



When outward FDI creates jobs at home: the role of relative investment size and organizational capacity constraints

Guus Hendriks¹ · Vera Kunczer²

Received: 17 June 2025 / Revised: 4 May 2026 / Accepted: 5 May 2026
© The Author(s) 2026

Abstract

Outward foreign direct investment (OFDI) is often assumed to shift jobs abroad, yet evidence on its effects on firms' domestic employment remains mixed. We argue that part of this variation can be explained by the organizational capacity constraints firms face when expanding internationally. Drawing on a Penrosean capacity-constraint perspective, we examine how the size of OFDI projects relative to firm size shapes domestic employment outcomes. Analyzing OFDIs by multinational enterprises from 13 emerging market economies, we find that the effect of OFDI on domestic employment strengthens at higher values of that relative size. This pattern reflects organizational capacity constraints at home, which become salient when firms undertake relatively large foreign expansion projects and require additional hiring. We also show that this relationship is moderated by establishment mode, state ownership, and regional orientation. The results suggest that not all OFDI projects yield the same domestic employment outcomes, highlighting the importance of firm-specific organizational constraints. OFDI projects representing approximately 10% to 20% of a firm's assets or sales produce the strongest domestic hiring effects. This study offers direct implications for policy design, suggesting that incentive schemes should account for firm-level capacity and relative investment scale rather than focusing solely on aggregate OFDI volumes.

Keywords Domestic employment growth · Multinational enterprises · Outward foreign direct investment · Penrosean perspective · Relative investment size · Organizational capacity constraints

Introduction

Foreign direct investment (FDI) plays a critical role in shaping employment and thus remains a central concern in economic policymaking (Buckley, 2018; Iammarino, 2018; Torres et al., 2016). With their FDI, firms not only shape employment in the countries in which they invest, but also in the home countries from which they internationalize

(Blomström & Kokko, 1998; Tüselmann, 1998). Whereas studies in the realms of economics, industrial relations, and international business have often focused more on the employment effects of inward FDI on the host countries that receive the investment (Driffield, 1999; Hejazi & Treffer, 2019), the effects on home-country employment tend to be sizeable, too, generating interest among research scholars and policy actors (Elia et al., 2009; Li et al., 2016).

To distinguish employment effects attributable to the investing firm itself from those arising in other firms located in its geographic proximity, this study focuses specifically on employment within the investing firm's own domestic operations (which we refer to as "domestic employment"). Prior work in international business has argued that the effects of outward FDI (OFDI) on domestic employment can be complementary or substitutive in nature (Hong et al., 2019; Lee et al., 2020). Most scholarly attention has gone towards understanding the substitution effect, whereby prior studies considered how firms relocate and offshore production activities and thereby manufacturing jobs from the home country to other locations (e.g., Driffield et al., 2019;

Accepted by Axèle Giroud, Area Editor, 5 May 2026. This article has been with the authors for two revisions.

✉ Vera Kunczer
vk.egb@cbs.dk
Guus Hendriks
g.hendriks@uva.nl

¹ Amsterdam Business School, Strategy & International Business Section, University of Amsterdam, Plantage Muidergracht 12, 1018 TV Amsterdam, The Netherlands

² Department of International Economics, Government and Business, Copenhagen Business School, Porcelænshaven 24 A+B, 1–4 Floor, 2000 Frederiksberg, Denmark

Harrison & McMillan, 2006). Yet through OFDI, firms may also create new domestic employment at home (a complementary effect), as foreign expansion generates additional organizational activities such as coordination, integration, production support, and information processing tasks, and increases demand for inputs and intermediate goods supplied from the home base (Hong et al., 2019; Lee et al., 2020). The emphasis on the substitutive nature of OFDI has left the complementary effect of OFDI on firm-level domestic employment comparatively less studied, and importantly, also less well understood.

The reason why this complementary effect is not well understood is likely twofold. First, the complementary and substitutive effects might occur simultaneously, which makes it hard to disentangle the two and fully comprehend how many new jobs a firm creates domestically as a result of OFDI. Second, although prior studies show that OFDI can function as either a strategic substitute or complement for domestic employment, prior work has paid less attention to insights on the internal organization of firms and the capacity constraints they face when managing foreign expansion. Yet these internal constraints are likely central for understanding how OFDI generates additional organizational activities at headquarters and, in turn, shapes firms' domestic employment responses (Penrose, 1959).

To shed more light on the complementary effect of OFDI on domestic employment, our study aims to address both of these points. Firstly, we do so by empirically looking at investments made by emerging market multinational enterprises (EMNEs) which engage much less frequently in the offshoring of manufacturing jobs to foreign locations than counterparts from more economically developed countries, as they already have more abundant low-cost labor, allowing us to focus on the complementary employment effects of OFDI rather than the substitutive effect associated with relocating jobs elsewhere (Cuervo-Cazurra et al., 2015; Liang et al., 2022; Moghaddam et al., 2014). Secondly, we draw on a specific insight from the Penrosean perspective (1959) to inform our understanding of how firms organize activities internally when undertaking foreign expansion under time-bound capacity constraints. Penrose argues that firm expansion, including international expansion, is ultimately limited by the capacity of human and organizational resources to manage additional activities, a phenomenon referred to as the Penrose effect. Building on this insight, we argue that the domestic employment consequences of OFDI depend not on the absolute size of an investment, but on its size *relative* to the investing firm's own size. Relative investment size captures how easily firms can absorb the additional activities triggered by OFDI within their existing workforce, or whether expanding domestic employment becomes necessary. Importantly, we draw on Penrose's insights regarding capacity constraints, without seeking to

model firms' broader growth trajectories or stocks of underutilized resources.

We theorize that OFDI projects that are large relative to firm size generate a disproportionately greater volume of additional organizational activities, thereby exposing organizational capacity constraints and amplifying the Penrose effect, compared to relatively smaller investments. As the relative size of an investment increases, activities concentrated at the firm's headquarters, such as increased exports, coordination, monitoring, and information processing, rise more than proportionally (Blomström & Kokko, 1998; Johnston & Menguc, 2007; Larsen et al., 2023; Slangen, 2016; Tüselmann, 1998), while the firm's ability to absorb or reallocate these activities within its existing workforce becomes increasingly limited. Consequently, relatively large OFDI projects are more likely to overwhelm internal organizational capacity and necessitate the hiring of additional domestic employees to support these expanded activity demands.

Our findings indicate that the relative size of OFDI projects significantly affects domestic employment growth, exhibiting a curvilinear relationship. Additionally, we show that this relationship is influenced by the firm's mode of establishment, state ownership, and regional orientation. One important implication from our study is that the effect of OFDI on domestic employment is thus firm-specific. Our study also indicates that not every amount of OFDI has the same effect on employment, since that effect is co-shaped by the investor firms' size and their capacity constraints. Whereas most governmental incentive schemes such as tax holidays, concessional loans, or sovereign guarantees, hinge on the headline dollar value of an OFDI project, our findings show that what really drives domestic job creation is how big the project is relative to the firm that undertakes it. Caution is therefore also advised when working with nationally aggregated FDI data reported in publications such as the World Investment Report or in databases from the World Bank and the OECD (Giroud & Bonilla-Feret, 2025; Sutherland et al., 2020), since the same dollar amount of OFDI can have very different effects on firms' domestic employment, depending on how large the investment is relative to the firm and the organizational capacity constraints firms face when taking on additional activities.

Using a Penrosean lens, the study conceptualizes the entire domestic workforce, not just managerial attention (e.g., Hutzschenreuter et al., 2011; Mohr et al., 2018; Slangen, 2016; Tan et al., 2020), as a scarce organizational resource whose capacity becomes strained as firms undertake foreign expansion. In this view, domestic hiring represents an adaptive response to the additional organizational activities generated by OFDI, including coordination, monitoring, production support, and information processing. The study also refines recent coordination models (Zeng et al.,

2023) by identifying domestic organizational capacity as a key precondition for effective OFDI management, particularly when foreign projects exceed a threshold proportion of firm size. More broadly, our findings contribute to the literature on OFDI and domestic employment by demonstrating that employment effects depend on the size of the investment relative to firm size rather than its absolute amount (Hong et al., 2019; Lee et al., 2020), highlighting the role of firm-level heterogeneity and internal capacity constraints in shaping employment outcomes (Driffield et al., 2019).

