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To cite this article: Fenghua Pan, Chun Yang, He Wang & Dariusz Wójcik (2020) Linking global financial networks with regional development: a case study of Linyi, China, *Regional Studies*, 54:2, 187-197, DOI: [10.1080/00343404.2019.1599844](https://doi.org/10.1080/00343404.2019.1599844)

To link to this article: <https://doi.org/10.1080/00343404.2019.1599844>



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Published online: 29 Apr 2019.



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Linking global financial networks with regional development: a case study of Linyi, China

Fenghua Pan^a , Chun Yang^b , He Wang^c  and Dariusz Wójcik^d 

ABSTRACT

This study applies the global financial network (GFN) framework to investigate the process and consequences of global financing for a regional economy in a financial globalization era. Using Linyi, a prefectural-level city in China as a case study, it illustrates how the regional economy has been linked with GFN via overseas listings of the lead regional firms. By incorporating in offshore jurisdictions, listing on overseas stock exchanges in world cities and through interaction with international advanced business services firms, since the early 2000s the lead firms and regional economy of Linyi have established global capital and knowledge pipelines.

KEYWORDS

global financial network; world city; offshore jurisdiction; advanced business services; initial public offering; regional development

JEL G24, R11, R51, R58

HISTORY Received 3 May 2017; in revised form 21 March 2019


INTRODUCTION

The financing activities of firms were considered a ‘black box’ and ‘a largely taken-for-granted aspect of production’ (Polard, 2003, p. 429). However, in the context of financialization and globalization of the world economy, finance has influenced society significantly at different scales, from national, through firms to individuals, as documented in the burgeoning research on financialization (Sokol, 2013). This research, however, has paid insufficient attention to the local and regional scale of analysis (French, Leyshon, & Wainwright, 2011). With financialization, firms and regional economies have been integrated to various degrees and in various ways into the global capital market (Pike, 2006; Wójcik & Camilleri, 2015; Zademach, 2009). As a result, explaining local and regional financial systems is not sufficient for understanding the financial drivers of local and regional development (Pike, 2006). How local and regional economies insert themselves into the global financial system, and vice versa, influences their development trajectories beyond the


financial sphere, with implications for growth, innovation, inequality and sustainability (Zademach, 2009).

The key challenge to economic geography and regional studies is to unpack the relationships between the benefits and costs of international financial integration under different local conditions and circumstances. While the existing literature highlights the importance of insertion into the global production networks (GPN) and global value chains for the development of firms and regional economies (Coe, Dicken, & Hess, 2008; Coe, Hess, Yeung, Dicken, & Henderson, 2004; Giuliani, Pietrobelli, & Rabellotti, 2005; Humphrey & Schmitz, 2002), less attention has been paid to the role of global capital markets in regional development in the era of globalization in economic geography research. The concept of global financial network (GFN) has been developed recently by Coe, Lai, and Wójcik (2014), and has been used to analyze how firms are connecting with and using the global financial markets in a recent study on China Mobile (Wójcik & Camilleri, 2015). While this framework has not been

CONTACT

^a (Corresponding author)  panfenghua@bnu.edu.cn


Beijing Key Laboratory of Environmental Remote Sensing and Digital City, Faculty of Geographical Science, Beijing Normal University, Beijing, China; and Bartlett School of Planning, University College London, London, UK.

^b  chunyang@hkbu.edu.hk

Department of Geography, Hong Kong Baptist University, Kowloon Tong, China.

^c  hewang@cityu.edu.hk

Department of Public Policy, City University of Hong Kong, Kowloon, China.

^d  dariusz.wojcik@spc.ox.ac.uk

School of Geography and the Environment, Oxford University, Oxford, UK.

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adopted to perform the analysis at a regional level, this study tries to fill in the gap, highlighting the importance of integration into GFN for regional development in less developed countries. We argue that firms and regional economies can create the global capital as well as knowledge pipelines via integration into the GFN.

Chinese firms and regional economies have engaged with the GFN particularly through overseas listings. The last 20 years have witnessed a growing number of Chinese firms going public on overseas stock exchanges (Pan & Brooker, 2014; Wójcik & Burger, 2010). So far, over 1000 firms from mainland China have gone public on overseas stock exchanges, with Hong Kong, New York, Singapore and London as major destinations (Pan & Brooker, 2014). Firms listing overseas are not only from the largest metropolitan areas, such as Beijing and Shanghai, but also from less developed regions in the country (Pan & Brooker, 2014; Wójcik & Burger, 2010). In fact, many Chinese local governments are very supportive of overseas listing of local firms, due to the perceived benefits to local economic development.¹

Drawing on the case of Linyi, a prefectural-level city in China, this study explores the process and consequences of global financing of a regional economy based on the GFN framework. The key components of GFN, including the world cities, offshore jurisdictions and key advanced business service (ABS) firms are analyzed in the case study. By establishing the global capital and knowledge pipelines via integration into GFN from the early 2000s, the regional lead firms in Linyi have raised a large amount of capital, and adjusted their corporate governance and management, with consequences for regional economic development. The empirical analysis demonstrates the potential of the GFN framework to analyze regional development from the perspective of globalization and financialization.

