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Embeddedness at varying depths: interactions between rural e-commerce entrepreneurs and China's local politico-economic contexts

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Abstract

Using data collected from face-to-face interviews, on-site observations, and other archival records, this article builds upon the mixed embeddedness framework to develop four concepts—*hyper-*, *hypo-*, *governed*, and *dis-embeddedness*—to capture the varied depths of rural e-commerce entrepreneurs' embeddedness within multiple levels of contexts in response to four different local politico-economic conditions in China. This study finds that entrepreneurs in coastal province interiors are hyper-embedded in multiple levels of contexts that are interlinked through personal ties, while in the Pearl River Delta area, entrepreneurs' hypo-embeddedness within multiple levels of contexts both enables and constrains their abilities to develop rural e-commerce businesses. Moreover, in the Yangtze River Delta area, in addition to entrepreneurs making their own efforts, local governments mobilize a variety of resources to affect the size, depth, and dynamics of entrepreneurs' embeddedness, while in central and western provinces, entrepreneurs have not completely embraced the e-commerce economy because they face weak politico-economic conditions. This article further explores policy changes that would help entrepreneurs take full advantage of rural e-commerce in China.

Keywords: China, Entrepreneurship, Rural e-commerce, Unbalanced embeddedness

Introduction

Since the mobile internet has enabled people around the world to buy and sell products with the touch of a fingertip, China has witnessed the fast growth of rural e-commerce (REC; China International E-Commerce Networks 2022). Thousands of e-commerce villages and towns have appeared across the nation, inspiring a growing body of literature in multidisciplinary fields (Alibaba Research Center 2022).

However, most existing studies leave understudied the varied subnational politico-economic contexts in which rural e-commerce is embedded (Li 2017; Liu 2023). Such contexts are usually offered as a backdrop rather than recognized as a dynamic structure that makes or breaks the development of rural e-commerce. In addition, many studies

are either single case studies or nationwide quantitative analyses that hardly identify the varied trajectories of rural e-commerce in different subnational regions (Qian 2021a, b; Yin and Cui 2022).

Using the mixed embeddedness (ME; Kloosterman 2010) framework, which examines the broader contexts in which entrepreneurs are embedded, this article captures two crucial dimensions—governance approaches and market conditions—and creates a typological framework that distinguishes four kinds of state-market relations as meso- and macrolevel contexts. Four interrelated concepts—*hyper-*, *hypo-*, *governed*, and *dis-embeddedness*—are used to analyze REC entrepreneurs' behaviors in varied state-market circumstances (Bruton et al. 2010).

Background

Rural e-commerce is booming in China. In 2021 alone, online sales increased by 11.3% in rural areas and by 32.2% in the most impoverished areas, both higher than the figures in urban areas. Together, 620 million rural residents spent 2.05 trillion RMB via e-commerce (China International E-Commerce Network 2022). Approximately 16.3 million online shops were registered in rural China, offering 30 million jobs (Ministry of Commerce 2021). As this trend continues, more farmers are becoming hometown REC entrepreneurs, not migrant workers. Such a significant achievement is partly due to high populations and good public services and infrastructure in China's rural areas, prerequisites that are unavailable in most rural areas, even in developed countries.

REC entrepreneurs in the same places are usually concentrated in the same sectors as well. For instance, in Cao County, Shandong Province, REC entrepreneurs make costumes, while in Heqing County, Yunnan Province, they usually craft silverware. Many villages all over China have been transformed into so-called "Taobao Villages," a term that Alibaba uses to define villages with more than 100 seller accounts and an annual sale of more than 10 million RMB. The number of Taobao Villages has grown from a mere 3 in 2009 to 7780 in 2022. There are also 2429 Taobao Towns in which multiple diversified, specialized, and interrelated sectors constitute complete industrial clusters. Taobao Villages are distributed unevenly across China. East China houses 92.9% of these villages, while the central and western provinces average only 50 and 20 villages, respectively (Alibaba Research Center 2022).

Literature review on rural e-commerce studies

The impacts of REC are multidimensional. On the microlevel, scholars focus on issues relating to platform companies' digital enablement, digital entrepreneurial process, and B2B adoption (Tan et al. 2007; Leong et al. 2016). On the mesolevel, e-commerce impacts more general aspects of rural societies, such as employment patterns, household economics, and rural industries (Zhang et al. 2018). E-commerce has also become a macrolevel policy tool to advance poverty alleviation, rural revitalization, regional integration, and community empowerment (Chao et al. 2021; Couture et al. 2017; Liu et al. 2021; Qin and Fang 2022; Tang and Zhu 2020; Wang et al. 2021). Studies on REC entrepreneurs either examine narrowly defined subclasses—for example, female entrepreneurs (Yu and Cui 2019)—or contextualize them in a unique backdrop, including poverty alleviation or rural development (Qiu and Qiao 2021a, b). Moreover, scholars

perceive them as digital laborers (Zhang 2023), rather than entrepreneurs, under the panoptical surveillance of platforms (Shao 2020; Qian 2021a, b).

The varied subnational politico-economic contexts in which rural e-commerce is situated are seldom discussed in the literature in a comparative manner (Zhang and Qiu 2022). Qiu and Huang find that REC entrepreneurship is possible when three factors—able persons, an acquaintance society, and online market resources—are present (2021). Qiu and Zhang also identify three mechanisms behind the integration of e-commerce technologies in rural areas: externality, visibility, and substantiation mechanisms (2022). However, the different patterns of interactions between REC entrepreneurs, markets, and governments in different regions remain understudied. Several other typological frameworks for China's rural e-commerce divide e-commerce villages on other grounds (Qi et al. 2018). For example, Luo and his colleagues divide villages into agricultural product villages, manufacturing goods villages, and commercialized goods villages (Luo et al. 2018).