Theory and hypotheses

Although the bulk of scholarly attention has gone to studying the effects of OFDI on employment in host countries, there is ample work on the relationship between OFDI and home-country employment, too (Debaere et al., 2010; Becker et al., 2005; Agarwal, 1997). Most of these studies, however, take a country-level perspective and analyze highly aggregated data about OFDI and home-country employment. More recent contributions shifted the focus to the firm and refined the analysis to study the effects of OFDI on the home subnational region from which firms internationalize (Elia et al., 2009; Li et al., 2016). Although more refined, it remains difficult with such an analysis to distinguish between jobs created by the investing firm and those by other firms in its geographic proximity.

Further work specifically considered the jobs that the investing firms themselves created or relocated as they reallocated certain value chain activities across their networks. Such studies addressed the employment consequences of offshoring and reshoring activities (Delis et al., 2019; Driffield et al., 2019) and started to look at the relationship between OFDI motivation and domestic employment. Depending on the motive, OFDI can either be a strategic complement that increases MNEs' domestic employment or a strategic substitute that decreases domestic employment by MNEs (Hong et al., 2019). Labor-seeking OFDI is usually associated with a decrease in MNEs' domestic employment and can be seen as a strategic substitute since labor-intensive production processes are transferred abroad (Blomström et al., 1997; Fors & Kokko, 2001). MNEs thereby substitute their domestic country-specific advantages (CSAs) (e.g., domestic human capital) for new, location-bound, host-country CSAs (e.g., lower labor costs) (Hong et al., 2019). Market-seeking, resource-seeking or strategic asset-seeking OFDI motives tend to trigger a complementary effect whereby MNEs' domestic employment increases (Hong et al., 2019). This particularly applies to market-seeking OFDI, or horizontal OFDI, as it expands an MNEs' operations and long-term outputs (Helpman et al., 2004; Greenaway & Kellner, 2007), which in turn requires more domestic labor to satisfy the

rising output demand (Ekholm et al., 2007; Hijzen et al., 2011). Firms thereby also require more employees to perform supporting activities (e.g., financial, legal, or managerial tasks) for foreign subsidiaries (Fors & Kokko, 2001; Mitra & Ranjan, 2010). More generally, this literature suggests that OFDI can increase domestic employment because foreign expansion generates additional activities at home, including coordination, monitoring, and support functions associated with managing geographically dispersed operations (Hong et al., 2019; Lee et al., 2020).

What tends to be overlooked in this work, however, is how firms internally organize and absorb these additional activities, and under what conditions existing organizational capacity becomes insufficient. This insight resonates with recent work highlighting that the effects of external strategic actions depend on firms' internal ability, motivation, and opportunity conditions, particularly in emerging and institutionally complex contexts (Hendriks, 2025). Although prior studies identify the presence of complementary activities, they pay less attention to the internal capacity constraints that shape firms' ability to accommodate these demands without expanding their domestic workforce. From a Penrosean perspective, firm growth is shaped by the availability and limits of internal organizational capacity required to organize productive activities (Penrose, 1959; Pitelis & Verbeke, 2007; Slangen, 2016). While firms may possess underutilized resources that motivate expansion, Penrose emphasizes that growth is ultimately constrained by the capacity to organize additional activities. When expansion places excessive demands on these organizational capacities, firms encounter limits to growth – the so-called Penrose effect (Penrose, 1959). At this point, firms must augment their internal organizational capacity, often through additional hiring, to prevent the neglect or deterioration of existing activities (Hutzschenreuter & Voll, 2008; Slangen, 2016).

Prior studies in international business have used a Penrosean perspective to gain insight into various aspects related to firm expansion and growth, including subsidiary ownership choices (Slangen, 2016), international divestment (Mohr et al., 2018), patterns of international expansion (Hutzschenreuter et al., 2011), or post-entry growth (Tan, 2009)—with the bulk of existing studies focusing on managerial capacity as the main constraint to growth [see Tan et al. (2020) for a review]. Building on this literature, we shift the focus beyond managerial attention alone and consider the broader organizational demands placed on the entire domestic workforce when firms undertake foreign expansion. While firms may mitigate growth constraints through organizational design and strategic choices (Verbeke & Yuan, 2007), one common response when existing capacity becomes overstretched is to expand the domestic workforce to sustain these activities. Importantly, our study does

not aim to model the full Penrosean growth process. While Penrose (1959) highlights the role of underutilized resources in shaping both the direction and motivation of firm growth, we do not seek to capture firms' stocks of underutilized resources or their broader growth trajectories. Instead, we draw on a specific Penrosean insight, namely that growth is constrained by time-bound organizational capacities, to theorize firms' domestic employment responses following OFDI. This focused application allows us to examine how the relative scale of foreign expansion generates organizational adjustment pressures at home, without making claims about firms' overall growth direction or resource redeployment decisions.

Relative investment size and domestic employment growth

A Penrosean capacity-constraint perspective suggests that firms are not continuously constrained in their organizational capacity; rather, such constraints become salient when new activities place substantial additional demands on the organization. The international context in which OFDI projects occur places particularly strong pressure on firms' internal organizational capacity, as foreign expansion requires the integration, monitoring, and support of geographically dispersed operations; a pressure that can become especially pronounced for large or complex projects (Verbeke & Yuan, 2007). Building on this Penrosean capacity-constraint perspective (Penrose, 1959), we argue that firms' domestic employment growth depends on the relative size of a firm's OFDI. Specifically, we propose a two-step logic: (1) OFDI generates additional organizational activities at home that can require domestic hiring, and (2) this effect becomes stronger as the investment becomes larger relative to firm size.¹

First, OFDI projects generate additional organizational activities at a firm's home location. Expanding operations abroad often increases activity at headquarters, as firms must support foreign subsidiaries through a range of functions, including supplying inputs and intermediate goods, integrating new operations, and organizing cross-border workflows (Blomström & Kokko, 1998; Tüselmann, 1998). In addition, new OFDI projects require firms to establish and manage

more complex organizational arrangements, involving enhanced communication, monitoring, and information-processing demands as business operations are aligned across locations (Narula, 2017). Taken together, these dynamics explain why OFDI can create additional activity demands at home and, in turn, why firms may need to expand domestic employment to sustain effective organization. New foreign operations typically require additional effort from the domestic workforce to ensure that both existing and new activities are adequately supported. However, the extent to which this additional demand translates into new domestic hiring depends on the firm's available organizational capacity.

Second, because such organizational capacity is limited, these additional demands translate into domestic hiring more strongly when OFDI projects are large relative to firm size. As OFDI projects become larger, the volume and complexity of additional activities increase. Large investments bring particularly demanding coordination, monitoring, and integration challenges (Larsen et al., 2023). For example, relatively larger investments involve an increasing number of functions and departments that are affected by the investment project, for which more intensive cross-unit coordination and oversight are required. A firm's workforce, however, is constrained both in the amount and in the types of activities it can effectively perform. When OFDI projects are small relative to firm size, firms may be able to accommodate new demands by reshuffling responsibilities or temporarily increasing workloads within the existing workforce (Johnston & Menguc, 2007; Slangen, 2016). When, on the other hand, OFDI projects are large relative to firm size, workload limits become increasingly exposed, as new activities cannot be fully attended to, or not in a satisfactory manner (Pitelis, 2004; Tan & Meyer, 2010), thereby amplifying capacity constraints consistent with the Penrose effect. At this point, asking the existing workforce to take on further complex tasks becomes infeasible, as it risks overstretching capacity and impairing ongoing operations, and may conflict with regulatory or labor constraints. Firms may therefore respond by expanding their domestic workforce.

Consequently, adopting a Penrosean capacity-constraint perspective highlights that the organizational consequences of OFDI are not linear but intensify as investments become larger relative to firm size. Relatively large OFDI projects substantially increase coordination, monitoring, and integration demands, while simultaneously exposing the limits of firms' existing organizational capacity. As these capacity constraints become more binding, firms are more likely to expand their domestic workforce. Thus, we expect that:

Hypothesis 1: The relative size of a firm's OFDI project is positively related to its domestic employment growth and

¹ While OFDI projects typically unfold sequentially and early projects may be relatively small, our theoretical argument focuses on the domestic employment implications of the relative scale of a focal OFDI project. Accordingly, our reasoning abstracts from the sequencing of projects or early-stage dynamics, not because such processes are unimportant, but because they lie outside the scope of the mechanism we examine here. We empirically account for firms' prior host-country investment experience and return to sequencing and cumulative OFDI processes in the limitations and future research section.

the strength of that effect increases more at higher values of that relative size.

