicinal Herbs Case Study*, November 2017, Web; Katrin Kuhlmann, Mengyi Wang, and Yuan Zhou, *China Horticulture Case Study*, November 2016, Web; New Markets Lab, *China Potatoes Case Study*, New Markets Lab and Syngenta Foundation for Sustainable Agriculture, publication forthcoming 2019; Katrin Kuhlmann, Yuan Zhou, and Nini Hou, *China Kiwi Case Study*, publication forthcoming 2019.

⁷ Katrin Kuhlmann, Megan Glaub, and Mengyi Wang, *Digital Economy Enabling Environment Guide: Key Areas of Dialogue for Business and Policymakers*, ed. Louisa Tomar, Center for International Private Enterprise and New Markets Lab, 2018. Web.

and enforcement flexibilities so that they can draw from good regulatory practices and roll out policy responses commensurate with local circumstances. An example would be cottage food laws that exempt small food workshops and food vendors from registration or approaches that allow for flexible registration systems (e.g., issuance of registration cards instead of business licenses).⁸

Second, different regulatory approaches will have implications for both market entry and enforcement. As noted, enforcement is an ongoing issue in China (as well as many other emerging markets) and addressing enforcement and implementation challenges warrants far greater attention. While efforts to lower market entry barriers may be pursued in order to encourage market growth, such as exempting registration requirements for small-and-medium enterprises (SMEs), these changes will necessitate more robust enforcement efforts, and vice versa. There are, however, often regulatory tradeoffs involved in this regard, as experience has shown in other jurisdictions and sectors. Jurisdictions that establish a heavy regulatory burden for market entry (*ex ante* regulation) do not always retain sufficient resources for enforcement, so this dynamic should be carefully weighed as well.⁹

Finally, as a crucial control point and an area of sustained challenge in China, enforcement should holistically engage all three relevant groups of stakeholders – government, industry, and consumers – in order to effectively address market surveillance, enhance deterrence, and improve compliance incentives. There are multiple mechanisms that could work in concert to strengthen enforcement. In the order of descending public control, these include heavy public intervention (e.g., public monitoring and surveillance followed by sanctions), public-private co-regulation (including government-industry and government-consumers frameworks), and self-regulation (consisting of industry self-regulation and industry-consumer collaborations). ¹⁰ Importantly, enforcement is also a dynamic system. While public efforts will most often take center stage in the short term, industry and consumers will increasingly take on important tasks in the long term (especially since some public efforts are aimed at fostering industry and consumer capabilities and awareness). Future changes in industry and consumer capabilities and awareness will thus require shifts in enforcement responsibilities at multiple levels (locally, nationally, and internationally).

⁸ Guangzhou Daily, 食品摊贩无需工商登记, 11 August, 2015. Web. See also Chongqing Food and Drug Administration, 重庆市食品摊贩备案管理办法 (Measures for the Administration of the Recordation o Food Vendors in Chongqing), Article 2; and Heilongjiang Province People's Government, 黑龙江省食品安全条例 (Heilongjiang Provincial Food Safety Regulations), Article 25.

⁹ See, e.g., Kuhlmann, Katrin, The Human Face of Trade and Food Security: Lessons on the Enabling Environment from Kenya and India, Center for Strategic and International Studies, December 11, 2017. Web; Katrin Kuhlmann, Megan Glaub, and Mengyi Wang, Digital Economy Enabling Environment Guide: Key Areas of Dialogue for Business and Policymakers, ed. Louisa Tomar, Center for International Private Enterprise and New Markets Lab, 85-88, 2018. Web; New Markets Lab, Increasing Growth and Competitiveness Through and Enhanced Enabling Environment: An Assessment of the Cosmetics Sector in Tanzania, S-40407-TZA-1, International Growth Centre, March 2017; Joshua Ariga, Shannon B. Keating, Katrin Kuhlmann, Nicole M. Mason, and Maria Wanzala-Mlobela, Creating and Enabling Environment for Private Sector Investment in Fertilizer Value Chains in Sub-Saharan Africa: Empirical Evidence and Knowledge Gaps, Michigan State University, December, 2018. Web.
¹⁰ See, Katrin Kuhlmann, Megan Glaub, and Mengyi Wang, Digital Economy Enabling Environment Guide: Key Areas of Dialogue for Business and Policymakers, ed. Louisa Tomar, Center for International Private Enterprise and New Markets Lab, 2018. Web.

Table 1: Summary of Good Food Safety Regulatory Practices and China's Context

Regulatory Issue	Global Good Practice	China Context
General Approach	 Comprehensive, technology-neutral, forward-looking baseline rules on e-commerce supplemented by a subset of more specific regulations. For online food safety this would include an umbrella law on food safety and regulations on more specific aspects like distance selling (e.g., mail order) and online sales Rules broadly and automatically applicable to new technologies and business arrangements, conducive to minimizing the risk of legislative conflicts and ambiguities and legal uncertainties 	 Baseline rules (Food Safety Law (FSL)) supplemented by technology-specific legal and regulatory measures (e.g., E-commerce Law) and distribution-channel-specific online food safety regulations (e.g., the Measures for Supervision and Administration of Food Safety in Online Catering Service and a package of regulations governing cross-border e-commerce based on broad baseline rules) China's current food safety regulatory system has a lack of clear guidance on technology-neutral distance selling and publication of distribution-channel-specific rules, which makes it difficult to automatically accommodate new technologies and business arrangements and could increase the risks of legislative conflicts and legal uncertainties
Market Entry	 Regulatory approach focused on market entry (ex ante), which typically includes licensing and registration requirements and other ways of controlling who enters the market. This approach is evident in China's FSL and the E-Commerce Law Ex ante regulation has implications for SMEs, and different approaches exist globally to encourage SME participation in the food market; these include cottage food laws, which are common at the provincial and state levels in Canada and US to promote small food workshops and food vendors Wide variations exist across regulatory systems based on five variables, with good practices arising that strike a balance between regulatory purpose and market facilitation. The variables 	 China's FSL allows for parallel food safety management systems for small workshops and food vendors (e.g., restaurants housed in private dwellings) Exemptions from registration for small food workshops and food vendors from and flexible registration systems (e.g., issuance of registration cards instead of business licenses) have frequently been instituted in local jurisdictions Exemptions and flexibilities may be affected by the E-Commerce Law, due to ambiguities about the need to obtain licenses in the legal text