Theorizing embeddedness and the research framework

Applying mixed embeddedness to China's REC entrepreneurs in varied local politico-economic combinations

Countries are structurally characterized as cores, semiperipheries, and peripheries (Wallerstein 1979). Since the politico-economic conditions of subnational units are heterogeneous and the division of labor creates domestic division, a single country can also have a three-level division. The domestic cores are also economic hubs, while semiperipheries connect otherwise economically isolated regions with the cores, and peripheries are less economically vibrant (Alderson and Beckfield 2004).

China's economic development has been spatially uneven at varying depths. The Yangtze River Delta (YRD) area and the Pearl River Delta (PRD) area are domestic core areas as global trade, financial, and manufacturing centers with different economic governance approaches; the former is more interventionist, while the latter is relatively *laissez-faire* (Shen and Tsai 2016). The interventionist approach of the YRD area, which includes four economically advanced provincial-level units, is more broadly diffused across the country, regardless of the politico-economic conditions of each subnational unit, while the *laissez-faire* approach has proven successful in only one province adjacent to Hong Kong and Macau (Song 2009).

Within China's domestic three-tiered economic structure, the interior parts of the coastal provinces that the two core areas encompass, such as northern Jiangsu Province, western Shandong Province, Anhui Province, and the non-PRD Guangdong Province, are classified as semiperipheries. In these areas, the politico-institutional structure of rural governments is similar to that of their counterparts in the domestic core areas, but their rural economies are much weaker, partly due to their previously underdeveloped infrastructure and insufficient economic endowment. Despite their weaker economies, these rural governments are also developmentalist and eager to take the interventionist approach in development. Moreover, since these areas are part of coastal provinces, they can receive intraregional assistance from core areas.

The rural areas of the central and western provinces, except very few villages near regional centers such as Xi'an or Kunming, are classified as the lowest level of China's



Fig. 1 The Map of China's various local politico-economic combinations. The blue-colored areas are the Pearl River Delta area; the red-colored areas are the Yangtze River Delta area as well as economically advanced coastal areas that follow an interventionist approach; the yellow-colored areas are interiors in coastal provinces; and the green-colored areas are central, western, and northeastern China. The pink-colored dots are field sites

three-tiered structure. These areas suffer from the weak economic management capacities of their rural governments and weaker economic endowments. Oftentimes, these areas only have scarce land, human, financial, and other resources to develop their economy. Rural governments in the central and western provinces are tasked with other highly prioritized duties, including border security, in addition to economic development, but with a much more stringent budget (Shi and Hamnett 2002; Wallerstein 2017) (Fig. 1).

Given the coexisting local politico-economic contexts, this study adopts the mixed embeddedness (ME) model, once used to compare different nations in a diachronic way, to address varying institutional forces and their influence on REC entrepreneurs on multiple levels. Their behaviors are influenced by microlevel human and community resources, mesolevel market conditions, and macrolevel politico-institutional forces (Kloosterman 2010). The preexisting market and politico-institutional contexts, which are extremely wide-ranging and multifaceted, lead to diverging entrepreneurial behaviors when everything else is equal. A typological framework is thus developed to analyze how REC entrepreneurs interact with the varied multilevel local contexts in China.

Hyper-, hypo-, governed, and dis-embeddedness

This study further advances the ME framework by employing the concepts of *over-embeddedness* and *under-embeddedness*, which indicate two extreme networking approaches that entrepreneurs adopt to manage social ties with their own communities and mainstream societies (Storti 2018). The former approach leads to high reliance on

< Local Governance Approach >			
< Local Market Conditions >		Noninterventionist/ Inability to intervene	Interventionist
	Without Robust Rural Economies	Central, Western, and Northeastern Provinces <i>Dis-Embeddedness</i>	Coastal Province Interiors <i>Hyper-Embeddedness</i>
	With Robust Rural Economies	Pearl River Delta Area <i>Hypo-Embeddedness</i>	Yangtze River Delta Area <i>Governed Embeddedness</i>

Fig. 2 Typological framework of China's local politico-economic contexts and the varied depths of REC entrepreneurs' embeddedness

strong social ties, such as kinship; impediments to mainstream markets; and decreases in profits, information diffusion, and business performance, among others. The latter leads to an unsuccessful translation of mainstream ties into business growth due to the undermobilization of community resources (Mozumdar et al. 2019; Schnell and Sofer 2002; Zhang 2014).

Combining these concepts with the ME model also addresses their theoretical shortcoming, which is the need to account for the influences of economic and politico-institutional factors that shape the mobilization of social networks. This study finds that unbalanced embeddedness can take place in both microlevel social networks and broader meso- and macrolevel contexts. To address this gap, this study builds on the theoretical framework by conceptualizing *hyper-embeddedness* and *hypo-embeddedness* as concepts to indicate when entrepreneurs are over- or under-embedded in multiple levels of contexts. In addition to systematically linking entrepreneurial behaviors with various depths of embeddedness, this study attempts to stress the roles of rural governments. Interventionist and resourceful rural governments in domestic core areas can *govern* the unbalanced embeddedness of entrepreneurs, while rural governments in central and western China, which suffer from insufficient e-commerce literacy, may make it difficult for existing industries to transition to e-commerce, a situation that I term *dis-embeddedness* (Fig. 2).