The moderating role of a firm's establishment-mode choice, its degree of state ownership, and its home-region focus

Although we expect the relationship between the relative size of OFDI projects and firms' domestic employment growth to be such that the positive effect increases more at higher values of that size, we also expect that the extent to which an OFDI project triggers domestic hiring is not uniform across firms. Specifically, the same relative investment can place very different organizational demands on firms depending on how easily additional activities can be processed within existing capacity. By drawing on a Penrosean capacity-constraint perspective, we therefore focus on three interrelated moderators—establishment-mode choice, the degree of state ownership, and home-region focus—capturing systematic differences in how firms experience and handle the additional organizational activities generated by OFDI. First, the mode by which a firm enters a foreign market, whether through a greenfield investment or an acquisition, directly shapes the volume and complexity of additional activities that must be organized at headquarters (Brouthers & Brouthers, 2000; Hennart & Park, 1993). Second, firms' capacity to absorb additional activities is also shaped by the internal bureaucracy of their organization. In particular, MNEs with greater state ownership are likely to face tighter organizational constraints than privately owned firms, as their processes tend to be more formalized and procedurally intensive (Cuervo-Cazurra & Li, 2021; Ralston et al., 2006). Third, the degree to which a firm is oriented toward its home region rather than globally affects how organizational demands are distributed across the firm's network, and thus how strongly additional activities are concentrated at the domestic headquarters (Rugman & Oh, 2013; Rugman & Verbeke, 2004). Together, these three moderators capture distinct but related sources of heterogeneity in firms' ability to absorb the additional organizational activities associated with OFDI as relative investment size increases. Greenfield investments, high levels of state ownership, and a pronounced home-region focus each make it more difficult for firms to redistribute or scale organizational capacity internally, thereby amplifying the positive relationship between relative OFDI size and domestic employment growth.

As for the first of these factors, an important choice firms need to make when entering a new foreign country is the establishment mode choice, specifically the choice between a greenfield investment and an acquisition (Slangen & Hennart, 2007). Greenfield investments require the firm to build new structures, processes, and subsidiary operations from the ground up. As a result, they generate a substantial

volume of additional organizational activities that must be organized and supported from the home base, including the establishment of communication channels, monitoring systems, and administrative routines (Narula, 2014). In contrast, acquisitions typically involve subsidiaries with pre-existing organizational structures, routines, and local staff that can assume part of the operational and administrative workload. This allows firms to distribute some of the additional activities associated with foreign expansion away from the domestic headquarters, thereby easing pressure on internal organizational capacity. While relatively large investments of any kind generate additional demands, firms undertaking acquisitions are often better able to handle these demands by reallocating responsibilities to the acquired unit or relying on its existing personnel. When relatively large OFDI projects are executed via a greenfield approach, however, these buffering mechanisms are largely absent. Consequently, domestic headquarters face substantially greater pressure to organize and sustain the new subsidiary's setup and ongoing operations. As relative investment size increases, this pressure is more likely to exceed existing organizational capacity, making additional domestic hiring a more likely response. We therefore expect that:

Hypothesis 2a: The positive effect of the relative size of a firm's OFDI project on its domestic employment growth increases even more at higher values of that relative size when the project is a greenfield rather than an acquisition.

The extent to which firms face constraints in their capacity to execute additional activities is likely also shaped by the bureaucratic characteristics of their internal organization. Specifically, MNEs with greater state ownership likely face more pronounced organizational capacity constraints than privately owned firms, as they often operate as bureaucratic organizations in which substantial managerial and employee effort is devoted to formal approval, compliance, and reporting procedures (Goldeng et al., 2008; Shleifer, 1998).² That is, state-owned enterprises (SOEs) often operate within more rigid, bureaucratic frameworks compared to privately owned firms (Cuervo-Cazurra & Li, 2021; Monteiro & Adler, 2022; Ralston et al., 2006). Their internal processes are typically more formalized, and decision-making may involve multiple layers of approval, extensive reporting requirements, and close oversight by public stakeholders (Guo et al., 2016; He et al., 2016). These features intensify organizational

² Importantly, these capacity constraints concern the organization and deployment of human and administrative effort, rather than the availability of financial resources. Even when SOEs may have access to substantial financial resources, heightened procedural requirements of SOEs absorb organizational attention and limit the flexibility with which existing staff can be redeployed.

capacity constraints, especially when firms are tasked with accommodating the additional activities generated by large-scale foreign investments. As a result, when SOEs undertake relatively large OFDI projects, they are less able to manage the resulting organizational demands through internal task reallocation alone. The heightened need to comply with formal procedures therefore makes additional domestic hiring a more likely response to the surge in organizational activities. Consequently, because they face more binding organizational capacity constraints, MNEs with greater state ownership are more likely to hire additional domestic employees than firms with less or no state ownership in response to relatively larger OFDI projects. Thus, we expect the following:

Hypothesis 2b: The positive effect of the relative size of a firm's OFDI project on its domestic employment growth increases even more at higher values of that relative size when the firm has a greater degree of state ownership.

The degree to which a firm is oriented toward its home region plays a significant role in shaping how additional activities generated by OFDI are distributed within the organization. Many MNEs exhibit a strong home-region bias in their expansion patterns (Asmussen, 2009; Rugman & Verbeke, 2004), largely caused by issues relating to compounded distance and problems of bounded rationality and bounded reliability (Verbeke & Asmussen, 2016; Verbeke & Kano, 2016). Firms with a strong home-region focus tend to rely more heavily on their domestic headquarters for organizing and supporting foreign operations and typically possess fewer established inter-subsidiary support structures distributed across multiple international locations. In contrast, more globally oriented firms are more likely to have developed organizational infrastructures that allow activities to be shared across their international network (Egelhoff, 1982; Hutzschenreuter et al., 2011), such as multinational teams, expatriation systems, standardized processes, and shared information platforms (Alfoldi et al., 2012; Persson, 2006; Schotter et al., 2017). These arrangements enable globally oriented firms to spread the organizational workload associated with foreign expansion across subsidiaries rather than concentrating it at headquarters. For home-region-focused firms, by contrast, the relative absence of such network-wide support structures means that a larger share of the additional activities generated by OFDI, such as coordination, monitoring, and production-support tasks, must be handled at the home headquarters. When OFDI projects are large relative to firm size, this concentration of organizational demands makes home-region-focused firms particularly vulnerable to organizational capacity constraints. As a result, these firms are more likely to respond by expanding domestic

employment in order to manage the heightened activity load effectively. We therefore expect that:

Hypothesis 2c: The positive effect of the relative size of a firm's OFDI project on its domestic employment growth increases even more at higher values of that relative size when the firm has a stronger home-region focus.

Methodology

Empirical setting

To test our hypotheses, we chose a context of emerging and newly industrialized economies. We do so for three reasons. First, in such a context, MNEs likely engage much less frequently in the offshoring of manufacturing jobs to foreign locations than in more economically developed countries, allowing us to focus on the complementary employment effects of OFDI that relate to additional activities (Cuervo-Cazurra et al., 2015; Liang et al., 2022). In other words, our research setting allows us to concentrate more on FDIs which are done for market-seeking, resource-seeking and strategic-asset seeking reasons, rather than efficiency-seeking reasons (Liu & Giroud, 2016; Thite et al., 2016). While there are efficiency-seeking emerging market firms in specialized industries such as the Indian software industry (Jain et al., 2015), the vast majority of emerging economy OFDI is performed for the former three reasons, as there is "little incentive" to undertake efficiency-seeking OFDI since "they themselves have abundant low-wage labor" (Moghaddam et al., 2014: 371). As such, developed-economy firms' OFDI tends to come more often with both a positive and negative effect on domestic employment, specifically when firms relocate jobs to foreign locations, but coordinate this relocation from the home location. The net employment outcome of OFDI is then the combined result of the positive and negative effect, but it is often difficult to disentangle the two empirically. Second, in the emerging economy context, we likely observe the greatest variation on our independent and moderator constructs. State ownership, in particular, is highly relevant in emerging markets (Cui & Jiang, 2012; Hong et al., 2014; Li et al., 2014), but among MNEs from such economies, we also observe high degrees of variation on our other key constructs. Some emerging market multinational enterprises (EMNEs) are seen to make large investments relative to their size, in order to catch up and compete on the world stage, while others rely on a series of relatively small investments in their expansion trajectory (Aybar & Ficici, 2009; Rui & Yip, 2008). In a similar vein, a decade of rapid growth has left some EMNEs internationalized to a high degree (Verbeke & Kano, 2015), with others remaining more home region-focused (Banalieva & Santoro,

2009; Li & Oh, 2016). Third, the organizational demands associated with managing foreign operations are particularly salient in an emerging economy context, as EMNEs often expand across large geographic, institutional, and developmental distances. Such expansions frequently require firms to organize and support activities in more developed and institutionally distinct markets, where existing routines and organizational structures may be less readily transferable, thereby intensifying the organizational demands placed on the home headquarters (Anderson et al., 2015; Jain et al., 2019).