are: 1) type of food allowed to be sold, 2) restriction on location (e.g., internet sales allowed in only few jurisdictions), 3) tiered system of registration, licenses, permits, or certificates that account for differing capacities across SMEs, 4) limitation on total sales based on the amount of income, and 5) mandatory labelling Regulatory approach focused on China's system faces challenges in the enforcement of market actors (ex offline world, due to the dominance of SMEs with scarce resources and little financial incentive for compliance; Investigative capabilities can be inadequate human, technological, and enhanced through a variety of financial enforcement capacities in means, including targeted training, local jurisdictions; insufficient interestablishment of specialized jurisdictional cooperation; and low enforcement units, promulgation consumer awareness and engagement of guidelines for local authorities, budget allocations Enforcement challenge in e-commerce aggravated by a more diffuse and inspection of online purchases layered global supply chain and the Cross-jurisdictional cooperation and assistance for food safety for e-commerce specific improved through national and enforcement tools subnational cooperation (e.g., in Hefty fines and criminal sanctions not Germany, the federal authority always implemented performs searches while state Mandatory recall based on risk levels **Enforcement** authorities enforce search results) international cooperation: (Public search and such coordinated Monitoring information exchange to establish and intelligence-led risk-based Surveillance) surveillance system Feasible and comprehensive sanctions system, consisting of both hard and soft controls which are well implemented. Hard include controls prosecution, suspension, fines, disposal of products, and recall; soft controls include inspection-led ratings and publication of information, with information disseminated prominently, widely, promptly Recall mechanisms modified to address online sales; recall notice

displayed on websites or social media pages from which products

	were sold, and consumers contacted with their purchase information	
Enforcement II (Public- private Co- regulation)	 Government-industry coregulation achieved through intelligence sharing (e.g., sharing of risk assessment and market surveillance) Government-consumer coregulation achieved through an easily accessible complaint redress system (e.g., hotlines provided by the United States Department of Agriculture and Food and Drug Administration), direct communication of food safety information (e.g., Smart Consumer App in India and Food Hygiene Ratings App in the United Kingdom), and educational programs for consumers 	 Food safety fund established by four prominent e-commerce platforms to share risk assessment reports with local China Food and Drug Administrations (CFDAs) Food safety related hotlines not always connected to the most relevant or specialized agencies (e.g., mayor's office), which could delay enforcement One-click hotline feature could be created in mobile applications and on websites that directly connects consumers to relevant CFDA branches based on consumers' addresses
Enforcement III (Private self- regulation)	• Deployment and diffusion of best practices, particularly by more affluent and resourceful actors to assist those with fewer resources (e.g., temperature-controlled equipment made available by Uber Eats to its drivers)	 Food safety alliance established by four prominent e-commerce platforms to jointly undertake research and development, surveillance, and enforcement; risk assessment informs platform features such as restaurant ranking and delisting of high-risk products Consumers encouraged to inspect food operators (e.g., home kitchens)

Source: New Markets Lab, 2018.

II. Overview of China's E-commerce Ecosystem for Food

China's e-commerce ecosystem for food is vibrant and ever-evolving. Characterized by mobile-first behavior, Chinese consumers' engagement in online food sales occurs through mobile apps. The e-commerce food market consists of a few different segments, each with distinct characteristics. This section focuses on two of these segments: online delivery services and sale of fresh produce as part of the e-commerce ecosystem for food.

The online meal delivery segment, comprised mainly of app-based services, is an extremely competitive sector of China's economy. Notably, it is more lucrative than the fresh produce industry: in 2017, 343 million users ordered more than 200 billion yuan (32 billion USD) worth of food. While a number of mobile apps were active in the online delivery space, the market now is characterized by a duopoly: Meituan (backed by internet giant Tencent) and Ele.me (largely

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¹¹ Albee Zhang "App Delivery Boom Shakes Up China Food Sector." *Phys.org*. Web. February 14, 2018.

backed by Tencent's rival Alibaba).¹² The mobile apps work by providing a list of food providers within a certain distance of a user's location and by allowing searches of specific restaurants outside of a given distance. Delivery is either free (generally when the value of a given purchase exceeds a baseline amount) or based on a standard fee (generally around 5 yuan (less than 1 USD).

China's online fresh produce segment is fiercely competitive, and most industry actors are operating at a loss due to high cost of cold chain logistics. In general, the fresh produce sector has gone through three phases, but service providers that emerged during different phases are still operating simultaneously. The first phase is characterized by individuals who sell through consumer to consumer (C2C) or business to consumer (B2C) modes. This phase is highly inefficient because of high logistics costs. Sellers have used unreliable logistics options, which have led to high perishability rates. While inefficient, this phase jump started e-commerce for a large share of farmers and coops. E-commerce platforms such as Taobao and Alibaba started working with local governments to teach farmers the operation of e-commerce. The second phase is characterized by more social media and community-based services, such as WeChat stores. This phase, however, did not innovate with respect to logistics solutions.

The third phase of sales of online fresh produce has given rise to more diverse business models and addresses the needs of different demographic groups. Two business models are particularly noteworthy. The first is led by Pinduoduo, an app with a robust group-buying features and a large number of deals. Pinduoduo caters specifically to women who are living in third-tier or fourth-tier cities (cities that are not provincial capitals). The second business model includes storage and warehouse logistics scattered throughout big cities. A good example is Meiriyouxian, which is an app with storage facilities strategically located in different parts of big cities, which guarantees one-hour delivery for its members.

The rise of e-commerce offers farmers and cooperatives new opportunities and sometimes higher profit margins. They have increasingly actively sought to use e-commerce to target different end-clients and consumer groups in order to boost their brands and grow their businesses, often in collaboration with e-commerce platforms. For instance, Qifeng, a large kiwi coop, sells through B2B and B2C channels and is rolling out a program with Tmall, a major e-commerce platform. Similarly, many local governments have also organized online sales, hoping to obtain price premiums through brands (generally through "geographic indications," which are marks applied to products to denote a particular quality level or reputation for quality that is derived from a particular place of production). For instance, it is common to find products with well-known geographic markers on platforms such as Tmall and mobile apps such as Meiriyouxian.