Research methods

This study used multisite fieldwork to examine rural e-commerce, a subject that is rapidly developing and thus cannot be accounted for by focusing on a single site. Thirty-seven villages in seven provinces were visited multiple times between 2018 and 2023, and each trip lasted between one week and 2.5 months. To provide a complete picture of China's rural e-commerce, 122 participants from multiple regions were identified through targeted sampling, organization-based network sampling, and dispersed referral snowball sampling. The length of each face-to-face, semistructured interview averaged 65 min. A large number of informal conversations also took place. Grounded theory and

Table 1 The names and locations of visited villages

Province	Prefecture	County	Village
Shanghai	Jiading		Rich Village Horse Village
Zhejiang	Jinhua	Yiwu	Rock Village Willow Village Happy Village
Guangdong	Guangzhou	Huadu	Benefit Village
		Baiyun	Horn Village East Village
		Panyu	Cave Village South Village Hilltop Village Pond Village
			Sand Village High Village Lakeside Village
			Tower Village Sun Village Elm Village Market Village
			Lee Village Sprout Village Frog Village
Anhui	Hefei	Caohu	Corn Village Wheat Village Millet Village
			New Village Shine Village Encounter Village Spring Village Pollo Village Step Village
			Unity Village Ginger Village Classic Village Smooth Village Cackling Village Oldtown Village
Yunnan	Dali	Heqing	
	Dehong	Ruili	

content analysis were adopted to code and interpret the data to develop both a broad and condensed description of rural e-commerce (Table 1).

Findings

Hyper-embeddedness and the interior areas of the coastal provinces

The framework highlights the diverging behaviors of REC entrepreneurs in different politico-economic contexts. Although local governments in the interior parts of coastal provinces are as developmentalist and familiar with new technologies, such as rural e-commerce, as their core counterparts, they are often incapable of developing

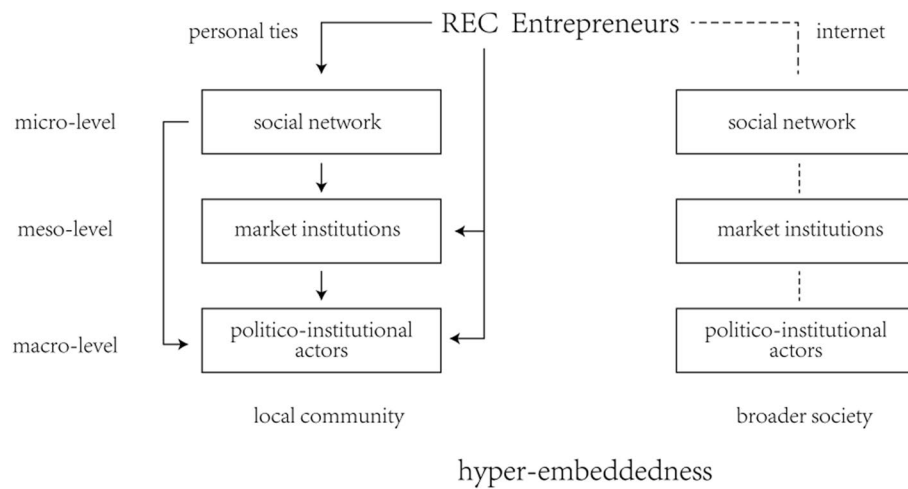


Fig. 3 Hyper-embeddedness. “Dashed line” indicates substantial ties between REC entrepreneurs and the other actors, while “dotted line” indicates no substantial ties

new economies due to their limited endowments and inherent disadvantages, such as the distance to major urban centers and population outflow, particularly in rural areas (Zhang 2021; Qiu and Huang 2021). E-commerce may revolutionize some factors of local politico-economic environments and provide more entrepreneurial potential, but REC entrepreneurs still have to utilize all available resources to overcome preexisting local obstacles. This study found that REC entrepreneurs adopt a *hyper-embeddedness* strategy to utilize resources to the maximum extent from all three levels of context, interconnected through their local personal social ties. Moreover, with the internet and e-commerce technologies, they can leave the outside world unattended physically. Contrary to over-embeddedness, *hyper-embeddedness* is a preferable strategy in rural areas in the interior parts of coastal provinces in pursuit of entrepreneurship (Fig. 3).

Through the internet, REC entrepreneurs can be as well informed of market trends and as well connected with customer bases across the country as their urban counterparts, regardless of spatial distance and geographic barriers. Furthermore, REC entrepreneurs feel no pressure to establish expensive sales units in major urban centers; instead, they expand locally in villages with ample land resources at a much cheaper price. New market opportunities on e-commerce platforms are readily available to REC entrepreneurs, as no preexisting local industries in these areas appear economically promising. The people left behind with limited human capital, including elderly individuals, children, and people with disabilities, are empowered and happy to take up e-commerce-generated positions, such as customer service, product packaging, and warehouse management, at very low labor costs. The lifting of the spatial restriction also eliminates housing costs, as employees can simply live at home and thus accept lower salaries. Moreover, close-knit rural social networks allow faster diffusion of knowledge and experience among villagers. Aspiring for a better life, ordinary farmers who could be migrant workers become REC entrepreneurs. One of the first few e-commerce leaders in Cao County told me about the positive changes that rural e-commerce brought to their lives:

“Now, everyone can start up their own businesses with an internet cable.... Previ-

ously, we only had a handful of costume makers who used traditional ways of sales. They had to ride bikes or take a bus to carry their products elsewhere across the nation.... I made total sales of ten million RMB in 2017.... But I am not the most successful one in my village. There are more than twenty, roughly thirty, big producers like me in my village, and seven or eight of them run bigger factories.”