We then choose as our main source of data the annual *Emerging Market Global Players* (EMGP) reports, which are published by the Columbia Center on Sustainable Investment (CCSI). These reports are explicitly designed to track OFDI by multinational enterprises from emerging economies and are used in prior research as a benchmark data source for studying EMNE internationalization (Filippov, 2011; Müller et al., 2017). We rely on the EMGP reports for two reasons. First, the EMGP classification of emerging economies follows CCSI's institutional definition and is not determined by the authors, allowing us to study OFDI from a clearly delineated and externally defined set of emerging-market countries. Moreover, CCSI includes a broader set of countries in its classification of emerging economies than, for example, the IMF. As such, we are able to draw inferences about domestic employment not only in recently emerging economies, but also in countries that are already more industrialized yet still classified as emerging markets. This breadth makes the data particularly suitable for examining heterogeneity in firm-level employment responses across different stages of economic development within the emerging-market category. Second, the EMGP reports provide unique, comprehensive, and detailed firm-level data, with a consistent methodology applied across all covered countries. The reports include information on firms from 13 emerging economies³ covered by the EMGP program over the period 2006–2015, as well as the individual cross-border investment projects they have undertaken. Based on these reports, we collected data on 409 OFDI projects in 77 host economies undertaken by 182 MNEs, which we supplement with both firm-level data from the year in which an OFDI is undertaken (year_t) and data from year_{t+2} . Firms that made multiple OFDIs during a given 2-year period were excluded from the sample, as we aim to unambiguously establish what the effect is of an individual OFDI project. Otherwise, it is hard to disentangle if employment growth is

related to one specific OFDI project or to possible confounding effects of other OFDI projects. The firm-level data we collected includes information on employment, sales, and asset amounts over various years, as well as information on the dispersion of sales across geographic regions. Annual reports supplement these data, while country-level information is taken from the World Bank's World Development Indicators and UNCTAD's World Investment Reports and its database on International Investment Agreements.

Dependent variable

We measure a firm's domestic employment growth as the percentage change in the number of employees working at that firm's home location. We thereby consider the number of domestic employees in the year of the OFDI and 2 years after the investment (Contini & Revelli, 1989). We focus on employment *growth* and not employment *levels*, and consider a 2-year lag to reduce potential reverse causality and endogeneity concerns. We chose a 2-year period to account for the time it takes firms to either set up new greenfield subsidiaries or integrate acquired target firms while making important decisions about hiring and retaining new staff (Dikova & Brouthers, 2016). At the same time, this period is likely short enough to capture that such hiring is related to the new OFDI project and its associated additional activities and capacity constraints. As we explain in greater detail below, we also reran the models with a firm's domestic employment growth over a 1-year and 3-year period as the dependent variable to assess the robustness of our findings. We take this information from CCSI reports and supplement this with data from firms' annual reports, press releases, and their corporate websites.

Independent variable

We measure the relative size of a firm's OFDI project as the transaction value in USD as a percentage of the firm's total annual sales (for similar measurements, see Datta, 1991; Lee & Caves, 1998). We obtained this information from CCSI reports. To be able to test whether the effect of relative investment size increases more at higher values, as predicted by H1, we also generated the squared values of that size (Dawson, 2014).

Moderating variables

A firm's establishment-mode choice is captured by a binary variable equal to 1 if the firm opts for a greenfield and 0 when it makes an acquisition (Dikova & Brouthers, 2016). To measure a firm's degree of state ownership, we consulted firms' annual reports and CCSI reports to obtain data on the percentage share held by home-country governments in

³ The home countries of the firms included in the sample are Argentina (9), Brazil (10), Chile (12), China (23), Hungary (4), India (29), Mexico (18), Poland (15), Russia (22), Slovenia (4), South Korea (11), Taiwan (8), and Turkey (17). The number in parentheses specifies the number of sample MNEs from each country.

our sample firms⁴. We measure a firm's state ownership on a continuous scale as the percentage of shares held by the government of the firm's home country. Last, to measure a firm's home-region focus, we also rely on CCSI reports, which list the proportion of total annual sales that a firm generates in each of nine supranational regions: "Developed Asia-Pacific," "East Asia," "Eastern Europe & Central Asia," "Latin America & the Caribbean," "Middle East & North Africa," "North America," "Other Europe," "South Asia," and "Sub-Saharan Africa." To measure this focus, we enter into the regression models the amount of sales that a firm generates in its home region as a percentage of total sales (cf. Hendriks et al., 2018; Uhlenbruck, 2004).

Control variables

We control for firm-specific, investment-specific, and home- and host-country factors to rule out alternative explanations for our findings. First, we control for the foreign employment growth of the firms making an OFDI, as they may opt to hire new employees in foreign locations rather than at home, to handle the new investment project (Hong et al., 2019; Lee et al., 2020). Similar to our dependent variable, we measure it by the percentage change in the number of employees working in foreign locations in the 2-year period after a firm makes an OFDI. We also control for a firm's degree of internationalization by including its "transnationality index" value as listed in CCSI reports, which is the average value of three constituent factors: foreign assets to total assets, foreign employees to total employees, and foreign sales to total sales (Goerzen & Beamish, 2003). This index better captures the depth of a firm's internationalization, whereas its regional orientation corresponds more closely to internationalization breadth (Casillas & Moreno-Menéndez, 2014). Next, to control for firm scale and baseline organizational capacity, we include firm size in our models, measured as the book value of total assets in U.S. dollars at the time of the OFDI (Lee & Makhija, 2009). While larger firms may possess greater absolute resources, firm size does not capture the extent to which such resources are underutilized; rather, it controls for differences in organizational scale that may shape firms' ability to absorb additional organizational demands. We also control for how efficiently a firm's current workforce executes its activities by including its labor productivity, measuring it as the ratio of its sales in US dollars to the number of its employees (Chen & Kamal, 2016).

We thereby also aim to control for possible differences in firms' ability to handle new activities that result from setting up OFDI projects. Additionally, as more rapidly growing firms may be used to hiring more new employees (Cho & Pucik, 2005), we use sales growth data to control for a firm's overall expansion trend by including its compound annual growth rate (CAGR) over the 3 years prior to the OFDI (i.e., year_{t-3} to year_{t-1}). We thereby also control for a firm's past and current performance, which is likely to influence its recruitment decisions. Further, we include a binary variable coded "1" if CCSI reports list a firm as active in the high- and medium-high-technology industries (using OECD's classification of manufacturing sectors by R&D intensity) (Hagedoorn & Narula, 1996). We do so to control for possible differences between firms when it comes to the extent to which they automate work processes. Furthermore, we include a binary variable coded "1" if a firm is listed on a domestic stock exchange, to control for the ease with which it can access new financing sources. For the same reason, we also enter the number of foreign stock exchanges on which a firm is listed. To account for path dependence and host-country familiarity, we include a host-country experience control capturing the amount of OFDI projects the firm had previously undertaken in the same host country in the 5 years prior to the focal investment (Belderbos et al., 2020). This measure captures host-specific embeddedness, and accumulated familiarity and learning related to host-country operations without mechanically overlapping with the scale of the focal investment. Data for the variables described above were obtained from CCSI reports and firms' annual reports.

Next, we control for the extent to which newly accessed resources are related, by including a variable coded "1" when a firm enters an industry in which it is already active (Morosini et al., 1998). Furthermore, we include a binary variable that takes the value of "1" when an OFDI is made with at least one strategic joint-venture partner, to control for the resources such partners may provide, thereby possibly alleviating constraints faced by the investing firm. This information is extracted from CCSI reports and firms' annual reports.