The notable trend of steady consumption upgrades among the Chinese middle class means that standardization, quality control, and "premiumization" (emphasizing a brand's superior quality to appeal to consumers) have become important factors of market growth. ¹⁵ A growing list of online store fronts display third party certifications of prominent food safety standards. For instance, a

¹² Ibid.

¹³ WalktheChat, Everything You Need to Know about Pinduoduo Users. Web.

¹⁴ See, Qifengfruit, About Us. Web.

¹⁵ Bruno Lannes, Jason Ding, Marcy Kou, and Jason Yu, "As Shoppers Upgrade, Growth Returns," *Bain & Company*. Web. July 06, 2018.

number of olive oil brands sold on Tmall have certifications demonstrating compliance with BRC Global Standards¹⁶ and the International Finance Corporation (IFC)'s global food safety advisory program.¹⁷ In terms of quality control, some high-end platforms now provide full traceability of their agricultural products, including inspection records. With respect to the trends towards premium foods, Bain and Company has observed that food categories with strong health benefits, such as nutrient supplements and cereals, saw particularly strong performance and growth of 6 or 7 percent. ¹⁸ Similarly, for beverages, the company Nongfu Spring attained strong sales growth through an effective marketing campaign. ¹⁹

III. Regulation of Food Safety in E-commerce: Global Food Safety Practices and Implications for China's Regime

Approaches for regulating online food sales (the "regulatory approach"), particularly in relation to the overall food safety management system, vary globally. Regulation of the digital economy as a whole is still an emerging area of the law, and the specific regulatory approach used will depend on a country's existing legal structure for e-commerce²⁰ as well as any existing "offline" food safety laws. In China, food safety regulatory systems cover a number of distinct and interrelated aspects along the supply chain. Most regulations pertaining to online food safety are already in place through the FSL framework. The newly effective E-Commerce Law further adds to this landscape. The E-Commerce Law does not directly address food safety but does regulate the conditions for operating in the online space (namely, through registration requirements, consumer protection rules, and record keeping requirements). This section discusses two crucial control points for regulating food safety, market entry requirements at the front end (an *ex ante* approach) and enforcement at the back end (an *ex post* approach), both of which have posed significant challenges in China and other markets.

A. China's Regulatory Approach for Online Food Safety

China's regulation of online food safety tends to be reactive (*ex post*), with laws focused on specific activities or distribution channels. This means that alongside the FSL, which is the overarching food safety law, additional and somewhat overlapping measures focus on: 1) the Internet (the Measures of the Investigation and Punishment of Illegal Conduct Concerning Online Food Safety and the E-Commerce Law) and 2) specific e-commerce distribution channels (Online Catering Services (OCS) and cross-border e-commerce (CBEC)). It is important to note

¹⁶ The BRC Global Standard for Food Safety is a mark that certified compliance with international standards of food safety and quality. *See*, "What is BRC Food Safety Certification," *FoodChain ID*. Web.

¹⁷ The IFC Global Food Safety Advisory Program assists companies enact practices to satisfy international standards for food safety and sustainability. *See*, "Global Food Safety Advisory Program: Our Approach," *IFC*. Web.

¹⁸ Bruno Lannes, Jason Ding, Marcy Kou, and Jason Yu, "As Shoppers Upgrade, Growth Returns," *Bain & Company*. Web. July 06, 2018.

¹⁹ Ibid.

²⁰ See, Katrin Kuhlmann, Megan Glaub, and Mengyi Wang, *Digital Economy Enabling Environment Guide: Key Areas of Dialogue for Business and Policymakers*, ed. Louisa Tomar, Center for International Private Enterprise and New Markets Lab, 2018. Web.

that food safety is a specialized field of law, and online food safety is mostly regulated through food safety frameworks. While food sales exist within the ecosystem of ecommerce, China's E-Commerce Law only regulates food safety incidentally, as it imposes registration requirements that could exclude small vendors that have been able to operate in off-line trading through exemptions. This will be discussed in more detail below.

With respect to OCS specifically, CFDA centrally rolled out the Measures for Supervision and Administration of Food Safety in Online Catering Service (Order 36). Order 36 seeks to curb a number of well-documented food safety issues, such as unlicensed operations, and prescribes roles for actors at each link of the service. For instance, third party platforms must adhere to a set of complex, multi-pronged compliance obligations such as food safety surveillance and management of food safety complaints; delivery services must maintain food safety and quality during storage and transportation; and catering service providers must have at least one physical store licensed for distributing food and preparing food on the premises (instead of outsourcing the preparation).²¹ Local branches of CFDA have also put forth additional requirements or initiatives. The Shanghai municipal CFDA, for instance, is implementing video surveillance of high-risk sectors such as fresh produce and sandwiches.²²

Further, with respect to CBEC, products tend to be treated as personal parcels and have thus faced weak legal scrutiny. The new supervisory model for CBEC, effective January 1, 2019, will align CBEC more closely with conventional trade.²³ Through Decrees 18 and 40, eleven ministries or commissions have delineated tariff, tax, customs, and inspection obligations for 1,203 products itemized in two positive lists (e.g., potato flour).²⁴ Pursuant to the positive lists and FSL, some product categories (e.g., health food) must undertake additional registration and filing with CFDA.²⁵ Notably, the new supervision model differentiates between CBEC products based on their business and logistics models. The new model primarily regulates goods traded through B2C third party platforms ("commercial goods") with bonded warehouses or overseas distribution

²¹ Economic Information Daily, 外卖热暗藏多重食品安全问题, February 18 2017; The State Council of the People's Republic of China, Proposal would tighten online food rules, Web. June 19 2017. CFDA, Measures for Supervision and Administration of Food Safety in Online Catering Service. Web. November 10 2017; CFDA, Interpretation of Measures for Supervision and Administration of Food Safety in Online Catering Service. Web. November 10 2017. To emphasize platform responsibility and facilitate compliance, CFDA held meetings with representatives from the prominent platform owners such as Ele.me and Baidu Waimai. See YicaiGlobal, Regulator Holds Disciplinary Talks with Online Food Services on New Safety Measures. Web. December 28 2017.

