Habitat International 40 (2013) 82–90

Contents lists available at SciVerse ScienceDirect

Habitat International

journal homepage: www.elsevier.com/locate/habitatint

The embeddedness of transnational corporations in Chinese cities: Strategic coupling in global production networks?

Y.H. Dennis Wei [a,1], Felix H.F. Liao [b,*]

[a] Department of Geography and Institute of Public and International Affairs, University of Utah, Salt Lake City, UT 84112-9155, USA
[b] Department of Geography, University of Utah, Salt Lake City, UT 84112-9155, USA

Keywords:
Transnational corporation
FDI
Embeddedness
Technology linkage
Global production network
China

ABSTRACT

The embeddedness of transnational corporations (TNCs) in metropolitan economies has become a central issue in the research on globalization and local development. This paper attempts to enhance understanding of FDI embeddedness by assessing TNCs' backward and technological linkages with domestic firms. Through a case study of the information and communication technology (ICT) industry in Suzhou, a frontier globalizing city in the Yangtze River Delta in China, it was found that strategic coupling between TNCs and domestic Chinese firms rarely exists and global production networks (GPN) have not brought substantial benefits to the development of domestic firms in the region. Regression analysis further reveals that TNCs' backward and technological linkages with domestic firms are highly selective and contingent upon market potential in the host region, TNCs' research and development (R&D) orientation and to a lesser extent subsidiary autonomy. It is also found that the booming and sizable domestic market and the development of domestic firms have potential to pave the way for upgrading. These findings suggest that there is a need to develop a broader conceptualization of the upgrading pathways of local firms beyond the notion of strategic coupling in the GPN perspective.

Introduction

Intensified capital flows at the global scale and the rising power of transnational corporations (TNCs) are vivid indicators that economic globalization is an important feature of the world economy (Dicken, 2003). TNC-led globalization leaves spatial imprints on cities and is a crucial driver of the globally-connected city network (Brown et al., 2010). Global cities provide the settings for globalization and global–local interface, serving as command centers to better organize complex global production (Sassen, 2001). Governments in emerging global cities, or globalizing cities, tend to regard foreign direct investment (FDI) as a critical generator of economic growth. These cities increasingly compete for investment from TNCs and actively participate in global value chains (GVCs), global commodity chains (GCCs), and global production networks (GPNs) (Hess, 2004; Humphrey & Schmitz, 2002; Wei, Li, & Ning, 2010). Heightened globalization has also made globalizing cities more vulnerable to capital mobility and external shocks (Pike, Rodriguez-Pose, & Tomaney, 2006). The issue of FDI embeddedness has therefore become a major concern of governments as regards the benefits of integration into global production networks (Wei, Liefner, & Miao, 2011). The GPN perspective emphasizes the importance of strategic coupling with GPNs for the upgrading of local firms in developing countries (Coe, Hess, Yeung, Dicken, & Henderson, 2004), and advances the GVC approach by unpacking the complex firm-region nexus in the GPN (Coe & Hess, 2011). From the GPN perspective, regional development, or upgrading, is a product of strategic coupling between specialized regional assets such as specific kind of knowledge, skills, or expertise with the strategic needs of extra-local actors coordinating GPNs (Coe et al., 2004).

The GPN perspective and, in particular, the notion of strategic coupling have rarely been critically evaluated with respect to the effect on the development of domestic firms in such emerging economies as China. Empirical evidence, focusing on the industrial upgrading of developing regions, which are at low levels of the GPNs, has shown that strategic coupling between local firms and TNCs rarely exists (e.g., Murphy & Schindler, 2011; Wei, 2010; Wei, Zhou, Sun, & Lin, 2012). It also has been found that the development of domestic firms is not necessarily subject to the strategic needs of TNCs, Moreover, strategic coupling is only a specific type of inter-firm collaboration between TNCs and local firms (Wei, 2010, 2011).

* Corresponding author.
E-mail addresses: wei@geog.utah.edu (Y.H.D. Wei), haifeng.liao@utah.edu (F.H.F. Liao).
[1] Tel.: +1 801 585 0545; fax: +1 801 581 8219.

0197-3975/$ – see front matter
http://dx.doi.org/10.1016/j.habitatint.2013.01.005

Keeping these conceptual issues in mind, this paper contributes to the literature on local embeddedness of FDI in globalizing cities by means of a case study of TNCs in the information and communication (ICT) industry in Suzhou, China. Suzhou is a key city in the Yangtze River Delta (YRD), which is China's economic powerhouse and probably the largest emerging global city region in the world. Drawing upon a recent high-quality survey, this paper offers a detailed quantitative and critical assessment of TNCs' local embeddedness in Suzhou's ICT industry.

The notion of embeddedness has multiple dimensions (e.g., societal, territorial and network), and operates at different scales. In this paper, we analyze the local embeddedness of FDI through the lens of TNCs' backward and technology linkages with local firms. Backward linkages, or domestic sourcing, form an important channel that connects TNCs with local firms and have potentially extensive benefits for the domestic sector (e.g. UNCTAD, 2001; Williams, McDonald, Tüselmann, & Turner, 2008). Technological linkages between TNCs and local firms also offer substantial benefits arising from connections within the GPNs (e.g. Yeung, 2007). The current paper differs from the previous publications that were based on the same survey (Wei, 2010; Wei et al., 2011; Zhou, Sun, Wei, & Lin, 2011), in two significant ways. First, it pays particular attention to why strategic coupling between TNCs and domestic firms is difficult to achieve in specific contexts. Second, it explores the potential of 're-coupling' with TNCs given the sizeable domestic market and the development of domestic firms in China. The remainder of the paper is organized as follows. After a critical appraisal of the perspective of GPN and the notion of strategic coupling, we will analyze the local embeddedness of TNCs in Suzhou with an emphasis on TNCs' backward and technological linkages with domestic firms. This is followed by a multivariate regression analysis of the determinants of TNCs' local backward and technology linkages. The final part presents our conclusion and discusses the theoretical and policy implications.