Additionally, we control for the geographic distance between a firm's home and host countries, using data from the Centre d'Études Prospectives et d'Informations Internationales (e.g., Liu et al., 2011). We also enter in our models the linguistic and religious distance between a firm's home and host countries, using Dow and Karunaratna's (2006) data. We do so to control for communication and coordination difficulties that come with greater distance in firm networks (Baaij & Slangen, 2013; Slangen, 2011). We also control for other country-level characteristics that potentially shape how difficult it is for firms to handle new activities across borders. First, we control for the level of

⁴ Foreign state ownership is negligible in our sample and therefore not separately identified in our empirical analysis. Our measure of state ownership focuses on the share held by the firm's home-country government. From a theoretical perspective, however, our arguments apply to state ownership more broadly, irrespective of whether the state owner is domestic or foreign.

economic development, in both the home and host countries, by including their level of GDP per capita. In a similar vein, we control for the size of both home and host country, and their market growth rates, measuring the former as the natural logarithm of the GDP and the latter as GDP growth from year_{*t*-1} to year_{*t*}. These data were obtained from the World Bank's World Development Indicators database. We also control for institutional quality in both the host and the home countries. In line with prior studies, we use a country's rule of law score to measure institutional quality (Liu et al., 2011). These scores were obtained from the World Bank's World Governance Indicators database. We also control for home-country labor-market tightness by including the yearly "Labor-market efficiency" score reported by the World Economic Forum. The index ranges from 1 (worst) to 7 (best) and captures the quality of employee–employer relations, the flexibility of wage determination, hiring-and-firing practices, redundancy costs and the incentive effects of taxation. A higher score signals that firms can hire, retain or dismiss workers with relative ease, giving employers greater staffing flexibility (Belderbos et al., 2025). Failing to control for this could blur the link between OFDI and subsequent domestic employment outcomes. Last, we control for the host country's economic dependence on a firm's home country, to account for the ease with which firms can set up new subsidiaries in host countries, and follow Duanmu (2014) in measuring it as a ratio that captures the host country's export to the focal firm's home country as a percentage of its total export to the world. Data on bilateral trade were retrieved from the IMF's Direction of Trade Statistics database.

Estimation method

We estimate the effect of the independent and control variables on a firm's domestic employment growth with ordinary least squares (OLS) regression models in STATA 17. A legitimate concern in our research design is that the estimated relationship between relative OFDI size and domestic employment growth might be contaminated by endogeneity, or unmodelled correlation between relative OFDI size and the disturbance term that would bias our slope estimates. Three channels are particularly salient in this context. First, firms with stronger underlying capabilities or growth opportunities could both undertake larger projects and hire more at home, yielding a spurious positive coefficient. Second, there might be reverse causality, whereby firms could expand their headquarters staff *before* venturing abroad, in effect enabling rather than resulting from relative OFDI size. Third, macro or industry shocks, such as commodity booms or institutional reforms, could jointly influence investment size and hiring.

To address the first concern, we restricted the sample to firms that announced only one OFDI in the 2-year

window. We also lagged the dependent variable by 2 years and included the firm's prior CAGR, labor productivity, and depth of internationalization, which accounts for time-invariant managerial quality and growth aspirations. We then replicated all models on a coarsened-exact matched (CEM) sample that pairs each firm making a large investment with a counterpart doing a small investment, identical on all observable performance predictors (e.g. Larsen & Witte, 2023). If unobservable ability alone were driving results, the treatment effect would evaporate after matching, which it does not, as results described below indicate. These results provide additional support for our hypotheses and are reported in the section "[Additional analyses](#)", where we provide more detail on the matching procedure. Regarding the second concern, we measure domestic hiring after the investment ($t + 2$) while relative investment size is measured at announcement (t). Our robustness checks using $t + 1$ and $t + 3$ windows, as well as an annual firm-year panel, show the same upward-sloping relationship, making a timing-based reversal implausible. As for the third concern, we include a comprehensive range of home- and host-country controls, and year dummies ought to capture any global shocks (e.g., the 2008–2009 crisis), while an additional analysis with a firm-year panel also employs two-way fixed effects. That is, we re-estimated the model on an annual panel that aggregates all projects announced in a given year, which yields nearly identical coefficients when both firm and year dummies are included, further attenuating concerns about omitted time-invariant heterogeneity or global shocks. More details on this procedure can be found in the "[Additional analyses](#)" section.

Our baseline specifications are designed to mitigate key endogeneity concerns by combining a forward-looking, lagged empirical structure with year fixed effects and a rich set of firm-level controls. Nevertheless, concerns may remain that unobserved, time-varying factors—such as firm-specific growth opportunities or expansion plans—could jointly influence the scale of OFDI projects and subsequent domestic employment growth. To address these remaining concerns, we implement an instrumental-variables (IV) strategy as a robustness check. Our instrument follows a Bartik (shift-share) logic and exploits exogenous variation in industry-level OFDI cycles (Goldsmith-Pinkham et al., 2020; Ni et al., 2025). Specifically, we construct an industry-year OFDI shock using project-level data by aggregating the total value of OFDI projects within each industry and year and computing the year-to-year growth rate of this aggregate. To reduce mechanical correlation between the instrument and the endogenous regressor, we compute a leave-one-out version of this industry-year growth measure that excludes the focal project from the industry aggregate. This industry-level OFDI growth rate captures changes in global investment opportunities and industry-specific expansion

dynamics that are plausibly exogenous to individual firms' domestic employment decisions. Importantly, this approach helps isolate variation in OFDI project size that is unrelated to firm-specific growth opportunities or expansion plans. In the first stage, the relative size of a firm's OFDI project is instrumented using this industry-year OFDI growth measure (and its square, where applicable). In the second stage, we estimate the effect of the instrumented relative OFDI size on subsequent domestic employment growth. The IV specifications include the same set of firm-level controls as the baseline models, along with year fixed effects. All IV regressions are estimated at the project level, consistent with the unit of analysis used throughout the paper. Standard errors are clustered at the firm level. Details on first-stage results, instrument diagnostics, and robustness checks are reported in the "Additional analyses" section.

Results

The descriptive statistics and pairwise correlations of the variables included in the regression models are shown in Table 1. On average, firms grow their domestic employment by 6.75% over a 2-year period after making an OFDI. In our sample, the median value for a firm's domestic employee base is about 30,000 staff members, so that this growth number translates to roughly 2,000 additional workers hired in that 2-year period. Yet, there is relatively high variation, as the standard deviation of 36.5 indicates that a considerable number of firms even exhibit negative growth, while some firms report much higher growth of domestic employment, up to 10,000 additional employees or more. Given that our empirical models include interaction terms to test moderation effects, we explicitly assessed the potential for multicollinearity. Following established practice in moderation analysis, we standardized and mean-centered the independent variables and moderators prior to constructing interaction terms, which substantially reduces collinearity between main effects and interaction terms. All pairwise correlations involving one of the independent measures are below 0.30. Moreover, the highest variance inflation factor (VIF) across all model specifications is 3.92, well below commonly accepted thresholds that would indicate problematic multicollinearity (Hair et al., 2006). Taken together, these diagnostics suggest that multicollinearity is unlikely to bias coefficient estimates or inference in our models.

Table 2 shows the OLS regression results of the models that test our hypotheses. H1 is tested in Models 2 and 6 and receives support, as the linear and squared term indicate that firms grow their domestic employment more when the amount committed to an OFDI project is greater relative to firm size ($\beta = 0.04$, $SE = 0.02$, $p = 0.029$, $CI_{95} = 0.00$ 0.08), and increasingly so for higher values of that size (β

$= 0.35$, $SE = 0.13$, $p = 0.008$, $CI_{95} = 0.10$ 0.60). Models 3 and 6 test H2a. To test this hypothesis, we interacted the linear and squared terms of relative investment size with the binary variable coded 1 for greenfield investments and simultaneously entered both interaction terms. Evidence for the moderation effect is obtained when the second interaction term is significantly positive (Dawson, 2014). H2a seems to receive support in Model 3 ($\beta = 0.28$, $SE = 0.14$, $p = 0.035$, $CI_{95} = 0.01$ 0.56), where the positive coefficient indicates that for each relative investment value, MNEs grow their own domestic employment even more when that investment is a greenfield rather than an acquisition. Figure 1 provides further support for this hypothesis by illustrating these regression results: Panel (B) shows the predicted relationship between relative investment size and a firm's domestic employment growth by establishment-mode choice. Figure 1 thereby suggests that MNEs that set up a greenfield subsidiary grow their own domestic employment by up to 50% for very large investments, whereas those making an acquisition grow it by up to 25% only. Next, H2b is tested in Models 4 and 6, where the interaction term between the relative size of an OFDI and a firm's degree of state ownership is significantly positive ($\beta = 0.37$, $SE = 0.14$, $p = 0.010$, $CI_{95} = 0.10$ 0.64), which lends support to the hypothesis. Panel (C) of Fig. 1 illustrates these regression results and suggests that for each relative investment value, firms with higher degrees of state ownership grow their own domestic employment more than firms without state ownership. For fully privately owned firms, the relationship is almost flat, and they tend to grow their own domestic employment by about 0 to 10% dependent on the investment size. The relationship is increasingly positive for firms with high degrees of state ownership (one standard deviation above the mean), with up to 60% domestic employment growth for very large investments that are almost as big as the firm itself. Last, Models 5 and 6 support H2c by indicating that the positive effect of relative investment size on firms' domestic employment growth increases even more at higher values of that size when the firm has a greater home-region focus ($\beta = 0.34$, $SE = 0.12$, $p = 0.005$, $CI_{95} = 0.10$ 0.568). Panel (D) of Fig. 1 indicates that MNEs with a strong home-region focus (one standard deviation above the mean) grow their own domestic employment by about 8 to 31% for investments at least bigger than half the value of their own firm, whereas the comparative figure is much lower for MNEs that are more globally oriented.