²² Xinhuanet, 上海:外卖食品合格率低于总体水平 政府将加强大数据监管. Web. November 8 2017.

²³ Consulate-General of the Kingdom of the Netherlands in Shanghai, China Cross-Border E-Commerce. Web. January 2017; Heller and Heckman, *Regulatory Landscape of Cross-Border E-Commerce in China Enters a New Spring*. Web. May 17 2016.

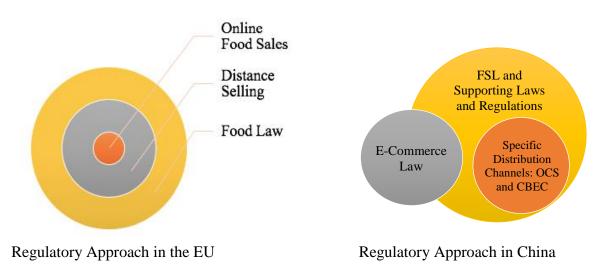
²⁴ Ministry of Finance, 《跨境电子商务零售进口商品清单》公布. Web. April 7 2016; Ministry of Finance, 《关于跨境电子商务零售进口税收政策的通知. Web. March 24 2016. The General Administration of Quality Supervision, Inspection and Quarantine, 质检总局关于跨境电商零售进口通关单政策的说明. Web. May 15 2016. While 11 ministries or commissions, including CFDA and MOFCOM, jointly released Decree 40 and the first positive list, only 3 ministries released Decree 18, and MOFCOM alone issued the second positive list. See also New Markets Lab, China Potatoes Case Study, New Markets Lab and Syngenta Foundation for Sustainable Agriculture, publication forthcoming 2019.

²⁵ Ibid.

centers. In contrast, goods directly shipped by merchants or individuals are still viewed as personal parcels and are, therefore, not affected by the new rules except for modified tax rates.

Other jurisdictions regulate online food safety through generic laws that tend to be forward-looking and broadly applicable. The European Union (EU) is one example, and general principles and requirements are set out in the EU's general food law, ²⁶ and online food sales are embedded in a subset of regulations that covers all distance selling (including, for example, mail order and telephone sales). ²⁷ This means that these umbrella rules are detailed and explicitly cover online sales. Notably, both China and the EU share the principle of grounding online food safety regulation under the umbrella of a general food safety framework. Unlike the EU, in China rules governing particular distribution channels are not nested within a broader framework, meaning there are potential ambiguities in how certain aspects of the E-Commerce Law will be applied to some types of online food sales. Figure 1 below illustrates the divergent regulatory approaches in the EU and China.

Figure 1. Regulatory Approaches to Online Food Sales in the EU and China



Source: © 2018 New Markets Lab

Advertising Food Online. Web. 2017.

The advantages of the EU's approach are three-fold. The first advantage is flexibility: the regulatory system can automatically accommodate new technologies and business arrangements — two hallmarks of e-commerce — without having to reactively promulgate new legislation. The second advantage is that comprehensive baseline rules minimize the risk of legislative conflict and

²⁶ The central baseline rules are Regulation (EC) No 178/2002 that governs the general principles and requirements of food law, Regulation (EC) No 852/2004 on the hygiene of foodstuffs, Regulation (EC) No 853/2004 that sets out specific hygiene rules for food of animal origin, Regulation (EU) No 1169/2011 on the provision of food information to consumers, and Regulation (EC) No 1924/2006 on nutrition and health claims made on food. ²⁷ European Commission, *Regulation (EC) 178/2002*, Article 3. The definition of "food business" in the regulation includes any undertaking carrying out any of the activities related to any stage of distribution of food. See also European Commission, *Regulation (EC) 1169/2011*, Article 14; Food Safety Authority of Ireland, *Selling or*

ambiguities engendered by multiple laws or measures. Third, the structure of the EU system reduces the likelihood of sweeping new reforms that could lead to legal uncertainty, which ultimately impairs business planning and development. Legal predictability is particularly pertinent in China, as a large number of SMEs are currently facing uncertainty regarding their ability to operate in e-commerce.

B. Market Entry

Regulation of market entry, which includes who can operate in the food sector and under what conditions, is a way of regulating food safety at the front end (a type of *ex ante* regulation). Generally, actors with more resources, which can be measured via proxies such as ability to rent commercial premises, are more equipped to meet relevant food safety laws, regulations, and standards than are actors with fewer resources. A number of governments, including China, have taken special measures to encourage the market entry of SMEs in the food sector. Given the critical role of SMEs in China's e-commerce system and the potential of strengthening enforcement as an alternative to regulating food safety (an *ex post* approach to regulation), this subsection surveys global good practices in relation to small food workshops and food vendors (home-based cooking), commonly referred to as "cottage food laws."

Balancing food safety compliance against other social issues such as employment, the FSL prioritizes economic inclusivity over compliance by authorizing local authorities to engineer parallel local systems that regulate small food workshops and food vendors. The prevalent local approach in China has been to exempt small food workshops and food vendors from registration or to run flexible registration systems (such as issuance of registration cards instead of business licenses), and details vary by locale. These flexibilities are complicated by the E-commerce Law, which requires all actors to obtain the Industrial and Commercial Registration that has much more stringent requirements (e.g., place of business for operators of processed food, which cannot be a residential building or a public street) than existing local systems. The E-Commerce Law does list several exemptions: those who sell self-produced subsidiary agricultural products, those who engage in small-value sporadic transactions, or those who are not required to register according to laws or administrative regulations. It is, however, unclear what is the threshold for small-value sporadic transactions or what happens with conflicts of local rules on exemptions, given that online transactions are frequently conducted across provinces.

Other jurisdictions, for example Canada and the United States (US), also encourage market entry of SMEs through cottage food laws, which exist at the provincial or state level but not the national level. The requirements and scope of cottage food laws vary widely, but there are five common control variables that could be instructive in China, as depicted in Figure 2 below.

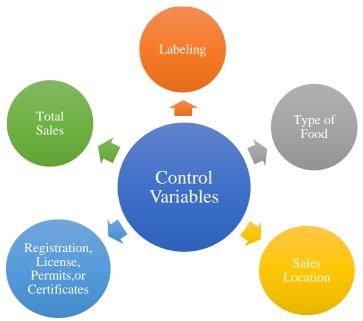
²⁸ The FSL, Article 36.