The paper is structured as follows. The next section introduces the GFN framework and elaborates how integration into the GFN might influence regional development. The third section uses the Linyi case to elaborate on the process of integration of a regional economy into the GFN, followed, in the fourth section, by the analysis of impacts of this integration. The last section concludes.

EXPLORING OVERSEAS LISTING AND REGIONAL DEVELOPMENT FROM THE GFN PERSPECTIVE

GFN as a framework for understanding global finance

Financial globalization describes the integration of a country's financial system into international financial systems (Schmukler, 2004), and it has been on the rise since at least the 1980s, albeit arguably at a slower pace since the outbreak of the global financial crisis in 2008 (Clark, 2005; French et al., 2011). With capital flowing more freely across borders (Clark, 2005; Martin, 2011), global financial markets have become more integrated. On the one hand, global investors can make investments more freely all

over the world. On the other hand, with falling barriers to trade in financial assets, firms can choose to list on foreign exchanges and raise funds abroad (Stulz, 2005). Cross-border equity issues in capital markets are an important channel of global financial integration (Kenen, 2007). By raising funds through overseas listings, borrowers can reduce the cost of fund raising, expand their investor base and increase liquidity (Schmukler, 2004). It was in this context that the concept of GFN was recently coined to capture the geographical structure and analyze major players in global financial markets linking regional economies with world cities and with each other (Coe et al., 2014).

GFN is defined as the articulation of ABS firms (with financial firms in the lead) across world cities and offshore jurisdictions (Coe et al., 2014). In particular, when local or domestic financial system cannot provide sufficient capital and financial services in both quantity and quality for local firms, integration into the GFN could be an alternative way for a regional economy to raise capital and obtain external services and knowledge. As firms in regions from less developed economies usually suffer more from the shortages in the supply of capital and financial services, linking with the GFN could be an opportunity for both local firms and the regional economy to foster development.

Two specific territories, world cities and offshore jurisdictions, are extremely important in the process of linking regions with the GFN (Coe et al., 2014; Wójcik & Camilleri, 2015). The world cities are 'key nodes in an evolving global network' and 'vital territories in the spatial articulation and manifestation of intersecting global finance networks' (Coe et al., 2014, p. 764). The world cities are ideal places for regions to raise capital from, as many of them also perform the role of international financial centres, including cities such as New York, London, Hong Kong and Singapore (Pan & Brooker, 2014; Wójcik & Burger, 2010). These financial centres have mature financial infrastructure and well-developed key financial institutions.

Offshore jurisdictions, such as the Cayman Islands and British Virgin Islands (BVI), are an 'integral component within a framework that examines global flows and networks of investment and profits' (Coe et al., 2014, p. 764), as they are widely used by corporations, individuals and also states themselves to arrange the financial flows strategically by setting up investment vehicles in these places to deal with tax, legal and regulatory matters (Coe et al., 2014). For instance, a large number of Chinese firms, including those overseas listing firms, are incorporated in the Cayman Islands, BVI, Hong Kong and Singapore (Buckley, Sutherland, Voss, & El-Gohari, 2015; Pan, He, Sigler, Martinus, & Derudder, 2018). Owing to the importance of offshore jurisdictions in accounting for global financial activities, they are integral to the GFN framework.

GFN cannot function without the work of the key actors: ABS firms, which intermediate and facilitate financial activities and help to connect specific firms and regions

to world cities and offshore jurisdictions. As pointed out by Coe et al. (2014), finance and professional business services are conceptualized under the broad category of ABS within the GFN framework. In addition to banks, insurance companies and other financial institutions, accountancy, law and business consultancy are also important ABS in mobilizing capital globally. ABS firms are highly concentrated in world cities to enjoy agglomeration economies and other benefits, and play a key role in directing corporate and other clients to offshore jurisdictions.

In fact, financial services firms, which bridge borrowers and investors in financial markets, are a major driving force of financial globalization (Schmukler, 2004). In developed economies, competition in financial markets is quite fierce and high-end financial service firms have started to look for opportunities in new markets in emerging economies (Schmukler, 2004). Although the location of stock markets is crucial to the geographies of financial services and centres (Wójcik, 2009), the global financial services firms can reach the faraway regions where firms with growth potential are in need of capital. Thus, with the help of global financial services firms, the investment could be 'less spatially bounded' (Wray, 2012). In the case of overseas listings, the stock exchanges themselves are key actors in the GFN. Stock exchange activities are concentrated in leading financial centres (Wójcik, 2007), while the competition between stock exchanges compels them to develop promotional activities (Pagano, Röell, & Zechner, 2002; Wójcik, 2007) to attract more listings from emerging countries, where untapped potential for overseas listings is particularly large.