Additional analyses

We also performed several additional analyses to assess the robustness of the main regression results to alternative specifications of our sample and our variables. First, we reran the models with a firm's domestic employment growth over

a 1-year and 3-year period as the dependent variable. We also developed an index that captures the change in domestic employment as a percentage of a firm's change in total employment. Second, we reran the analyses after excluding observations for firms from Hungary, Slovenia, and South Korea, which are not classified as emerging markets by some organizations, such as the IMF, in contrast to the list developed by CCSI. Third, we performed an analysis in which we exclude observations pertaining to Chinese firms, because of their possibly unique characteristics (Peng, 2012). Fourth, in addition to our main analysis in which we control for several industry and home- and host-country characteristics, we also performed an additional analysis in which we included dummy variables for each home and host country in our sample. Although the latter method is not preferred for our main analysis because of the low observation-to-variable ratio, findings are highly consistent to those we obtained previously.

Further, we performed a set of analyses that involved different specifications of the independent and control variables. First, we measured the relative size of a firm's OFDI project as the amount of equity invested in USD as a percentage of total assets rather than total sales. Second, rather than using the share of state ownership, we adopted a binary variable equal to 1 when a firm is state owned and 0 when it is privately owned. We used cut-off values of 0%, 10%, and 25% to distinguish between these types of firms (Duanmu, 2014). All these analyses generated results that were qualitatively similar to those from our main regression models⁵.

To confirm that our project-level findings are not an artefact of tracking individual OFDI projects, we re-estimated the model on an aggregated firm-year panel. In this supplementary test each observation represents a single firm i in calendar year t ; any number of projects announced in that year are aggregated into one figure of total OFDI. While our main analyses isolate single projects to establish clean project-level effects, this firm-year aggregation serves as a complementary robustness check that captures cumulative organizational load. In practical terms, we proceeded as follows. First, we rebuilt the dataset into firm-years. For every firm-year, we summed the dollar value of all outward investments announced that year and divided this amount by the firm's total assets in the same year. The resulting OFDI-to-assets ratio is conceptually identical to the "relative investment size" used in the main analyses, but now captures the annual foreign-investment load placed on the organization rather than the load of a single project. As before, we entered both the linear term and its square to test the Penrosean effect. The dependent variable remained domestic employment

growth, measured as the percentage change in domestic employees at home between year t and $t + 2$. We retained two firm-level moderators (state ownership and home-region focus) and all control variables, now expressed in firm-year form. Because the greenfield-versus-acquisition distinction is meaningful only at the project level, establishment mode necessarily drops out of this specification. We estimated two-way fixed-effects OLS (firm and year dummies) with standard errors clustered by firm, although random-effects checks yielded virtually identical coefficients. The results echo the original findings. The linear OFDI-to-assets term is positive and significant ($\beta = 0.05$, $p = 0.01$), while its square is also positive and highly significant ($\beta = 0.47$, $p < 0.01$). Plotting the marginal effects shows the familiar flat-then-steep curve, whereby domestic hiring scarcely moves until annual OFDI tops roughly 10% of assets, after which it accelerates sharply. The moderator terms also replicate earlier findings: domestic employment growth is markedly stronger for firms with higher state ownership and for those focused on their home region. The only element we can no longer test is H2a, the greenfield/acquisition moderation, because this detail is lost in aggregation. Taken together, this firm-year analysis indicates that the Penrosean mechanism is robust to the level of aggregation, whether we focus on single OFDI projects or the yearly sum of initiatives, loading more foreign activity onto a constrained resource base pushes firms to hire more employees at home⁶.

Additionally, we performed an analysis aimed at verifying whether it is indeed a firm's establishment-mode choice, and not its entry-mode choice, that co-shapes domestic employment growth. That decision between a joint venture and a wholly owned subsidiary represents a related, although distinct, choice that firms need to make when entering a foreign country (Brouthers & Hennart, 2007; Dikova & Van Wittenloostuijn, 2007). We therefore included a binary variable in our models equal to 1 when the OFDI was a joint venture. This analysis, however, yielded insignificant results. That finding provides further evidence that it is indeed one of the key variables of our theoretical framework that exerts an important moderating effect, rather than alternative conceptualizations.

Coarsened exact matching and IV models

To ensure that relatively larger and relatively smaller FDIs are comparable and to limit possible bias associated with relative investment size being a reflection of firm performance, we test the robustness of our results on a matched sample (Larsen & Witte, 2023; Obukhova & Tian, 2024).

⁵ The regression results of these analyses are available from the authors upon request.

⁶ Full results of this additional analysis are available from the authors upon request.