Another businessperson concurred:

“I have never been to a foreign country, but with e-commerce, my products can reach foreign countries... through our agent with Amazon and Ali Express.”¹

An e-commerce business owner who has been doing cross-border e-commerce since 2014 said:

“I sell costumes to Brazil, mainly for Halloween, Carnival, and Christmas.... I have a factory and hire more than sixty employees.... Now, I am doing business on Alibaba. In the future, I want to try Amazon for international business... but the language barrier is a big issue.”

The internet and e-commerce technologies permit REC entrepreneurs to operate business while staying in their villages, but such technologies do not put them on the same footing as their urban competitors, as unsatisfactory market conditions are still not fully mitigated. Therefore, REC entrepreneurs have to become over-embedded on all three levels, a situation termed *hyper-embeddedness*, to be able to extract resources to the maximum extent, as microlevel resources alone have proven insufficient. Unlike the traditional ME model in which the three levels are seen as influencing entrepreneurs separately and individually, the three levels in the close-knit villages are interrelated through social ties.

At the meso level, REC entrepreneurs utilize personal ties with villagers, who may be potential workers, partners, investors, informants, and entrepreneurs themselves, to obtain affordable labor, personal loans, private land, and market information. In an acquaintance society, REC entrepreneurs have to be deeply involved in their social networks, partly due to the high costs of obtaining a similar quantity of benefits from outside. Since close-knit social networks enable business information to be shared more quickly, bringing more villagers who aspire to a good life into rural e-commerce, the sooner and deeper REC entrepreneurs become involved with their local social networks, the more economic returns they receive from their entrepreneurship.

Since other local REC-related market participants are often acquainted with REC entrepreneurs as well, they are incentivized to strengthen social ties with REC training centers, marketing agencies, raw material suppliers, bank tellers, etc., to create more favorable market conditions in the same area rather than investing in market relations outside of their hometowns. These interwoven local-only social networks further create a kind of trust that benefits all of the market participants involved. For example, they can skip contractual processes and simply ask for favors from people they know personally,

¹ AliExpress is an Alibaba e-commerce platform for international customers.

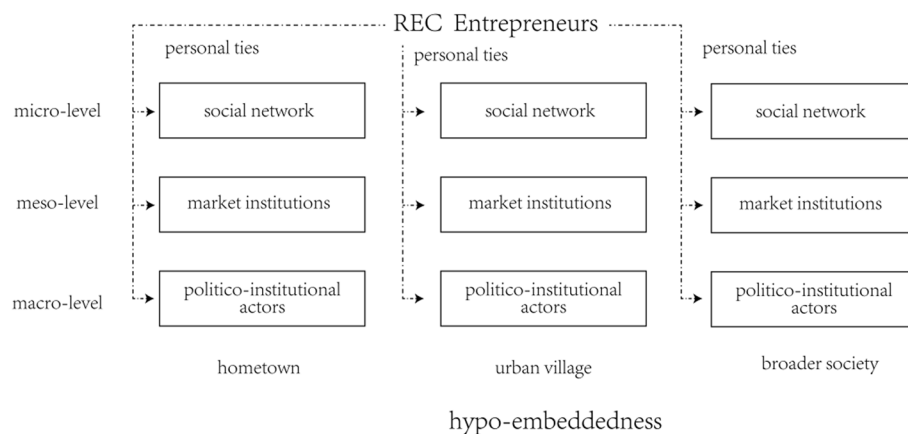


Fig. 4 Hypo-embeddedness. “Dash dot line” indicates limited ties between REC entrepreneurs and the other actors

such as borrowing products when they run short or asking a villager to ship products on behalf of the borrower.

At the macrolevel, the politico-institutional context in these rural areas is less rule-based than that in urban areas, particularly domestic core areas, and more heavily *guanxi*-based. Thus, REC entrepreneurs are more inclined to reach out to local governments through personal ties than through impersonal and formal procedures. Local officials who they usually know can often grant their applications, verifications, and documentations, or a mutual friend can broker a sit-down with people in charge to offer guarantees or fix administrative matters within their discretionary power. On the other hand, macrolevel overseers can take advantage of the same social networks to exercise control over individual entrepreneurs. In many villages, e-commerce association chiefs, usually those with the most extensive social networks, are often invited to serve in semi-official roles in local government, where they act as middlemen between entrepreneurs and local governments. Since these well-connected chiefs are situated across entrepreneurs’ micro- and macrolevel contexts, entrepreneurs in their networks often voice concerns to their local government through them, and local governments often let them mediate and adjudicate disputes. In this case, REC entrepreneurs must become over-embedded in the local macrolevel context through personal ties, with little concern for broader politico-institutional contexts.

