## Chinese and Indian MNEs' shopping sprees in advanced countries. How good is it for their innovation output?

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## 1. Introduction

Roughly 40% of the investments from emerging economies goes towards advanced countries (UNCTAD, 2016), rich in strategic assets, such as patents and technological skills, much sought after by emerging-market multinational enterprises (EMNEs) (Luo and Tung, 2007; Cuervo-Cazurra, 2012). EMNEs' asset seeking strategies are well exemplified by some landmark cross-border acquisitions (CBAs), such as that of Jaguar and Land Rover by the Indian Tata Motors in 2008, of Volvo by Geely Automobile of China in 2010, and the takeovers of the Italian tire producer Pirelli in 2015 and of the Swiss pesticides and seeds producer, Syngenta in 2016 by ChemChina. This kind of CBAs are expected to boost the acquiring EMNEs' innovative capabilities and promote processes of reverse knowledge transfer to their home countries (Hansen et al., 2014), but indeed we know very little about whether this actually takes place and about the frictions and impediments involved in this process.

EMNEs tap into advanced country knowledge and technological assets by accessing them directly from the acquired firm (hereinafter target firm) as well as by connecting with other organizations (e.g. universities, suppliers, competitors, service providers) located in the region (hereineafter target) where the target firm is located (Cantwell and Iammarino, 2001; Meyer et al., 2011; Mudambi and Swift, 2011; Beugelsdijk and Mudambi, 2013; Dau, 2013). However, the degree of innovativeness of the target firm and/or the innovative capacity of the target region are likely to differ widely, and so it is their expected capacity to contribute to the post-acquisition EMNEs' innovation output<sup>1</sup>. For instance, EMNEs buying a very innovative company in the Silicon

<sup>&</sup>lt;sup>1</sup> In the article, we use the term post-acquisition and post-deal interchangeably.

Valley are probably more exposed to valuable knowledge spillovers and have more opportunities to tap into a bigger pool of advanced and specialized knowledge (Barnard, 2010; Cantwell and Mudambi, 2011) than EMNEs investing in less innovative companies and regions.

At times, studies in international business and economic geography have conducted parallel investigations of the process of tapping into international knowledge. They document the potential frictions in and impediments to attempts to source knowledge which can threaten their capacity to take full advantage of investment in highly innovative targeted firms and regions. In general, research in international business takes a predominantly firm-level perspective on this area of inquiry (e.g. Birkinshaw et al., 2000; Cassiman et al., 2005; Cloodt et al., 2006; Colombo and Rabbiosi, 2014; Awate et al., 2014), while economic geographers tend to focus more on the regional dimensions of this process and how multinationals integrate with the local contexts they enter (Iammarino and McCann, 2013; Crescenzi et al, 2013; Hansen et al., 2016). Although several scholars have achieved some progress toward the integration of these two strands of scholarly research (see e.g. Cantwell and Mudambi, 2011; Mudambi and Swift, 2011; Beugelsdijk and Mudambi, 2013), very little research has investigated the impacts of CBAs on EMNEs, taking account of both firm- and regional-level perspectives; generally, research in international business and economic geography on the impacts of CBAs remains scant.

To address these gaps, we consider the universe of majority stake CBAs accomplished by Chinese and Indian medium to high-tech firms in Europe (EU28) and the U.S. during 2003–2011<sup>2</sup>, and investigate whether following these investments the Chinese and Indian acquiring firms have become more innovative. Our baseline expectation is that the more innovative the target firm or region, the more the acquiring firm will be able to innovate after the deal. To further qualify these relationships, we investigate the moderating roles played by EMNEs' absorptive capacity and status. Our focus on these two dimensions is justified because the former, which following Cohen and Levinthal (1990), we conceptualize as the firm's knowledge base, generally is deemed an

<sup>&</sup>lt;sup>2</sup> Note that our focus on medium to high-tech firms is justified by the need to select deals that most likely reflect the EMNE's intent of acquiring and building on the target firm's and region's technological assets (Piscitello et al., 2015).

important condition for the ability to tap into external knowledge and skills that are outside the EMNEs' "*comfort zone*" (see also Bathelt and Cohendet, 2014)<sup>3</sup>. Moreover, we expect significant variation in EMNEs' knowledge bases; some of them are known to be rather technologically lagging. We believe that this heterogeneity could influence their capacity to take advantage of their CBAs in terms of their innovation output. To investigate the latter issue of EMNE status, we consider that high-status EMNEs which we define as those portrayed more positively in the international press, will face fewer difficulties in the process of accessing local knowledge residing in the target firm or region. Therefore, we expect status to moderate our baseline relationships positively.

Our analysis supports most of our predictions. Among other things, it suggests that the innovative capacity of the target region is positively and significantly related to the innovative output of the EMNE after the deal, and in particular, when we measure regional innovative capacity by its "social filter". Social filter is a composite indicator used widely in the economic geography literature to approximate the regional socio-economic preconditions for a well-developed ecosystem characterized by intense knowledge circulation (Rodriguez-Pose and Crescenzi, 2008; Crescenzi et al., 2014). This result is reinforced if we combine social filter with the moderators –EMNEs' knowledge base and EMNE's status. These moderators play also a key role in the association between the target firm's innovative capacity and the innovative output of the EMNE after the acquisition process. In contrast to our expectations, we find that this association initially is negative and significant but turns positive when the obstacles faced by the acquiring firms are mitigated by a strong knowledge base and high status.

<sup>&</sup>lt;sup>3</sup> Because firm knowledge base is functional to the capacity of the firm to absorb external knowledge and to innovate as a result (Cohen and Levinthal, 1990), in the rest of the paper we use the terms 'knowledge base' and 'absorptive capacity' interchangeably.