Table 1 Descriptive statistics and correlations

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Firm's domestic employment growth	6.75	36.5																			
2. Relative investment size	0.40	0.82	0.14																		
3. Firm investment is greenfield	0.60	0.49	0.00	-0.05																	
4. Firm's home region focus	64.0	27.2	0.02	-0.04	-0.07																
5. State-ownership percentage	15.6	32.2	0.02	0.02	-0.24	0.22															
6. Firm's foreign empl. growth	19.8	48.8	0.12	0.06	0.10	0.01	-0.09														
7. Firm size	28666	58039	-0.11	-0.04	-0.30	0.15	0.47	0.16													
8. Firm's depth of international.	41.8	23.1	-0.05	-0.04	0.13	-0.30	-0.36	-0.16	-0.26												
9. Firm's labor productivity	13.4	28.3	-0.05	-0.02	-0.02	-0.16	-0.13	0.17	-0.19	0.03											
10. Firm's prior CAGR	0.02	0.05	0.13	-0.02	0.01	0.09	-0.17	0.11	-0.02	0.16	-0.03										
11. Firm has domestic listing	0.81	0.39	-0.02	0.10	0.14	-0.17	-0.26	0.11	-0.11	0.12	0.06	0.03									
12. Number of foreign listings	0.46	0.50	-0.13	0.04	-0.01	-0.21	-0.21	0.01	0.18	0.29	-0.07	0.21	0.33								
13. Firm is in high-tech industry	0.35	0.48	-0.01	0.00	-0.03	-0.16	-0.13	-0.04	-0.21	0.10	0.36	-0.27	-0.10	-0.20							
14. Prior invest. in host country	1.05	1.17	-0.05	0.15	0.05	0.10	0.20	0.10	0.22	0.18	0.09	0.13	0.08	0.18	0.05						
15. Related investment	0.87	0.33	-0.04	0.00	0.06	0.09	-0.02	0.09	0.05	-0.02	-0.07	0.10	-0.04	0.16	-0.08	0.13					
16. Investment with partner	0.19	0.39	0.02	0.06	0.38	0.14	-0.02	0.17	-0.02	-0.04	-0.11	0.15	0.07	-0.02	-0.14	0.08	0.05				
17. Geographic distance	5457	4116	0.06	0.08	0.00	-0.16	0.14	-0.07	-0.02	-0.06	0.06	-0.11	-0.16	-0.11	0.02	-0.10	-0.06	-0.08			
18. Linguistic distance	0.73	0.34	0.00	0.14	-0.04	-0.03	0.27	-0.10	0.12	-0.18	-0.01	-0.14	-0.12	0.00	0.06	-0.15	0.05	0.06	0.18		
19. Religious distance	0.37	0.36	0.12	0.14	-0.24	-0.00	0.45	-0.10	0.15	-0.13	0.02	-0.16	-0.30	-0.12	0.16	-0.09	0.06	-0.02	0.34	0.45	
20. Home GDP per capita	6759	3622	0.01	0.11	0.05	-0.16	-0.47	0.10	-0.34	0.42	0.24	0.04	0.11	0.16	0.29	0.05	0.14	-0.04	-0.09	-0.13	0.12
21. Host GDP per capita	13643	12336	-0.08	-0.10	0.45	-0.15	-0.13	-0.01	-0.17	0.12	0.14	-0.08	0.09	0.21	0.16	0.08	0.13	-0.05	0.07	0.17	-0.09
22. Home-country size	27.1	1.13	0.08	0.06	-0.03	-0.09	0.44	-0.06	0.42	-0.33	-0.20	-0.02	0.08	0.05	-0.25	0.09	0.07	-0.01	0.25	0.24	0.22
23. Host-country size	27.3	2.12	0.00	0.00	0.29	-0.23	-0.30	-0.05	-0.30	0.22	0.09	-0.11	0.19	0.12	0.23	0.18	0.06	-0.12	0.19	0.15	0.01
24. Home-country GDP growth	4.19	4.25	0.01	-0.01	-0.08	0.02	0.47	0.03	0.23	-0.22	-0.03	0.01	-0.10	-0.03	-0.09	0.05	-0.16	-0.05	0.13	0.10	0.25
25. Host-country GDP growth	3.99	4.34	0.16	0.02	-0.30	0.04	0.13	0.08	0.14	-0.15	-0.10	0.02	-0.06	-0.04	-0.05	0.14	-0.12	-0.04	-0.07	-0.06	0.17
26. Home-country rule of law	-0.03	0.75	0.08	0.21	-0.13	0.17	-0.15	0.00	-0.29	0.15	0.14	-0.03	-0.02	-0.05	0.28	0.03	0.12	-0.01	-0.14	-0.05	0.20
27. Host-country rule of law	0.42	1.07	-0.06	-0.07	0.42	-0.13	-0.11	0.02	-0.16	0.13	0.09	-0.02	0.16	0.19	0.17	0.11	0.13	0.03	0.06	0.25	-0.03
28. Home labor market efficiency	4.30	0.62	0.05	0.12	0.06	-0.15	-0.22	0.10	-0.20	0.25	0.18	0.02	0.11	0.15	0.20	0.03	0.05	-0.02	-0.08	-0.12	-0.10
29. Host-country economic dependence on home country	0.05	0.07	0.01	-0.04	0.09	0.10	0.33	0.11	0.30	-0.28	-0.09	0.01	-0.19	-0.10	0.02	0.21	0.09	0.09	-0.23	-0.03	-0.02
			20	21	22	23	24	25	26	27	28										
21. Host GDP per capita			0.14																		
22. Home-country size			-0.63	0.00																	
23. Host-country size			0.26	0.67	-0.12																
24. Home-country GDP growth			-0.25	0.01	0.34	-0.14															
25. Host-country GDP growth			-0.11	-0.53	0.06	-0.38	0.32														
26. Home-country rule of law			0.62	-0.07	-0.64	0.06	-0.22	-0.02													
27. Host-country rule of law			0.15	0.89	0.00	0.61	0.01	-0.52	-0.02												
28. Home labor market efficiency			0.40	0.05	-0.25	0.01	-0.18	0.03	0.55	0.20											
29. Host-country economic dependence on home country			-0.30	0.05	0.32	-0.08	0.24	0.08	-0.20	0.02	-0.03										

Correlations greater than |0.10| are significant at $p < 0.05$, while those greater than |0.15| are significant at $p < 0.01$

Specifically, we use coarsened exact matching (CEM) to match firms with relatively large and relatively small FDIs on all control variables associated with such performance. First, we coarsen the relative size of a firm's investment into two categories, small and large, based on the median. Then, we include the matching variables associated with firm performance, which are a firm's labor productivity, firm size, a firm's prior compound annual growth rate, and whether a firm is listed on domestic and foreign stock exchanges. We match exactly for binary outcomes (i.e., two bins), while we use the Stata default algorithm (Sturges) for continuous variables. This decreased the sample size to 363. Table 3 shows the results of the OLS regression analysis on the matched sample. As can be seen in this table, the models continue to indicate support for the hypothesized effects related to the relative size of a firm's OFDI project.

As an additional robustness check, we estimate instrumental-variables (IV) models using a Bartik (shift-share) instrument based on industry-level OFDI cycles. Table 4 reports the corresponding first- and second-stage results. In the first stage, the relative size of an OFDI project is strongly predicted by the industry-year OFDI growth measure used as the instrument. The associated Kleibergen–Paap rk Wald F statistics exceed conventional thresholds for weak instruments, indicating that the instrument is sufficiently relevant for identification. Because the IV specification is exactly identified, formal tests of overidentifying restrictions are not applicable. The second-stage estimates confirm the main

findings from the baseline models. The relationship between relative OFDI size and subsequent domestic employment growth remains positive and concave, and the magnitude of the estimated effects is comparable to those obtained in the non-IV specifications. This similarity suggests that the baseline results are unlikely to be driven by reverse causality or omitted factors that jointly affect firms' investment scale and domestic employment outcomes. To further assess the plausibility of the exclusion restriction, we conduct a set of placebo and pre-trend tests. Specifically, we re-estimate the IV specification using domestic employment growth measured in the period prior to the OFDI project as the dependent variable. In these placebo regressions, the instrument does not exhibit a statistically significant association with pre-investment employment changes, providing reassurance that the instrument is not capturing pre-existing firm-level growth trends. In addition, balance checks show that the instrument is not systematically correlated with observable firm characteristics that predict domestic employment growth. Taken together, these diagnostics support the validity of the Bartik instrument and reinforce the interpretation that the observed employment effects reflect organizational adjustment associated with large relative OFDI projects rather than spurious correlations. As with all IV approaches, the results should be interpreted as local to the variation induced by the instrument; nonetheless, the IV estimates provide consistent support for the core arguments developed in our study.

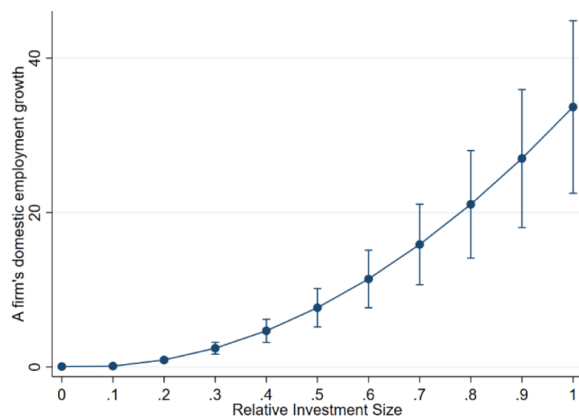
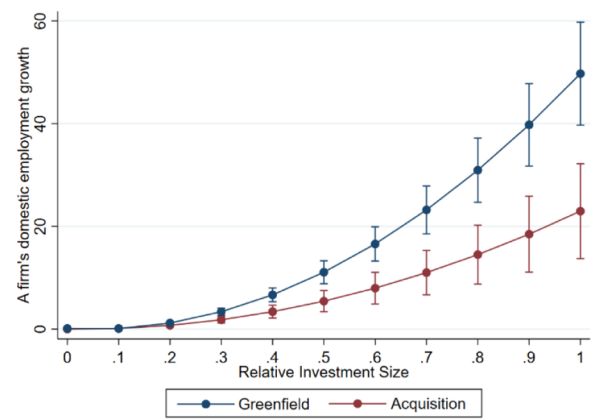
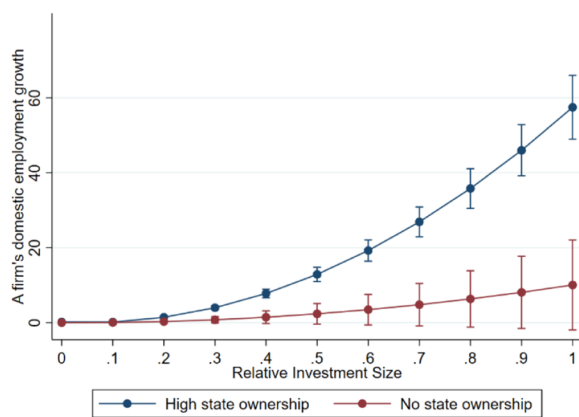
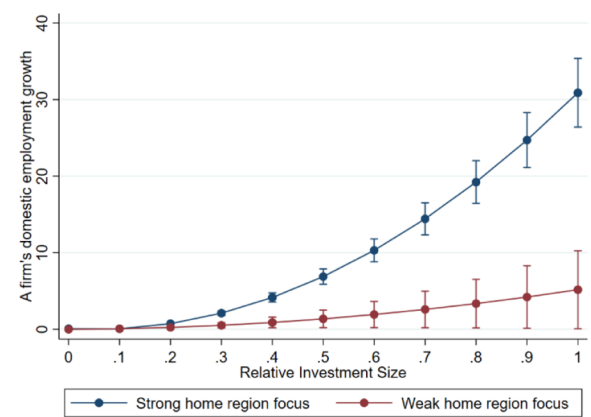
Table 2 OLS estimates of firms' domestic employment growth