²⁹ Guangzhou Daily, 食品摊贩无需工商登记, 11 August, 2015. Web. See also Chongqing Food and Drug Administration, 重庆市食品摊贩备案管理办法 (Measures for the Administration of the Recordation o Food Vendors in Chongqing), Article 2; and Heilongjiang Province People's Government, 黑龙江省食品安全条例 (Heilongjiang Provincial Food Safety Regulations), Article 25.

³⁰ E-Commerce Law (2018), Article 10; SAIC, 个体工商户登记管理办法 (Measures for the Administration of Registration of Individual Industrial and Commercial Households), Article 6.

³¹ E-Commerce Law (2018), Article 10.

Figure 2. Control Variables for Cottage Food Laws



Source: © 2018 New Markets Lab

The first control variable is the type of food allowed to be sold. In Canada, provinces such as Manitoba and Ontario permit the sale of some lower-risk items like jams, jellies, and baked goods.³² In the US, some states have exhaustive lists of allowed foods, while others simply state that food should not be potentially hazardous.³³ For instance, California's cottage food law contains 16 allowed foods, including dried pasta and fruit pies.³⁴ It is important that this control variable is designed to reflect a tangible regulatory purpose (for example, protecting consumers or buffering against market risk) and is not applied in a way that deters rather than encourages market entry for SMEs. This is true across all five control variables, with additional considerations noted below.

The second control variable for cottage food laws is sales location.³⁵ While nearly all states in the US restrict sales locations, state approaches differ greatly in terms of the exact locations (e.g., roadside stands or the producer's premises).³⁶ It is notable that some states expressly allow for Internet sales, as long as the sales occur within the local jurisdiction (otherwise the sales may violate the cottage food laws of another state).³⁷ In jurisdictions where online sales across borders are common (such as China), determining the location of sale will be particularly important for cottage food operators.

³² Canadian Broadcasting Corporation, Home-based food sales stirring up trouble with Manitoba's health inspectors. Web. December 18, 2017.

³³ Harvard Food Law and Policy Clinic, Cottage Food Laws in the United States. Web. August 2013.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

The third control variable encompasses the requisite registrations, licenses, permits, or certificates.³⁸ Again, these requirements vary widely across US states, and many have complete exemptions.³⁹ How these requirements are applied and in what combination will impact the number, nature, and diversity of businesses in the sector. While registration, licenses, permits, and certificates can serve a distinct regulatory purpose, limiting the number of requirements to those that are necessary and ensuring that they do not overlap is important.

The fourth control variable is the limitation on total sales, which impacts which businesses are covered by the cottage food law. Total sales are calculated based on income, with limitations ranging from \$5,000/year up to \$50,000/year. These controls can help support small businesses by creating carve outs that make larger enterprises ineligible to qualify for the particular exemptions contained in cottage food laws. However, these also create restrictions on the viability of these businesses and should be designed carefully so as to not overly restrict market entry.

The final control variable is mandatory labeling.⁴¹ In the US, labeling is generally required by all states and encompasses some combination of required elements such as name and address of the producer, product ingredients (in descending order of predominance by weight), and food allergies.⁴² While labeling also serves an important regulatory purpose, and supports traceability of food products as well as protect consumers, labeling requirements should be streamlined and easy to follow.

C. Enforcement

Enforcement of food safety laws in e-commerce is both critical and challenging in a number of respects. First, enforcement of food safety laws, regulations, and standards in general is a perennial challenge in China. The primary causes of weak enforcement are numerous: the dominance of SMEs with scarce resources and little financial incentive for compliance; inadequate human, technological, and financial enforcement capacities in local jurisdictions; insufficient interjurisdictional cooperation; and low consumer awareness and engagement. Enforcement of e-commerce presents a particular challenge, due to a more diffuse and layered global supply chain and the need for e-commerce specific enforcement tools (e.g., protocols for digital evidence), and exacerbates offline enforcement challenges. For instance, in China, compliance with the newly effective OCS rule has been minimal. Likewise, even in the United Kingdom (UK) and the EU, where offline food safety enforcement is robust, there is widespread online non-compliance and therefore e-commerce was identified as a high-risk area for food safety.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² Ibid.

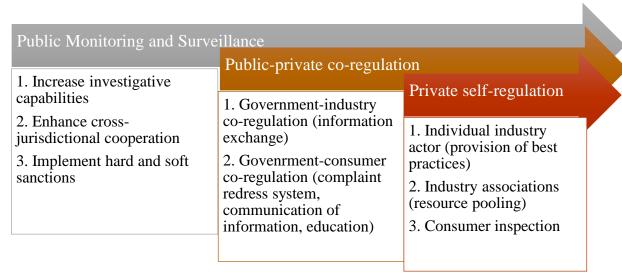
⁴³ See Kuhlmann, Katrin, Wang, Mengyi, and Zhou, Yuan. *China Food Safety Legal and Regulatory Assessment*. Syngenta Foundation for Sustainable Agriculture, publication forthcoming.

⁴⁴ Global Times, New Food Safety Rules Don't Dent Online Catering Services, May Hit Home Kitchens. Web. January 3 2018.

⁴⁵ United Kingdom Food Standards Agency, *Food Sold Online Guidance for Local Authorities*. Web. December 2016; European Commission, *The First EU Coordinated Control Plan on Online Offered Food Products*. Web. 2018.

A holistic enforcement system has proven to be most effective and involves collaboration among key enforcement actors: government, industry, and consumers. Such a system can better implement market surveillance, enhance deterrence, and improve incentives to comply. Notably, a holistic and effective enforcement system, coupled with less restrictive market entry requirements, can also be more inclusive for SMEs. As depicted in Figure 3, three types of enforcement mechanisms, in the order of descending public control, could work in concert. The first type is heavy public intervention, which is achieved through public monitoring and surveillance followed by sanctions (e.g., prosecution or incentive/market-based sanctions). The second type of enforcement mechanism is public-private co-regulation, which is well underway in China and could be intensified (e.g., consumer-facing communications and intelligence sharing with online businesses). The third type is self-regulation, which consists of industry self-regulation and industry-consumer collaborations.