Integration into GFN via overseas listing and regional development

As a typical way to integrate into the GFN, overseas listings have a significant potential to influence regional development in two ways. On the one hand, insertion in the GFN can help a regional economy overcome capital constraints, as it helps regional firms raise capital and develop a capital pipeline linking the region with world cities and overseas investors. The financial system facilitates the allocation and deployment of economic resources both temporally and spatially (Dixon, 2011), and different financial systems have various impacts on firms' competitiveness, the long-term economic performance and even social structures (Clark & Wójcik, 2003, 2005; Klagge & Martin, 2005). For instance, the local venture capital system has been considered to be critical for the rise of Silicon Valley (Martin, Sunley, & Turner, 2002). In contrast, many regional economies in less developed economies suffer from lack of financial resources (Long & Zhang, 2011; Ruan & Zhang, 2009, 2012). Firms in less developed economies have relied largely on local and regional bank loans or other informal financial networks as major sources of financing (Ruan & Zhang, 2009, 2012). However, the domestic financial resources are often insufficient and the lack of capital is harmful for the formation of flexible and specialized production clusters and networks (Bathelt & Graf, 2008; Glassmann, 2008) and innovation (Sturgeon, Van

Biesebroeck, & Gereffi, 2008). Thus, one major challenge for regional development is to make sure firms in the region can obtain sufficient financial resources. Overseas listings provide an important way for firms with growth potential in a regional economy of less developed countries to raise capital (Doidge, Karolyi, & Stulz, 2004; Pagano et al., 2002). With capital raised through global capital pipelines, lead regional firms can expand their business and invest more in innovation and marketing activities. The regional production networks can also benefit from the expansion of lead firms.

On the other hand, external information and knowledge can be brought through integration into the GFN establishing a global knowledge pipeline in addition to a capital pipeline. It is considered that geographical proximity is critical for accessing knowledge (Gertler, 2003). However, by listing on overseas stock exchanges, a typical way of integration into the GFN, firms and regional economy can break into new commercial networks and knowledge pools without geographical proximity. Previous research claimed that firms could benefit from corporate governance, know-how, management and reputation via overseas listing (Doidge et al., 2004; Pagano et al., 2002). For instance, global investors tend to demand stricter governance standards than their domestic counterparts, which could have a positive impact on performance (Kose, Prasad, Rogoff, & Wei, 2006). In addition, global investors may have capacities that allow them to monitor management better than local investors (Kose et al., 2006). Furthermore, by listing on an overseas stock exchange, a foreign firm is subject to local laws and regulations and is monitored by the exchange and regulators (Stulz, 2005). To meet such requirements, firms are forced to restructure corporate governance and adjust management following the standards defined in the world cities and host countries (Wójcik, 2006). In the long term, the regional economy could benefit from such knowledge of modern corporate governance and management obtained from the world cities due to the spillover effects from the listing firms (Kose et al., 2006).

A recent case study based on the overseas listing of one single firm, China Mobile, illustrated the potential of GFN in analyzing how global financing activity has occurred and its impacts on firm development. China Mobile was integrated into GFN 'through registration in Hong Kong, cross-listing in Hong Kong and New York, and creation of offshore entities in the BVI' (Wójcik & Camilleri, 2015, p. 465). Some ABS firms including Goldman Sachs, Linklaters and KPMG played key roles in the initial public offerings (IPOs) of China Mobile (Wójcik & Camilleri, 2015). This case also shows integration into GFN has allowed China Mobile to gain capital and expertise to consolidate, expand and modernize its business, and consequently China Mobile has become the largest telecom company in the world (Wójcik & Camilleri, 2015).

There is, however, a deficit of empirical evidence applying the GFN framework to the processes and consequences of integration into the global capital markets for regional

economies, despite the rapid growing number of firms from emerging economies being listed on stock markets in world cities (Pan & Brooker, 2014; Wójcik & Burger, 2010). In this study, we will apply the GFN framework to find out how global financing has occurred and impacted regional development based on a case from China.

INTEGRATION INTO THE GFN VIA OVERSEAS LISTINGS: THE LINYI CASE

Research area and methodology

We use Linyi as a case study as it represents a concentration of local and regional firms with overseas listings. Our motivation was also to study an area outside of the most researched agglomerations of Beijing, Shanghai and Shenzhen. Linyi is a prefectural-level city located in Shandong province (Figure 1) with a population exceeding 10 million. It had a gross domestic product (GDP) per capita of RMB23,886 compared with the average of RMB41,106 in the province in 2010. The city consists of three districts and nine counties with an urbanization rate of 48% in 2010. The unique feature of the city is the dominance of the private sector in its economy. In 2010, for instance, private enterprises generated more than 86% of the city's industrial output value added,² which was much higher than the national average. In Linyi, there are 20 firms listing on overseas stock exchanges (Table 1), while only three firms are listed on domestic stock exchanges.