Hypo-embeddedness and the Pearl River Delta area

The Pearl River Delta, dubbed the world’s factory, is one of the most economically advanced areas in China and home to three global cities: Guangzhou, Shenzhen, and Hong Kong. Thus, the PRD area, with homogeneous intraregional governance and a highly integrated economy, is China’s largest domestic migration destination. Due to high housing costs, most migrants live in so-called “villages in the city,” or urban villages, a byproduct of China’s fast urbanization and industrialization. Urban villages have no less robust market infrastructures than urban areas, with close proximity to wholesale and consumer markets, highway and subway systems, and fast delivery networks. Moreover, vibrant informal manufacturing sectors, a flexible and affordable labor market, and

low-value land supplies are present, which make urban villages more attractive to aspiring migrant entrepreneurs (Yang 2021) (Fig. 4).

However, local district governments have little appetite for developing rural e-commerce, despite their well-developed market infrastructures. Partly because their economic governance is quite *laissez-faire*, when several district commerce bureau officials were asked about their rural e-commerce policies in July 2018, they were quite surprised that one of Guangdong's largest e-commerce villages had been built under their watch. Another commerce official from a different district said they mainly concentrated on developing a state-business environment that was favorable to the entire economy rather than to one or two particular sectors that could rise and fall during the economic cycle. As a local manager of economic affairs, this official believed that Guangzhou's economic future lay in international trade and high-tech manufacturing and that rural e-commerce would not be a pillar industry anytime soon. Contrary to their public addresses on rural e-commerce, even the village officials begrudgingly expressed some downsides of rural e-commerce. The secretary of the largest e-commerce village in Baiyun District confided in 2018,

"We do not want to develop rural e-commerce at all. We do not get our own fair share.... No taxes [are collected] from it, [and] only problems result from it, such as profane livestreamers, traffic issues, noise pollution, and wire fraud....."

In 2019, citizens of this village voted in favor of an urban renewal project proposed by a state-owned developer affiliated with the Guangzhou government, which abruptly brought down the curtain on its rural e-commerce for tens of billion yuan. In such contexts, migrant REC entrepreneurs are often weakly embedded within multiple spheres to extract resources for their entrepreneurial ambitions, constituting a *hypo-embeddedness* situation. However, they strategically form strong attachments to one or a few levels of contexts in some cases. For example, Chaoshan² entrepreneurs shared a strong bond with each other in developing businesses.

First, migrant REC entrepreneurs, except those from Chaoshan, have to keep weak ties with their hometowns, largely due to their absence. Their underdeveloped hometowns, which provide them with limited resources and rather dim economic opportunities, are the very reason that they head to Guangzhou in the first place. Many of them have tried and failed to seek resources from friends and family members. In addition, migrant entrepreneurs' hometown ties, which are mainly maintained via internet technologies, such as video calls and electronic payments, permit constant connectivity but also fresh opportunities for remittances, which are more substantial than the investments from their hometowns. Thus, it is hard to tell whether they willfully keep ties with their hometowns weak to avoid unnecessary economic obligations or if they are simply resigned to the reality of weak ties since they cannot invest time in hometowns with no considerable resources. Additionally, they maintain minimal connections with their hometown market and politico-institutional actors since they receive little assistance from them.

Second, most migrant entrepreneurs in the PRD area cannot extract substantial resources from the microlevel migrant communities formed in urban villages, except

² Chaoshan areas include Chaozhou, Jieyang and Shantou cities in the eastern province of Guangdong.

those from the Chaoshan area, who are known for strong lineages. The increasing cost of urban life in Guangzhou, largely driven by rising rents, makes it very difficult for aspiring REC entrepreneurs to initiate even undercapitalized businesses. Moreover, as the result of urban village displacement and reformation, the large-scale migrant dispersing policy, along with the massive urbanization of Guangzhou, harms migrant entrepreneurs' primitive accumulation of social capital and deters them from creating strong and stable ties because they are constantly on the move. Oftentimes, migrant entrepreneurs reported finding coprovincials less supportive, prioritizing solidarity below their monetary interests. However, weak ties with migrant communities force migrant entrepreneurs to diversify their social networks and create ties with local labor markets to meet labor demands. Increasingly, they are inclined to hire the best workers for lower wages with little regard for places of origin, as they feel less indebted to their coprovincials and less attached to migrant communities.

Third, despite enormous efforts to create and maintain ties with local market participants, these ties are less stable and strong since migrant REC entrepreneurs are often undercapitalized newcomers. They are only minor outputs for well-established local manufacturers, who deem migrant entrepreneurs to be highly replaceable. Even fewer can join the inner circle of the local business networks or establish long-term collaborations with local business elites. Many of them simply buy products from wholesale markets, such as regular retailers.

In addition to being under-embedded within all three microlevel social networks, migrant entrepreneurs in the PRD area remain in a vulnerable position, with no strong ties to meso- and macrolevel actors. Unlike that elsewhere in China, the business environment in the PRD area has been developing for decades and is more rule-based, a situation with which entrepreneurs from more *guanxi*-based areas are uncomfortable. For example, although they all agreed that transparency is favorable to every business, they also complained that a lack of personal ties at banks and regulatory agencies made their businesses vulnerable because they could not obtain lower interest rates or swift passes for regulatory application, which they believe (true or not) can be maneuvered through personal ties. Thus, they have made enormous, although often futile, efforts to develop such ties with local market and regulatory institutions to obtain some protection from potential damages or inside information on policy changes.

Nevertheless, their migrant status prevents them from achieving full embeddedness within the meso- and macrolevel contexts, especially in the PRD area, where local governments adopt a hands-off approach. Interestingly, they are very ambivalent about what roles local government should play in developing rural e-commerce. On the one hand, they called for more government support. An entrepreneur from a central province who engaged in garment e-commerce in Panyu District described the situation:

"They (the government) only deal with public security.... But they can do e-commerce training...Training is the most appropriate thing they can do.... The training should be not-for-profit...The government can also do the resource matchmaking...Some businesspersons have sales skills, and some industrialists have bad sales records; being matched together is good for both."