Figure 3. A Holistic Enforcement Mechanism



Source: New Markets Lab (2018).

Public Monitoring and Surveillance

The first type of enforcement mechanism is public monitoring surveillance through inspection and sampling. As summarized in Table 2, inspection and sampling pose several challenges specific to e-commerce: investigative capabilities, cross-jurisdictional cooperation, and appropriate sanctions. Good practices exist to mitigate the three challenges and are elaborated below.

Table 2. Challenges and Solutions for Public Monitoring and Surveillance of Online Food Safety

Challenges	Solutions	
	Targeted training	
Investigative Capabilities	Establishment of a specialized unit	
	Promulgation of guidelines for local authorities	
	Allocation of additional funds to make online purchases	
	National and subnational cooperation (e.g., in Germany, federal authority	
Cross-	performs search while state authorities enforce search results)	
jurisdictional	International cooperation: coordinated search and information exchange to	
Cooperation	establish intelligence-led risk-based surveillance system (e.g., EU coordinated	
	control plan on online offered food products)	
Sanctions	Hard control: prosecution, suspension, fine, disposal of products, and recall	
	Soft control: ratings and publications of information (e.g., Singapore and UK)	

Source: New Markets Lab (2018).

The first challenge involves relevant investigative capabilities, including creation of a specialized investigative unit, appropriate infrastructure (hardware and software), trained expert staff who can exercise public surveillance without being identified as public authorities, enforcement officials who are apt at collecting digital evidence, and additional financial resources for ordering products online. A number of good practices could help alleviate capacity-related challenges, including targeted training, promulgation of guidelines, and allocation of additional funds for enforcement activities. In the EU, for example, national food control agencies are explicitly authorized to anonymously order samples of goods sold "through the Internet" ("mystery shopping"), 46 and Member States' control staff undergo specialized training through the EU "Better Training for Safer Food" e-Commerce control courses. 47 Moreover, institutional reform aimed at creating a specialized enforcement unit could further ensure a high level of enforcement capability. In Denmark, the Food Supplement Group in the Flying Squad, the food inspection task force, takes charge of the e-commerce control system for food. 48 Further, comprehensive and detailed guidelines could help build capacities in local jurisdictions. For instance, the UK Food Standards Agency, the main food safety watchdog, has circulated detailed guidelines for local authorities carrying out food safety control. ⁴⁹

Based on other countries' experiences, a number of steps in the investigation and sampling process could be instructive in China: ⁵⁰

• *Identification of Online Businesses*: local authorities should compile and maintain a comprehensive list of businesses with online sales platforms operating in their jurisdictions

⁴⁶ European Commission, OCR (Regulation (EU) 2017/625), Preamble (49) and Article 36.

⁴⁷ United Kingdom Food Standards Agency, *Food Sold Online Guidance for Local Authorities*. Web. December 2016; European Commission, *The First EU Coordinated Control Plan on Online Offered Food Products*. Web. 2018.

⁴⁸ Finnish Food Safety Authority, *Danish E-commerce Control System for Food*, Web.

⁴⁹ United Kingdom Food Standards Agency, Food Sold Online Guidance for Local Authorities. Web.

⁵⁰ Ibid.

- (e.g., through third party platforms or social media) in their inspection protocol. The information system could label businesses by premises/property use code;
- Registration of Identified Online Businesses: identified businesses should be registered, inspected, and risk rated for interventions in the future;
- Sampling of Food from the Registered Businesses: businesses should be inspected through an intelligence-led and risk-based approach. Importantly, to avoid being identified as a public authority, enforcement officials should use anonymous email addresses and credit cards, delivery addresses not linked to government bodies, and standalone computers with independent Internet connections (computers and Wi-Fi networks could give away official identities to actors with technological sophistication); and
- Gathering and Maintenance of Evidence for Imposing Sanctions: evidence must be handled according to relevant evidence rules, and continuity must be ensured, which will lay the foundation for sanctions such as prosecution.

The second challenge confronting public surveillance is the cross-jurisdictional nature of Internet sales. Digital sales of food often affect multiple domestic and international jurisdictions, and non-compliant actors can only be sanctioned with the help of local enforcement officials. Cooperation between enforcement authorities in different jurisdictions at both the national and international levels is, therefore, crucial.

At the national level, the enforcement model could shift away from traditional, locally-focused enforcement to shared responsibility between national and subnational entities. In particular, it would be more efficient to train and deploy one dedicated national unit than hundreds of municipal units. In Germany, the G@ZIELTTM was established as a permanent unit in 2013 for "control of food, feed, cosmetics, consumer goods and tobacco products traded on the Internet" by the Federal Office of Consumer Protection and Food Safety (BVL) and the 16 German Federal States. ⁵¹ Unlike the traditional German food control system that heavily depends upon states (akin to China's heavy dependence on local CFDA officials), G@ZIELTTM, as a federal unit, searches for unregistered food businesses and high-risk food sold online and then passes surveillance results to states. The Germany system has been considered a best practice by the European Commission and is a reference for good practices more broadly. ⁵²

At the international level, joint efforts are underway to conduct surveillance on of a number of high-risk food products (e.g., four unauthorized novel foods), which form the foundation of a data-driven risk-based surveillance approach that helps conserve public resources. In September 2017, the EU implemented its first coordinated control plan for online offered food products; authorities investigated traders located within their borders and shard search results through the electronic EU Rapid Alert System for Food and Feed (RASFF) for notifications of products which raise health concerns and the EU Administrative Assistance and Cooperation System for notifications of non-compliance that is not health related but mainly misleads consumers. ⁵³ A second and more

⁵¹ Panteia, and CSES, *Good practice in market surveillance activities related to non-food consumer products sold online*. Web.

⁵² European Commission and Slovak Presidency of the Council of the European Union, *Food Chain in the Digital Single Market (Introduction to the Programme of the conference)*. Web.