Theoretical issues and research framework

The debate on globalization and local places has stimulated research on the nature, process, and uneven geographic impact of globalization (Amin & Thrift, 1994). The hyper-globalization thesis emphasizes a borderless world and the free flow of capital, arguing for global integration and convergence in a context of the declining significance of nation states, history, and geography. Scholars influenced by dependency theory, the world system perspective and, more recently, the GVC/GCC approaches (e.g., Amin & Thrift, 1994; Gereffi & Korzeniewicz, 1994; Taylor & Thrift, 1982) hold that FDI can induce structural displacement, financial instability, and external control of developing economies (Agenor, Miller, Vines, & Weber, 2000). Geographers and planners tend to celebrate the power of local assets and processes and the efficacy of local institutional capacities (Micek, Neo, & Gorecki, 2011; Phelps & Waley, 2004). They argue for the continued significance of the state in FDI location decisions, the localization and embeddedness of global capital, and the reemergence of industrial districts and clusters (e.g., Cox, 1997; Dicken, 2003).

The recent literature on production globalization and regional development has employed the concepts of "chains" or "networks" to improve our understanding of the regional development process in the context of globalization (Henderson, Dicken, Hess, Coe, & Yeung, 2002). The GPN approach aims to glean more insights into the geographical organization of global production. It differs from the earlier theories on FDI that emphasize trade between countries (e.g., Dicken, 2003) and the location decisions of TNCs (e.g., Dunning, 1981). The GPN approach addresses the 'organizational innovation' of global operations and "the transition from multinational corporations with their focuses on stand-alone overseas investment projects, to global network flagships that integrate their dispersed supply, knowledge and customer bases into global (and regional) production networks" (Ernst & Kim, 2002). In comparison with the "model-based" GVC perspective (e.g., Gereffi, Humphrey, & Sturgeon, 2005; Mahutga, 2012), the GPN perspective proposes a different way of understanding the relationship of global buyers with the regional governance structure. It emphasizes the 'territory-based' and geographically sensitive process of TNCs' embedding into regional economies and appreciates the complex and dynamic interdependence between key dimensions of "embeddedness," "power," and "value," and the unique spatiality of production networks (Henderson et al., 2002). GPN scholars also criticize the new regionalism perspective for its narrow focus on endogenous assets, or institutional thickness, and emphasize the trans-local dynamics of development by 'strategic coupling' with TNCs (Coe & Hess, 2011).

The spatial organization of GPNs or GVCs is undoubtedly related to the world city network (Brown et al., 2010). World cities, closely linking with globalizing cities in developing countries, also become control points of global production networks. This is particularly relevant for the case of China where many globalizing cities, such as Beijing and Shanghai, have increasingly been integrated into global networks. Yang (2009) argued that the successful strategic coupling between Suzhou and the GPN in the ICT industry led by Taiwanese TNCs has reshaped Suzhou into an important production node in the global ICT industry. Yang and Coe (2009) also maintain that the embedding of the GPN in Suzhou, Taipei and Dongguan resulted in a new mini-GPN controlled by Taiwanese ICT manufacturers. In these regional GPNs, TNCs have taken advantage of the diverse local institutions and assets in Chinese cities, and respond strategically to the changing factors of cost, speed and flexibility in the transformation of global ICT industry.

The contribution of the GPN perspective to the understanding of the upgrading process in the context of economic globalization, however, has not been evaluated thoroughly and critically (MacKinnon, 2012). This perspective has noticeable limitations when applied to explain the upgrading of local firms in China (Wei, 2010; Wei et al., 2011). Firstly, the GPN perspective tends to overemphasize the exogenous factors of development. Wei (2011) has found that in Wenzhou, integration with GPNs is not a major upgrading strategy, while the huge domestic market of China has played an important role in the development of the clothing industry.

Secondly, the GPN perspective, while it is multi-scalar and sensitive to places, over-generalizes the experiences of newly industrialized economies in East Asia, where TNCs develop cooperative relationships with local suppliers and thus contribute substantially to the upgrading of domestic suppliers (Ivarsson & Alvstam, 2005a). The empirical work that draws upon the notion of strategic coupling also focuses on successful coupling that has already been created in developing regions (e.g. Yeung, 2007), without offering adequate explanation for why strategic coupling has come into being. Murphy and Schindler (2011) have argued that the GPN approach overlooks 'the need for developing regions to first achieve scale, scope, and localization economies and adequate institutional capacity before value can be created, enhanced and captured through ties' (p. 65). Wei (2010) identifies two situations in which such coupling can be observed. First, it occurs when local firms have strong capabilities to drive global–local production networks. Kim and Zhang (2008) have found the domestic giant companies such as Haier electronics have the power to incorporate foreign-owned suppliers in a domestically oriented electronics cluster in Qingdao. Second, coupling may also emerge when TNCs seek to exploit the network reach and capabilities of indigenous