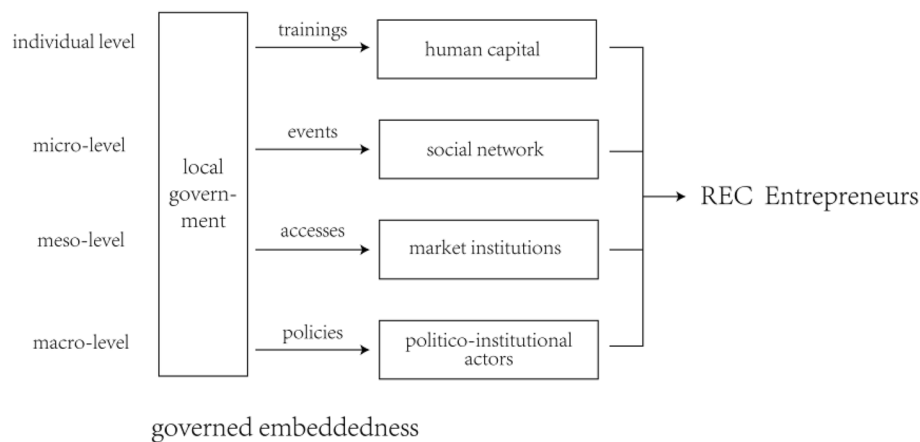


Fig. 5 Governed embeddedness

On the other hand, counterintuitively, they also wanted to keep governments at arm's length, which is observed in some existing studies conducted elsewhere (Qian 2023). An e-commerce association chair, whose members were from an inner city area, explained that they keep a low profile and avoid troubles from local officials who might extort "favors." The head of the e-commerce association in another village in Baiyun District said,

"We do not have an office.... We do not publicize our existence or have an opening ceremony very publicly. We just want to avoid attention and have no title. I have received many titles from my hometown government, though I think these are meaningless. We do substantive things."

Their ambivalence is the result of their prior experiences with village officials. One of them revealed that a senior village official, a powerful local, joined one of the largest fast delivery firms in the village as a so-called limited partner. Rather than an investment, he provided access to public resources, such as village-owned warehouses and office spaces, and some protection from unwanted inspections. His partners could not refuse his partnership offer. Therefore, the ties with the politico-institutional actors in urban villages were rather weak and unreliable in many cases.

Governed embeddedness and the Yangtze River Delta area

As China's other major manufacturing center and the headquarters of Alibaba, the YRD area is home to one-third of all e-commerce villages. Unlike the local governments in the interior parts of the coastal provinces, with inadequate resources to develop rural e-commerce, or the noninterventionist governments in the PRD area, the local governments in the YRD area have both ambition and resources. Through a variety of REC policies, the presence of YRD local governments is amplified. Their strong presence changes the dynamic of entrepreneurs' embeddedness; the local governments proactively readjust the factors affecting all three levels of REC entrepreneurs' context, a situation termed *governed embeddedness*. Although their micromanagement is costly, it can leverage larger and more profitable REC growth by enabling farmers who could

not be REC entrepreneurs elsewhere to become REC entrepreneurs, turning villages into e-commerce villages (Fig. 5).

At the microlevel, YRD governments invest heavily in the human capital of under-skilled but entrepreneurially aspiring farmers. The traditional ME model holds that low-skilled, undercapitalized entrepreneurs have to join light industries or private services, such as the garment industry or the nail salon industry, respectively. Traditionally, it is economically unwise and practically impossible for local governments to provide financial resources to help low-skilled farmers attain the threshold to highly compensated sectors. However, funding e-commerce training, an alternative human capital acquisition, is less costly but more helpful in terms of transforming low-skilled farmers into REC entrepreneurs.

Without government assistance, fewer farmers would have the chance to join rural e-commerce due to the expenses of highly segmented e-commerce training. To run a multiplatform REC business, an ordinary entrepreneur needs at least several median-level, skill-based courses to be familiar with the most-used marketing skills of the major platforms. These cost 50 to 100 yuan per session and more than 20,000 yuan in total (or \$2,871.29), which is not a small amount of money for farmers, whose annual disposable income barely reached 37,565 yuan in 2022.³ It could take years to accumulate enough money for e-commerce training, which could be more costly by then. Although such investment is smaller than the investment in traditional higher education, local governments in other places are less interested in, or capable of, funding it. Thus, the financial assistance of the local YRD governments significantly lowers the barrier for regular farmers to join this sector and ushers them into e-commerce jobs to which they would otherwise have no access, such as livestreaming and power-leveling services. The CEO of a training firm in Yiwu, Zhejiang Province, explained that.

“We often earn procurement contracts with local governments for such training. But due to our close relationship and mutual trust, they sometimes send people in directly. Usually, people who have zero knowledge about e-commerce. Most of them are not locals but farmers from elsewhere.”

In addition to building human capital, local governments provide entrepreneurs with social capital at the microlevel. The bodies at all levels of the local governments proactively host all kinds of networking events for established and newly arrived REC entrepreneurs through industrial parks, talent recruitment, training schools, and Party-Masses Centers. A newcomer could quickly add hundreds of new contacts on WeChat and easily find the best upstream and downstream partners. They are often assigned one or more so-called entrepreneurship mentors who have good relationships with the local governments and have been successful in rural e-commerce. Entrepreneurs who are party members can be further assisted by local party organizations.