⁵³ European Commission, The First EU Coordinated Control Plan on Online Offered Food Products. Web. 2018.

ambitious coordinated control plan on e-commerce has been proposed by the European Commission to additionally enhance cooperation and administrative assistance.⁵⁴

The third challenge of public monitoring and surveillance is the design and implementation of appropriate levels of sanctions. While China's FSL stipulates hefty fines and criminal sanctions, enforcement officials have rarely implemented them. Officials either consider the fines to be too hefty or have not prioritized their prosecutorial resources. ⁵⁵ Inadequate implementation of enforcement rules thus calls for the design and implementation of a set of feasible and comprehensive sanctions and penalties. Effective public sanctions could encompass both "hard control" and "soft control" mechanisms, both discussed in detail below. ⁵⁶

"Hard control" mechanisms for enforcement typically involve one-off penalties and are effective deterrence mechanisms. There are a range of options available, with varying degrees of severity. For example, the national food control agencies in the EU can order the suspension of the operator's "Internet sites" for an appropriate period of time. ⁵⁷ Japan and Northern Ireland have other measures in place to deter violations such as disposal of food, suspension of the business in whole or in part for a specific time period, fines (of an amount sufficient to inflict financial pain but not high enough to drive offending entities out of business), criminal penalties, and recall. ⁵⁸ For instance, Northern Ireland recently prosecuted a food business for its repeated failure to display its food safety rating. ⁵⁹ Prosecution is a particularly potent deterrent for repeat offenders and can send a clear message to industry that the government is serious about enforcement.

Notably, recall is an important sanction that is critical to reducing the harmful impacts of non-compliant food products. Mandatory recall based on risk levels is part of China's food safety management, ⁶⁰ and China could draw upon practices from other countries as well. For example, China could incorporate Australia's approach and replicate its detailed, technology-neutral recall requirements for food sold online. ⁶¹ In addition, China's recall system could be modified to accommodate the features of digital sales. The Food Safety Authority of Ireland includes two distinct features of digital sales and recommends modifications of recall policies accordingly. First, since consumers purchasing food online will likely not see point-of-sale recall notices in physical stores, recall notices should be prominently displayed on websites or social media pages from which products were sold. ⁶² Second, since consumers submitted their contact details when making purchases, industry actors are recommended to contact consumers to inform them of a recall. ⁶³ These practices could be instructive for further development of China's system as well.

⁵⁴ Ibid.

⁵⁵ See Kuhlmann, Katrin, Wang, Mengyi, and Zhou, Yuan. *China Food Safety Legal and Regulatory Assessment*. Syngenta Foundation for Sustainable Agriculture, publication forthcoming.

⁵⁶ New Markets Lab, Assessment of Good Regulatory Practices for Food Safety and Implications for China's New Legal Regime, Syngenta Foundation for Sustainable Agriculture, October 2017, Web.

⁵⁷ European Commission, OCR (Regulation (EU) 2017/625) Article 138 (2)(i).

⁵⁸ Baker & McKenzie, Japan Food product and safety regulation. Web.

⁵⁹ United Kingdom Food Standard agency, *The Food Standards Agency In Northern Ireland Welcomes First Prosecution of A Business for Failing to Display Food Hygiene Rating*. Web. January 17, 2018.

⁶⁰ Amended Food Safety Law (2015) Article 63; Hogan Lovells, *China Launches New Rules on Food Recall System*, 2015, Web. October 1 2017.

⁶¹ Food Standards Australia New Zealand, Standard 3.2.2 Food Safety Practices and General Requirements. Web.

⁶² Food Safety Authority of Ireland, Selling or Advertising Food Online. Web. 2017.

⁶³ Ibid.

"Soft control" mechanisms for enforcement, on the other hand, tend to employ a continuous stream of information and rely on market incentives to induce desirable behavior. Ratings based on inspection results and publicization of offending and compliant behavior are two prominent examples of soft control and are frequently used together. The National Environment Agency (NEA) in Singapore, for example, grades all food retail outlets according to their overall hygiene, cleanliness, and housekeeping standards and advises all food retail outlets to display their grades for the public in order to support informed choice.⁶⁴ NEA has also developed a set of guidelines and educational materials to enable food retailers to adopt good practices and earn good grades. Similarly, in the UK, all online catering service operators are required to register with local Registering Authorities, and they can receive hygiene ratings from Inspecting Authorities. The UK's Inspecting Authorities determine the frequency of inspections and give a new rating based on the potential risk to health (six months for high-risk business, and two years for lower-risk business). 65 Publications that signal positive behavior can also contribute to soft control. In Germany, the BVL and states' governments have collaborated with four providers of quality seals; operators which are registered can purchase seals to show that they are under official control.⁶⁶

China regularly publish lists of offending actors, particularly through local CFDA branches and consumer associations, but food and digital food sales are not always prioritized in the list. To maximize the utility of ratings systems, they should be widely disseminated, easily accessible for consumers, and issued promptly. In many jurisdictions, the rating is combined with the hard control requirement of prominent display in a physical store, and this requirement could be extended to the online world.

Public-Private Co-Regulation

The second pillar of online food safety enforcement is public-private co-regulation. Figure 4 sketches out the two types of public-private co-regulation: government-industry and governmentconsumer. In the first, government and industry share the regulatory burden of making information available to consumers; in the second, consumers play an active role in ensuring that the system works through education and open channels of communication with government.

Co-regulation between government and industry centers around intelligence sharing. For instance, four prominent e-commerce platforms formed an alliance and set up a food safety fund under the guidance of the Beijing municipal CFDA to carry out a number of actions, including risk assessment. 67 Risk assessment reports are shared with CFDA. 68 Co-regulation between government and consumers is aimed at arming consumers with necessary information to spot food safety breaches, make informed decisions, and seek redress. Consumers are generally not familiar with relevant requirements such as permit requirements of food operators, ⁶⁹ so the government (and industry) must also play an active role.

⁶⁴ National Environment Agency, *Food Hygiene Standards in Singapore*. Web.

⁶⁵ Food Standard Agency, *Food Hygiene Ratings*, web.

⁶⁶ Federal Office of Consumer Protection and Food Safety, *G@ZIELTTM*: Safe Shopping on the Internet, Web.

⁶⁷ *Id*: Xinhuanet, 四家外卖平台设专项基金开展食品安全风险监. Web. July 25 2017.

⁶⁹ Canadian Broadcasting Corporation, Home-based food sales stirring up trouble with Manitoba's health inspectors. Web. December 18, 2017.