We pay special attention to firms listed on Singapore Stock Exchange (SGX) and firms from the food industry, as these were the first firms from Linyi that conducted an IPO on overseas stock exchanges. Linyi has a dynamic and fast-growing food sector. In 2000, the food processing and food manufacturing industries accounted for 34.7% of all industrial output of the city. Nine of 20 firms that went public on the SGX, Hong Kong Exchange (HKEX) and American Stock Exchange (AMEX) are from the food

industry. The SGX, as the first destination, has 10 firms from Linyi and half are from the food sector.

This study is based on both primary and secondary data. On the one hand, we conducted interviews with senior managers of listing firms, local government officials involved in the process and representatives of international stock exchanges. We conducted a field study in Linyi in July 2012, interviewing four senior managers of the two lead food firms listed on the SGX. In addition, we interviewed two local government officials from the Financial Work Office (Jinrong Ban) of Linyi. The local government officials had been involved directly in the overseas listings of regional lead firms. Furthermore, we interviewed managers from the representative offices of the Hong Kong Stock Exchange, Deutsche Börse (DB) and the New York Stock Exchange located in Beijing in 2012. In addition, we collected prospectuses and annual reports of all publicly listed firms in Linyi to obtain corporate information, financial details, information on senior managers and ABS firms involved in the IPO. In addition, we collected related news reports from local newspapers and information from the websites of the local government, listing firms and stock exchanges.

Integration process of Linyi's regional economy into GFN

There were 20 IPOs on overseas stock exchanges in Linyi's history. In 2001, two firms were listed on the SGX, People's Food first and United Food later. In the following year, People's Food was cross-listed on the main board of the HKEX. In 2003, the third firm, China Food, was listed on the SGX. In the following years to 2006, seven firms were listed on the SGX (Table 1). With time the destinations of overseas-listed firms became more diverse. From 2005 to the present, four firms were listed on the HKEX, two on the Australian Stock Exchange (ASX),



Figure 1. Location of Linyi in Shandong province, China.

Table 1. IPO of firms from Linyi on overseas stock exchanges.

Firms	Year of initial public offering (IPO)	Place of IPO	Sector
People's Food	2001	SGX, Singapore	Food
United Food	2001	SGX, Singapore	Food
China Food	2003	SGX, Singapore	Food
Zhongguo Powerplus	2004	SGX, Singapore	Machine
China Paper	2004	SGX, Singapore	Paper
Pine Agritech	2005	SGX, Singapore	Food
China Bearing	2006	SGX, Singapore	Machine
Luzhou Bio-Chem	2006	SGX, Singapore	Food
Fabchem	2006	SGX, Singapore	Chemical
China Energy	2006	SGX, Singapore	Energy
Shandong Luoxin Pharmacy	2005	HKEX, Hong Kong	Pharmaceutical
Fufeng Group	2007	HKEX, Hong Kong	Food
China Zhongsheng Resource	2012	HKEX, Hong Kong	Mining
Shandong Tiantong Food	2015	HKEX, Hong Kong	Food
SinoHua-An International	2007	BM, Malaysia	Chemical
Sorbic International Plc	2008	LSE, Britain	Food
Shigo Asia AG	2008	DB, Germany	Textile
Lorain Corporation	2009	AMEX, United States	Food
China Steel	2009	ASX, Australia	Mining
Ishine International Resource	2009	ASX, Australia	Mining

Source: Authors.

one on the London Stock Exchange (LSE), one on the DB and one on the AMEX. In contrast, there were only two new domestic listings after 2000: one in 2010 and the other in 2011.

World cities and offshore jurisdictions are two important spatial units connected with regional economies through the operation of ABS firms (Coe et al., 2014; Wójcik & Camilleri, 2015). As shown in Table 1, all overseas listing firms from Linyi are listed on stock exchanges in world cities including Singapore, Hong Kong, London, New York, Frankfurt, Kuala Lumpur and Sydney. Singapore and Hong Kong are the two most important destinations, which indicates that there exists a proximity preference in choosing listing destinations (Pan & Brooker, 2014).

Offshore jurisdictions are places where most overseas listed firms are incorporated. Taking the nine firms listed on the SGX, for example, four of them are incorporated in Bermuda and five in Singapore (Table 2). As the boundary between onshore and offshore financial activities is blurred, Singapore and Hong Kong are often chosen as incorporation places due to their unique combination of 'offshore advantages and onshore traits' (Coe et al., 2014, p. 765). In addition, incorporating in offshore jurisdictions is also an opportunity for Chinese firms to avoid the constraints that the Chinese government agencies put on overseas listings (Pan & Brooker, 2014).