At the meso level, local YRD governments strive to create a business-enabling market environment for rural e-commerce. Building on the investment in training, they have further developed a comprehensive e-commerce training system. Working together with

³ These data are based on the Statistic Gazette of the 2022 Economic and Social Development of Zhejiang Province, found at https://zjnews.zjol.com.cn/yc/qmt/202303/t20230316_25531537.shtml.

Alibaba, hundreds of villages joined an REC project that also included training programs (Zhang 2020). Many worked closely with local colleges and e-commerce researchers who could offer one-on-one consulting services for REC development. These governments provided training sessions covering all levels and skill sets to tens of thousands of aspiring farmers, returnee college graduates, and local officials. Some resourceful villages used procurements to outsource REC development tasks, including training, to third-party consulting firms. The village-backed e-commerce associations also provide training to their member firms and newcomers.

A businesswoman from a northwestern province gratefully shared her stories from when she was a newbie:

“As someone with just a middle-school level education... I was once a mere customer service representative, then I learned e-commerce skills, for free, at this Party-Mass service center.... When I wanted to expand my business, I ran into no trouble, either at the government office or the bank. Things were done swiftly, and the bank approved my credit cards based on the e-commerce transaction record.... Officials here advised me to connect with my hometown commerce bureau, and then I became an e-commerce coach for my fellow provincials.”

In addition to offering training, local YRD governments have attempted to level the playing field for both local and migrant entrepreneurs. In many cases, the playing field has even tilted toward migrants who were drawn to the international trade centers of specialized products, such as Yiwu, Dongyang, and Keqiao, Zhejiang Province. Many favorable policies, such as rent control, delivery fee negotiation, supply–demand matching, subsidized fiber internet service, and discounted industrial park spaces, have been adopted to keep migrants, who are deemed crucial for future development. In contrast to the migrants in the PRD area, the migrants in the YRD area feel cared for by the local market institutions as well as local governments. Nevertheless, REC entrepreneurs try to create and maintain ties with the YRD market institutions. Unlike governments in the PRD, however, local governments proactively draw market institutions and themselves closer to entrepreneurs and make embeddedness much easier. A director of a newly emerged e-commerce village elaborated,

“They moved here initially because of the high rent in other villages as well as our close proximity to highways.... It caused troubles, definitely, but what doesn’t? ... We...decided to freeze the rent, pave the roads, and negotiate with fast delivery firms.... Everything we could do.... Every new entrepreneur who moves into our village is referred to people I think they should know. They have direct contact with me...in the same WeChat group.”

At the macrolevel, forward-looking local governments take up jobs to advance e-commerce that only they can do, such as building and improving infrastructure, establishing foreign trade access, and supporting market relations. Due to the YRD area’s strategic position in the world economy, it is important for local governments to build rails to Europe and highways to the world’s two largest ports: Shanghai and Ningbo. The trade agreements between China and states in Central Asia, the Middle East, and Eastern Europe bring the e-commerce of the YRD area across the border. Furthermore, the

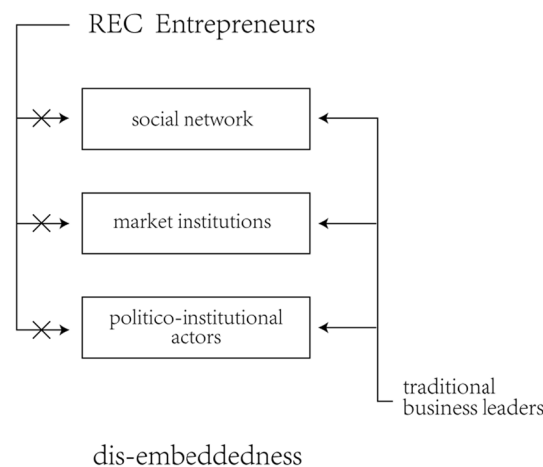


Fig. 6 Dis-embeddedness. “Dash X line” indicates the embedding efforts of REC entrepreneurs that are rejected by the other actors

YRD governments are proactive in getting ahead of the actual demand from entrepreneurs. For example, they have worked closely with REC entrepreneurs who have been defrauded in global trade, sending their law enforcement abroad through Interpol on behalf of the entrepreneurs. In other cases, they have sought legal advice from foreign-educated scholars with regard to the growing number of the United States intellectual property lawsuits against REC entrepreneurs who had no idea why they were being sued. Apparently, these moves were successful in creating a mutually beneficial state-business relationship in the YRD area.

Dis-embedded E-commerce and Central, Western, and Northeastern (CWN) Provinces

Most of the literature on rural e-commerce discusses successful stories from East China, while only a few articles, such as Qian and Chen’s study in Tibet (2023), attempt to explain why and how REC development largely fails in all but a few villages in the CWN provinces. Indeed, although all kinds of similarly worded government-issued newsletters suggest that rural e-commerce is developing well everywhere and a fast growth rate is observed due to a very small number of e-commerce villages, they represent only 7.2% of the national total. The e-commerce towns in these provinces fare better, making up one-quarter of the national total. Hence, the more intriguing question is which factors contribute to the underdevelopment in these areas. From the ME perspective, how and why has rural e-commerce not been as successfully embedded in the CWN provinces as in East China? (Fig. 6).