Figure 4. Public-Private Co-regulation of Online Food Safety

Government

- Easily accessible complaint redressal system (e.g. hotlines provided by the United States Department of Agriculture and Food and Drug Administration)
- Direct communication of food safety information (e.g., Smart Consumer App in India and Food Hygiene Ratings App in the UK)
- Easily digestible educational programs for consumers

Industry

- •Intelligence sharing (e.g. sharing of risk assessment and market surveillance)
- Displaying CFDA educational and enforcement information, ideally on their mobile applications and websites.
- Industry self-regulation (e.g., spreading good practices by platforms to operators)

Consumers

- Reporting through mobile apps
- Proactive attainment of food safety information

Source: © 2018 New Markets Lab

Two categories of government-consumer co-regulation are potentially applicable in China. The first type is easily accessible complaint redressal system such as government hotlines provided by the United States Department of Agriculture and Food and Drug Administration). While China also has a range of food safety related hotlines, the hotlines do not always connect to the most relevant or specialized agencies (e.g., mayor's office) and could delay enforcement. To help efficiently connect consumers to the most specialized food safety watchdog, CFDA, industry actors could step in and prominently display CFDA's contact details, classified by location, on their mobile applications and websites. Additionally, given the mobile-first consumer behavior in China, mobile applications could include a one-click hotline feature that directly connects consumers to the CFDA branches based on consumers' addresses. The second type is the creation of feedback loops through direct government-consumer communication. Examples include the Smart Consumer mobile application jointly developed by the Food Safety and Standards Authority and the Ministry of Consumer Affairs in India. This application provides consumers with the maximum degree of information (e.g., special labelling requirements) in relation to the products they intend to purchase. 70 Similarly, the UK Food Standards Agency has developed a mobile application for consumers to easily search food safety ratings of food outlets.⁷¹ The UK also engages in direct consumer education, with easily understandable guidelines.⁷²

⁷⁰ Indian Food Laws, *Smart Consumer App – FSSAIi*, Web. December 18, 2017.

⁷¹ Opening up Government (UK), UK Food Hygiene - Ratings App. Web

⁷² United Kingdom Food Standard agency, Advice for Buying Food Online, Web. December 2016.

Industry Self-Regulation

Self-regulation encompasses actions by individual industry actors, associations of industry actors, and industry-consumer cooperation. Third-party platforms could provide broader access to good practices than individual operators using the platform could obtain on their own, due to the financially burdensome nature of accessing these practices. For instance, Uber Eats has standardized temperature-controlled equipment made available to its drivers, which many individual drivers would not have the means to secure individually. ⁷³ Proactively enabling operators to adopt good practices at scale could be particularly efficient in China, where market consolidation has allowed a small number of platforms to amass substantial markets and resources.

Industry associations or alliances could also collaborate to upgrade their practices and share intelligence. For instance, four prominent platforms formed an alliance that shares a blacklist of offending catering services, leading to the delisting of 5,073 catering services. Subsequently, the four members set up a food safety fund under the guidance of the Beijing municipal CFDA. The fund will contribute to research and development, surveillance, and enforcement. Risk assessment informs platform features such as restaurant ranking and delisting of high-risk products. Further, industry and consumers can institute mechanisms of cooperation. An example is Home-Cook, a Chinese online-to-offline catering service platform, which encourages consumers to inspect food operators through house visits.

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⁷³ Joanna Fantozzi, "Are Speedy Delivery Apps Skimping on Safety?" *The Daily Meal*, January 11, 2016. Web.

⁷⁴ Xinhuanet, *外卖食品安全要监管也要自治*. Web. July 25 2017.

⁷⁵ Xinhuanet, *外卖食品安全要监管也要自治*. Web. July 25 2017; Xinhuanet, *四家外卖平台设专项基金开展食品安全风险监*. Web. July 25 2017.

⁷⁶ Xinhuanet, 四家外卖平台设专项基金开展食品安全风险监. Web. July 25 2017.

⁷⁷ Xinhuanet, 四家外卖平台设专项基金开展食品安全风险监. Web. July 25 2017.

⁷⁸ Global Times, New Food Safety Rules Don't Dent Online Catering Services, May Hit Home Kitchens. Web. January 3 2018.

Recommendations

As China moves to refine its regulatory framework governing online food safety, global good practices could be leveraged and tailored, with the following as priorities:

- Regulatory Approach: China should focus on establishing comprehensive, technologyneutral, forward-looking baseline rules, with detail left to implementing regulations or
 subsequent standards. These general rules allow for more flexibility because they do not
 single out particular types of businesses, which is an important consideration given the
 rapid development of online food sales. While the E-ecommerce law and FSL are more
 general, they must also be considered alongside some of China's more specific frameworks
 related to OCS and CBEC. This also means that novel business methods or application of
 new technologies such as blockchain or drone service should not be specifically addressed
 in overarching legislation, such as future modifications of the E-commerce Law or FSL.
- Market Regulation (Ex-ante Regulation): National regulations should preserve local flexibilities to enact cottage food laws that promote market participation of small food workshops and food vendors. Depending upon specific local capacities, cottage food laws could be tailored, individually or in combination, based on the following five control variables: 1) type of food allowed to be sold, 2) restriction on sales location (e.g., Internet sales allowed in a few jurisdictions), 3) a tiered system of registration, licenses, permits, or certificates that accounts for capacities of SMEs, 4) limitation on total sales based on the amount of income, and 5) mandatory labeling. Additionally, subsequent rules should clarify the exemptions to the requirement to obtain market entry permission, including the threshold for small-value sporadic transactions and potential conflicts between local exemption requirements.
- Enforcement (Ex-post Regulation): A robust and holistic enforcement system is needed in China that engages all key enforcement actors: government, industry, and consumers. Three types of enforcement mechanisms could be strengthened in China. The first type is public monitoring and surveillance followed by sanctions (e.g., enhanced investigative capabilities, establishment of specialized enforcement units, and increased international cooperation). The second type is public-private co-regulation (e.g., intelligence sharing, easily accessible complaint redress system, and a one-click hotline feature in mobile applications and on websites that directly connects consumers to relevant CFDA branches based on consumers' addresses). The third type is industry self-regulation, which could consist of industry self-regulation measures (e.g., provision of resources to adopt best practices) and industry-consumer collaborations (e.g., a platform policy that encourages consumer inspection of food operators).