As a typical way of integration into the GFN, overseas listings could not have taken place without the operation of ABS firms (Coe et al., 2014; Wójcik & Camilleri, 2015). As listed in Table 2, most ABS firms that were involved

in the IPO process at the SGX are global firms from Singapore, Hong Kong, Malaysia and other countries. China Construction Bank Singapore branch is the only intermediary that has its headquarters in mainland China. With the integration of China in the global economy, international financial firms have focused on China as an important market. The division of labour between the financial and other ABS firms is clear:

Financial service firms were in charge of the whole process. They picked up and helped the potential firms. Business consulting firms design the whole road map; investing banks pushed further; accounting and lawyer firms help to prepare the official documents.³

There are some key players in the process. 'For instance, Overseas Union Bank from Singapore played a critical role in pushing firms from Linyi to list on the SGX.'⁴ Financial services firms, including stock exchanges, take the leading roles in enabling the connections in the GFN. In Linyi's case, financial intermediaries, including stock exchange representatives, visited Linyi frequently for business opportunities. As mentioned by one interviewee:

The financial intermediaries including stock exchanges, investment banks, consulting companies, and accounting companies and others are also looking for business in China. They were especially interested in those ambitious and far-sighted entrepreneurs. Those people visited Linyi and asked for help from the local government.⁵

Table 2. Structure of the global financial networks (GFNs) for firms from Linyi listed on the Singapore Stock Exchange (SGX).

Firms	Listing bourse	Place of incorporation	Lead manager (office)
United food	SGX	Bermuda	Overseas Union Bank Ltd (Singapore)
People's food	SGX	Bermuda	Vickers Ballas & Co. Pte Ltd (Singapore)
Luzhou Bio-chem	SGX	Singapore	China Construction Bank Singapore Branch (Singapore)
Pine Agritech	SGX	Bermuda	Sterling Coleman (Singapore)
Fabcem	SGX	Singapore	HL Bank (Singapore)
China Paper	SGX	Bermuda	PricewaterhouseCoopers Corporate Finance (Singapore)
Zhongguo Powerplus	SGX	Singapore	HL Bank (Singapore)
China Energy	SGX	Singapore	ABN AMRO Rothschild (Singapore)
China Bearing	SGX	Singapore	Philip Securities Pte Ltd (Singapore)

Source: Authors, compiled from prospectuses of listing firms.

This indicates that stock exchanges were interested in cooperating with local government. As the local official mentioned:

The representatives of the stock exchanges visited Linyi very frequently. Take Hong Kong for instance, the HKEX has a promotion division in Shanghai and the chief representative visited Linyi every year. They came to Linyi to give lectures, teaching entrepreneurs how to become a public listed firm and promoting the stock exchange they belonged to. I just attended a lecture held by the chief representative of Hong Kong stock exchange.⁶

Interviews at stock exchange representative offices in Beijing further highlighted the process of targeting regional governments and economies. As the chief representative officer of the HKEX stated:

We organize regular events in some cities working with local governments. Local governments invite firms with listing potentials to attend the events. By doing this, more firms and entrepreneurs can get the information about overseas listings on our stock exchange.⁷

Firms compare the costs and benefits for public listing on different stock exchanges, which in turn reflect competition between international stock exchanges as well as the world cities hosting them. One of the major reasons for choosing the SGX for overseas listing is that it has lower financial requirements, for example, with regard to the profit or sales track record that a listing company has to document. This makes the SGX more friendly to manufacturing firms from traditional sectors with a relatively smaller size in China (Pan & Brooker, 2014). As the manager stated:

The subsidiary of our firm located in Hong Kong tried to find external capital. It was found that the financial standards for listing on the SGX were lower than that on the HKEX. So our firm chose the SGX as the destination for overseas listing.⁸

Legal and accountancy firms are also important in the case of Linyi's insertion into the GFN. Table 3 shows all major ABS firms involved in the IPO of People's Food and United Food, the two firms that pioneered overseas listings from Linyi. As

the pioneers in overseas listings in Linyi, the two firms used exactly the same accounting, auditing and law firms in the IPO applications, reflecting the crucial role of some key ABS firms in the process. In addition, it is important to consider which cities these ABS come from. Except for legal advisers focusing on the People's Republic of China (PRC) law, who came from Guangzhou, all other ABS firms were from Singapore and Hong Kong. Guangzhou, being geographically close to Hong Kong and Singapore, has been favoured by Linyi's IPO operations. The locations of ABS firms involved in the IPOs of the two firms further indicate the importance of world cities within the GFN.