At the microlevel, several factors deter REC entrepreneurs from emerging in these regions. First, most young and aspiring farmers in these regions are headed to East China for a better life, leaving behind a population largely composed of children and elderly individuals, who are less able to attempt rural e-commerce. Second, returned migrant workers who have some entrepreneurial ambitions cannot usually identify a unique product in their home villages that can be sold online profitably. Their agricultural products are not unique, popular, standardized, or trademarked. Only a few products, such as coffee and tea, which are highly commercialized and cannot be

found elsewhere, can help some REC forerunners economically. Third, for those who successfully find profitable agricultural products or popular handcrafted ethnic items, it remains difficult to penetrate the preexisting, close-knit social structures based on those successful sectors. As a young livestreamer in a village of Yunnan Province who sells silverware online said,

"Those maestros monopolize the supply of silverware in our village through their extended families and circles of friends. We are seen as challengers, so we cannot obtain silverware from them easily. If something is sold in a large number, they will keep those items for themselves."

Another return REC entrepreneur agreed with the statement above:

"These maestros do not like e-commerce, especially livestream e-commerce, at all. They believe e-commerce leads to vicious price wars and diminishes their profits. There is a hidden conflict between traditionalists and us, and we are the losing side."

At the meso level, it is very difficult to create an REC-friendly environment out of nowhere, especially without the intervention of the platforms. Platform companies participate in REC poverty alleviation quite strategically. A mid-level manager who worked for a philanthropic foundation affiliated with one of the largest e-commerce platform companies said that his employer looked for villages assisted by direct supervisory agencies to appease regulators. This means that most CWN villages are not part of the e-commerce platforms' strategy and entrepreneurs there have little chance to move their products up to the first page of the e-commerce apps and earn sufficient incomes, as they have to rely entirely on their own efforts. In addition, although even households in mountainous areas are connected by paved roads, the population in CWN villages remains sparsely distributed and cannot support a thriving fast delivery industry, as even the basic postal service is often unavailable.

Moreover, in places with the most advanced transportation systems, including high-speed railways, highway hubs, and airports, rural e-commerce may still be stalled by the preexisting, mature industrial chains centered around a few traditional leaders whose old-fashioned marketing strategies and supply networks have proven successful. Although these villages may qualify as Taobao Villages, the future of their REC development remains questionable if the mindsets of traditional business leaders are not revolutionized and the ambitions of young, talented individuals fade away. A so-called "new villager" of an e-commerce village in Yunnan shared his feelings as an outsider:

"This is an acquaintance society that I cannot break into. The latest skills of the craftsmanship will never be taught outside of small circles of several top guys. People here have been friends since childhood. On its surface, this village has a lot of outsiders from all over China, but deep down, I know I will not be one of them. There is a ceiling. I can sense it."

These local governments usually choose one of two approaches to develop rural e-commerce. Most of them have very limited capacities to develop this new sector.

On several occasions, commerce bureau chiefs have erroneously perceived rural e-commerce as agricultural e-commerce and tried to identify agricultural products for sale. Other local governments see REC development as a chance to upgrade their local infrastructures with features such as 5G mobile internet and paved main roads. The second approach tries to, on the one hand, maintain the status quo while, on the other hand, giving lip service to REC development. The E-Commerce Center at one western Taobao Village is more akin to a museum of local products than a command center in which resources and information are exchanged, and the manager, a young man with limited experience in REC development but good at reporting about REC development to visiting officials, is more like a museum guide who spends most of his time receiving visitors. In actuality, he is an outsider whose REC strategy is politely rejected by local business leaders. They did not want to join his plan for promoting a neutral collective brand that highlights the locality; instead, they wanted to keep their own individual brands. However, these leaders are warmly courted by local governments who actually rely on them rather than on rural e-commerce for local economic development.

Conclusion

Entrepreneurship is claimed to be the ultimate adventure in the pursuit of happiness. This study develops four new concepts to address REC entrepreneurs' different responses to the various politico-economic circumstances in China. Its findings partly explain the different trajectories of REC development and the visible gaps in economic development between different regions of China.

This study makes several contributions to the entrepreneurship literature. First, these concepts highlight the limitation of the extant ME literature by showing that embeddedness should not be visualized as three concentric and well-balanced circles; it can often be viewed as unbalanced, interconnected, and irregularly visualized spheres reshaped by actors of greater significance. Contrary to conventional wisdom, the findings suggest that entrepreneurs should not rule out strategies of unbalanced embeddedness lightly. Additionally, bridging entrepreneurship studies and development studies, this study tackles a core question of China's political economy: In what circumstances does economic growth happen?

The findings further offer critical policy implications, which echo the recent call for sociological participation in platform governance (Lu et al. 2023). Local governments should provide REC training, create a nondiscriminatory state-business environment, and assist farmers with accumulating social capital, as the Chinese state, from the top down, is tasked with providing a good life, or in its own words, improving the sense of gain, for the people (Au 2022).

Abbreviations

CWN provinces	Central, western, and northeastern provinces
ME	Mixed embeddedness
PRD	Pearl River Delta
REC	Rural e-commerce
YRD	Yangtze River Delta

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Author contributions

TY conducted interviews, made field trips, conducted analysis, gave the structure for the article, and did the writing.

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Availability of data and materials

I collected data from face-to-face interviews, on-site observations, and other archival records not publicly available and accessible for the purpose of confidentiality and secrecy, thus no URL is provided for the data repository.

Declarations

Competing interests

The author declares that he has no competing interests.

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