IMPACTS OF INTEGRATION INTO THE GFN ON LINYI'S REGIONAL ECONOMY

Insertion in the GFN has significantly reshaped the development trajectories of listed firms as well as the regional economy of Linyi. Considering these development impacts, we will continue to focus on the food industry.⁹

First, a global capital pipeline with Singapore has been established via the listing of the lead firms from Linyi. For example, People's Food raised as much as S\$48.6 million by listing shares on the SGX, followed by S\$35.1 million raised by United Food (Figure 2). The two IPOs occurred in 2001 when capital was in short supply and expensive in mainland China. In that period, it was extremely difficult for private firms to borrow from banks and very few private firms had an opportunity to become listed on domestic stock exchanges (Pan & Brooker, 2014; Pan & Xia, 2014). Therefore, money raised through the IPOs on the SGX was critical for the rapid growth of the two firms. As the manager of one firm complained, 'The firm was in need of capital very much at that time. It was difficult to borrow from banks. Moreover, domestic listing was not available for our firm.'¹⁰ In addition to the capital raised from the IPOs, both United Food and People's Food conducted further public offerings to raise more capital through the SGX in 2002. In other words, firms and the regional economy in question have created a global capital pipeline after the firms were listed on foreign stock exchanges. Money raised through the global capital pipeline has arguably helped the firms and local economy grow faster than their domestic counterparts.

Table 3. Advanced financial and business service firms involved in the initial public offering (IPO) of People's Food and United Food.

	People's Food	United Food
Manager, underwriter and placement agent	Vickers Ballas & Co. Pte Ltd Singapore	Overseas Union Bank Ltd Singapore
Co-placement agent	Daiwa Securities SB Capital Markets Singapore Ltd Singapore	–
Reporting accountants	Ernst & Young Certified Public Accountants Singapore & Hong Kong	Ernst & Young Certified Public Accountants Singapore & Hong Kong
Auditors	Ernst & Young Certified Public Accountants Hong Kong	Ernst & Young Certified Public Accountants Hong Kong
Solicitors to the invitation	Wong Partnership Singapore	Wong Partnership Singapore
Legal advisers to the company on Hong Kong law	Chiu & Partners Hong Kong	Chiu & Partners Hong Kong
Legal advisers to the company on Bermuda law	Conyers Dill & Pearman Hong Kong	Conyers Dill & Pearman Hong Kong
Legal advisers to the company on PRC law	Guangzhou Foreign Economic Law Office Guangzhou	Guangzhou Foreign Economic Law Office Guangzhou

Source: Authors, compiled from the prospectuses of People's Food and United Food.

Using money raised from overseas listings, Linyi's lead food firms invested in expansion. As disclosed in the prospectus, People's Food planned to spend RMB100 million for the acquisition of land-use rights in facilities in three cities within China, RMB43 and 60 million to expand fresh meat production and low-temperature meat products in its new factories. In addition, the firm planned to spend new capital on expanding retail shops in China and investing in research and development. United Food had similar plans. In addition, United Food planned to set up a sales office in Moscow to promote direct sales of their frozen pork products in Russia.

Second, Linyi has also created a global knowledge pipeline with world cities and beyond via integration in the GFN. Two major mechanisms are identified in the field study in Linyi. One has to do with corporate governance standards required by the host stock exchanges. The two listing firms are required to disclose more information

and are subject to investigation by the SGX, in addition to investors and analysts from all over the world, which has forced the firms to adjust corporate governance and management accordingly. This could generate spillovers effects for other firms in the regional economy in the long term. As one manager stressed:

Firms need to disclose the business operations and financial information regularly in the annual reports and financial reports. Investors and analysts will examine them very carefully. With the interaction between firms and the global capital market, information is known by domestic entrepreneurs, which is beneficial to the corporate governance, corporate culture and the entrepreneurs. The local entrepreneurs become more qualified.¹¹

In addition, firms with overseas listings have opportunities to employ more internationally experienced senior managers.

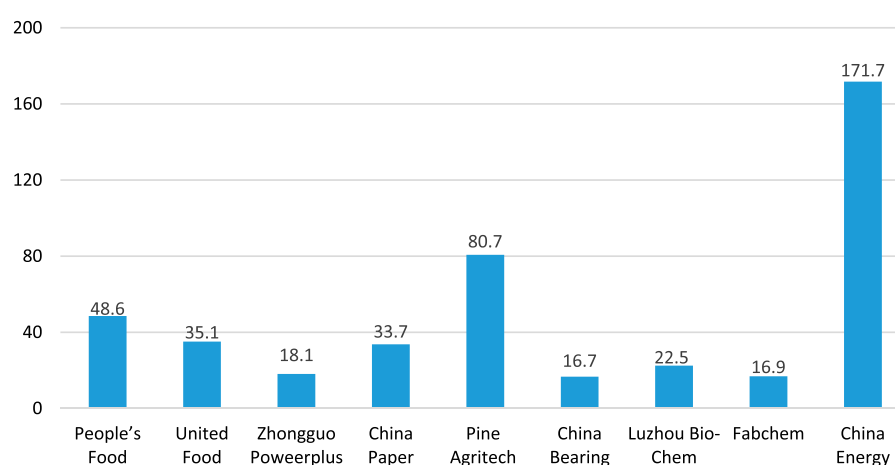

Figure 2. Capital raised via initial public offerings (IPOs) on the Singapore Stock Exchange (SGX) (Singapore dollars, millions). Source: Prospectus of the listed firms and media reports.

Table 4. Structure of board members of firms listed on the Singapore Stock Exchange (SGX).

Firms	Local board members	Foreign board members
People's Food	3	3
United Food	3	2
Luzhou Bio-Chem	4	2
Pine Agritech	4	2
Fabchem	3	5
China Paper	4	2
Zhongguo Powerplus	3	5
China Energy	2	4
China Bearing	4	2

Source: Annual reports of the listed firms in 2011.

Taking the firms listed on the SGX, for instance, new independent board members and new managers have joined firms since they became listed (Table 4). The board membership became more internationalized. New board members, including independent board members, became quite influential and have incentives to monitor the firm to maintain and improve corporate governance and management standards. As pointed out by one of the interviewees:

They were very strict. Compared to their counterparts in domestic listing firms, they were much more responsible towards investors. With these external people joining the firm, it was easier for us to get new information and improve the governance of the firm. The benefits were obvious.¹²

In addition to global capital and external knowledge, Linyi's case also shows that integration into the GFN can enhance the firm's reputation both internationally and locally. As mentioned by one interviewee, it became easier for the firm to borrow money from local banks after they became listed overseas, as public listed firms were considered more reliable. "The reputation of the firm rose significantly once it was listed. The money borrowed from the local banks almost equaled with that raised from overseas capital market. So it was a multiplier effect."¹³

Overall, the regional food industry has grown rapidly since the lead firms' integration into the GFN. On the one hand, the lead firms have significantly grown their business. According to the financial prospectuses and annual reports, the total sales of People's Food grew from RMB2.3 billion in 1999 to RMB16.8 billion in 2011; the total sales of United Food grew from RMB1 billion in 1999 to RMB5.3 billion in 2011. People's Food, with its Chinese name Jinluo, has become one of the largest pork-processing companies in China since 2007.¹⁴

The fast growth of the lead regional firms, has facilitated the growth of other up- and downstream firms in the same and related sectors. For example, due to the enlargement of production capacity of People's Food, more firms and people are engaged in the activities of feeding pigs. The production network has expanded. The food industry grew significantly from 2000 to 2010. In food

processing sector, the number of firms in 2010 was five times of that in 2000, and total sales were about 10 times larger. The food manufacturing industry exhibits a similar growth trend. The food industry has become the pillar of Linyi's economy.¹⁵ Consequently, Linyi has become nationally well known for its pork-processing and manufacturing sector. As mentioned proudly by the local official, 'Linyi is famous for its pork processing industrial cluster. It is especially competitive in feeding pigs and pork processing. Jinluo (People's Food) has become one of the largest pork processing firm in China since it got listed on SGX.'¹⁶

Furthermore, following the success of the lead regional firms in listing shares on overseas stock exchanges, information about the international capital market, and particularly information on how to access external capital, has spread quickly. As a result, other firms in the food industry and other sectors have started to raise capital from stock markets in international financial centres. Linyi has become the city within Shandong province with the largest number of firms listing on overseas stock exchanges.¹⁷ The Linyi local government has continued to encourage local firms to list on overseas stock exchanges, and considers it an important way to boost local economic development.

CONCLUSIONS AND IMPLICATIONS

Financialization and globalization have together shaped the global economic landscape. As Clark (2005, p. 99) noted, 'if we are to understand the economic landscape of 21st century capitalism, it should be understood through global financial institutions, its social formations and investment practices'. Global financing has important impacts on regional development (Zademach, 2009); however, the conceptualization and theoretical development on this topic is still limited in economic geography.

Drawing on the GFN framework, this study investigated the role of ABS firms and the geographical structure of overseas listings of firms from Linyi. It shows that a few ABS firms from Singapore and Hong Kong played a key role in the process. Singapore and Hong Kong were the major world cities in which the stock exchanges and ABS firms involved are located. Bermuda and Singapore are key offshore jurisdictions (Palan, 2010) as incorporation places of the listing firms. The results indicate that the GFN framework can be well applied to explore the process of global financing activities of regional economies.

By integrating into the GFN via overseas listing on the SGX, the regional lead firms and the whole food processing sector in Linyi have created global capital and knowledge pipelines. With capital raised overseas, the lead regional firms in Linyi managed to overcome the local and regional 'funding gap'. As a consequence, they were able to enlarge their production capacity and invest more in activities such as marketing and research and development (R&D). With the new knowledge pipeline the firms involved and the regional economy have equipped themselves to compete in the national and international market. Corporate governance and reporting requirements from the SGX, and introduction of experienced, international and independent

board members have helped the listing firms adjust their corporate governance and management. In addition, they have improved their visibility and reputation significantly since the IPO. With the fast growth of the listing firms, the local production networks of food processing have become more dynamic and the local production chains have been enlarged and extended.

This study indicates that beyond applying the GPN or the global value chain framework, regional economic development can also be understood through the lens of the GFN. With financial globalization, more firms from less developed regions in particular have obtained financial resources in global capital markets. The world cities, offshore jurisdictions and the key ABS firms are crucial to understand the process. Moreover, integration into the GFN is a way in which regional economies can establish global pipelines, which has been considered crucial for regional economic development in the globalization era (Bathelt, Malmberg, & Maskell, 2004). This study indicates that overseas listings of lead regional firms could help establish global capital and knowledge pipelines for the regional economy.

Economic geographical studies need to pay more attention to the financial activities of economic actors and regions. In a world of financial globalization, local economic actors and even the local economy as a whole are exposed to the vagaries of the global financial system. It has been long argued that while the developed world has been increasingly integrated by financial flows, lower income countries derived few benefits from the process (Sarre, 2007). However, it seems apparent that both government and private actors in less developed economies can also tap into the global financial markets for the benefit of their local and regional economies. This is not to say that there are no major disadvantages and risks of financial globalization (Engelen, Konings, & Fernandez, 2010; Lee, Clark, Pollard, & Leyshon, 2009; Martin, 2011), but to state there are great opportunities for firms and local economies in developing areas.

Admittedly, insertion into GFN can also lead to negative impacts on the local economy. It can lead to disruptive restructuring and dislocation of labour, as well as excessive financialization of the local economy (Muellerleile, 2009). It can also lead to conflicts between shareholders, local and remote, and local stakeholders. The shareholders of the firm can surely make decisions at the expense of local development (Pike, 2006).

Future studies on the GFN should be strengthened both theoretically and empirically. On the theoretical side, the governance structure of the GFN needs more investigation. In particular, the power relations between ABS firms and their common clients, and among ABS firms (Dorry, 2015), are crucial for understanding the formation of the GFN. On the empirical side, more case studies from various regions and countries in different development stages and institutional contexts are needed (Wójcik, 2018). Detailed data on overseas listings, for example, is available from stock exchanges and corporate prospectuses, offering opportunities to analyze firms,

localities and intermediaries involved in this important subset of the GFN, and ultimately the relationships between the GFN and the GPN.

ACKNOWLEDGEMENTS

The authors thank Dr Zuoli Liu for help with the interviews in Linyi. The authors are very grateful for the insightful comments made by the editor and anonymous reviewers. All remaining errors are the authors' own.

DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

FUNDING


This research was supported by the National Natural Science Foundation of China (NSFC) [grant number 41871157]; the UK Economic and Social Research Council (ESRC) [grant number ES/P003435/1]; and the European Research Council (ERC) under the European Union's Horizon 2020 Research and Innovation Program [grant number 681337].

NOTES

1. See <http://www.shandongbusiness.gov.cn/index/content/sid/8950.html/>.
2. Calculated based on the *Linyi Statistical Yearbook 2011*.
3. Interview with the manager of an overseas listed firm, Linyi, on August 1, 2012.
4. Interview with the manager of an overseas listed firm, Linyi, on August 1, 2012.
5. Interview with a local official, Linyi, July 31, 2012.
6. Interview with a local official, Linyi, July 31, 2012.
7. Interview with a representative officer, Beijing, September 25, 2012.
8. Interview with a manager of an overseas listed firm, Linyi, August 1, 2012.
9. Including the food processing and food manufacturing sectors in *Linyi Statistical Yearbook 2001*.
10. Interview with a manager of an overseas listed firm, Linyi, August 1, 2012.
11. Interview with a manager of an overseas listed firm, Linyi, August 1, 2012.
12. Interview with a manager of an overseas listed firm, Linyi, August 1, 2012.
13. Interview with a manager of an overseas listed firm, Linyi, August 1, 2012.
14. See <http://www.jinluo.com.cn/2014/SitePage/Honor.aspx/>.
15. See <http://linyi.iqilu.com/lyyaowen/2016/0118/2668404.shtml/>.
16. Interview with a local official, Linyi, July 31, 2012.

17. See <http://news.163.com/10/1115/01/6LGCT9KC00014AED.html/>.

ORCID

Fenghua Pan  <http://orcid.org/0000-0003-0317-4420>
 Chun Yang  <http://orcid.org/0000-0002-0169-3449>
 He Wang  <http://orcid.org/0000-0002-3436-1299>
 Dariusz Wójcik  <http://orcid.org/0000-0003-2158-284X>

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