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Relative investment size (RIS)	–	0.04 (.02) [.029]	0.04 (.02) [.038]	0.05 (.02) [.026]	0.04 (.02) [.035]	0.05 (.02) [.025]
RIS squared (H1)	–	0.35 (.13) [.008]	0.38 (.13) [.005]	0.44 (.13) [.001]	0.43 (.13) [.001]	0.51 (.14) [.000]
RIS x Investment is a greenfield	–	–	0.15 (.08) [.070]	–	–	0.14 (.08) [.080]
RIS squared x Investment is a greenfield (H2a)	–	–	0.28 (.14) [.035]	–	–	0.24 (.12) [.042]
RIS x Firm's state ownership	–	–	–	0.39 (.13) [.003]	–	0.24 (.10) [.016]
RIS squared x Firm's state ownership (H2b)	–	–	–	0.37 (.14) [.010]	–	0.26 (.12) [.027]
RIS x Firm's home region focus	–	–	–	–	0.44 (.13) [.001]	0.30 (.13) [.023]
RIS squared x Firm's home region focus (H2c)	–	–	–	–	0.34 (.12) [.005]	0.36 (.13) [.006]
Investment is a greenfield	– 0.02 (.07) [.730]	– 0.02 (.07) [.808]	– 0.04 (.07) [.535]	– 0.02 (.07) [.750]	– 0.04 (.07) [.502]	– 0.06 (.07) [.380]
Firm's percentage of state ownership	0.24 (.10) [.016]	0.21 (.10) [.035]	0.21 (.10) [.030]	0.29 (.10) [.004]	0.21 (.10) [.033]	0.24 (.10) [.016]
Firm's home region focus	0.05 (.07) [.455]	0.08 (.07) [.255]	0.07 (.07) [.301]	0.07 (.07) [.324]	0.02 (.07) [.760]	0.07 (.07) [.311]
Firm's foreign employment growth	0.24 (.18) [.170]	0.25 (.18) [.161]	0.25 (.18) [.174]	0.24 (.18) [.180]	0.25 (.18) [.165]	0.24 (.17) [.165]
Firm size	– 0.08 (.06) [.168]	– 0.09 (.06) [.144]	– 0.08 (.06) [.201]	– 0.08 (.06) [.205]	– 0.10 (.06) [.099]	– 0.09 (.06) [.128]
Firm's depth of internationalization	– 0.04 (.07) [.588]	– 0.06 (.10) [.545]	– 0.06 (.10) [.533]	– 0.07 (.10) [.480]	– 0.07 (.10) [.477]	– 0.06 (.10) [.525]
Firm's labor productivity	0.23 (.06) [.000]	0.23 (.06) [.000]	0.23 (.06) [.000]	0.24 (.06) [.000]	0.23 (.06) [.000]	0.22 (.06) [.000]
Firm's prior compound annual growth rate	0.16 (.06) [.006]	0.17 (.06) [.006]	0.16 (.06) [.005]	0.17 (.06) [.006]	0.16 (.06) [.006]	0.15 (.06) [.010]
Firm is listed on domestic stock exchange	0.04 (.08) [.590]	0.02 (.08) [.845]	0.03 (.08) [.645]	0.04 (.08) [.631]	0.05 (.08) [.535]	0.05 (.08) [.577]
Firm's number of foreign stock listings	– 0.14 (.06) [.020]	– 0.16 (.07) [.015]	– 0.16 (.07) [.017]	– 0.16 (.06) [.009]	– 0.18 (.06) [.003]	– 0.18 (.06) [.003]
Firm's prior investments in the host country	– 0.04 (.05) [.421]	– 0.03 (.05) [.488]	– 0.04 (.05) [.399]	– 0.03 (.05) [.470]	– 0.04 (.05) [.370]	– 0.04 (.05) [.366]
Investment is in high-tech industry	0.02 (.07) [.718]	0.03 (.07) [.611]	0.03 (.07) [.595]	0.02 (.07) [.710]	0.03 (.07) [.605]	0.03 (.07) [.630]
Investment is in related industry	– 0.04 (.06) [.531]	– 0.00 (.06) [.941]	– 0.00 (.06) [.956]	– 0.00 (.07) [.940]	– 0.00 (.06) [.923]	– 0.01 (.06) [.844]
Investment done with strategic partner	0.02 (.06) [.795]	0.00 (.07) [.970]	– 0.00 (.06) [.951]	0.00 (.06) [.931]	0.01 (.06) [.877]	0.01 (.06) [.860]
Geographic distance	0.03 (.06) [.585]	0.02 (.06) [.755]	0.02 (.06) [.729]	0.01 (.06) [.855]	0.03 (.06) [.580]	0.02 (.06) [.701]
Linguistic distance	– 0.03 (.06) [.601]	– 0.06 (.06) [.333]	– 0.07 (.06) [.291]	– 0.04 (.06) [.477]	– 0.05 (.06) [.355]	– 0.06 (.06) [.305]
Religious distance	0.07 (.08) [.386]	0.09 (.08) [.285]	0.11 (.08) [.188]	0.09 (.09) [.289]	0.09 (.09) [.295]	0.08 (.08) [.317]
Home-country GDP per capita	0.06 (.11) [.555]	0.04 (.10) [.690]	0.03 (.10) [.750]	0.04 (.10) [.671]	0.05 (.10) [.540]	0.03 (.10) [.755]
Host-country GDP per capita	0.02 (.13) [.818]	0.04 (.12) [.711]	0.03 (.13) [.822]	0.04 (.13) [.775]	0.06 (.13) [.647]	0.06 (.13) [.626]
Home-country size	0.41 (.10) [.000]	0.38 (.11) [.001]	0.38 (.11) [.001]	0.41 (.11) [.000]	0.42 (.10) [.000]	0.41 (.11) [.000]

Table 2 (continued)

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Host-country size	− 0.02 (.07) [.733]	− 0.01 (.07) [.845]	− 0.00 (.07) [.950]	− 0.02 (.07) [.759]	− 0.02 (.07) [.777]	− 0.01 (.07) [.849]
Home-country GDP growth	0.09 (.09) [.297]	0.10 (.08) [.222]	0.10 (.08) [.201]	0.09 (.08) [.271]	0.08 (.08) [.325]	0.07 (.07) [.330]
Host-country GDP growth	0.11 (.07) [.098]	0.13 (.07) [.055]	0.12 (.07) [.096]	0.14 (.06) [.024]	0.14 (.06) [.022]	0.12 (.06) [.051]
Home-country rule of law	0.08 (.08) [.325]	0.08 (.08) [.328]	0.08 (.08) [.317]	0.11 (.09) [.210]	0.11 (.09) [.207]	0.13 (.09) [.140]
Host-country rule of law	0.09 (.12) [.494]	0.09 (.12) [.485]	0.09 (.12) [.450]	0.09 (.11) [.443]	0.09 (.11) [.438]	0.09 (.12) [.490]
Home-country labor market efficiency	0.07 (.10) [.487]	0.08 (.11) [.469]	0.07 (.11) [.491]	0.06 (.11) [.566]	0.08 (.11) [.471]	0.07 (.11) [.495]
Host country's economic dependence on home country	0.04 (.06) [.450]	0.04 (.06) [.448]	0.03 (.06) [.628]	0.03 (.06) [.651]	0.04 (.06) [.455]	0.03 (.06) [.608]
F-statistic	2.45 [.000]	2.81 [.000]	3.01 [.000]	3.19 [.000]	3.40 [.000]	3.48 [.000]
R ²	0.17	0.18	0.19	0.20	0.21	0.21

Intercept and year dummies included but not shown; robust standard errors in parentheses; $N = 409$

**Panel (A)****Panel (B)****Panel (C)****Panel (D)****Fig. 1** Graphical representation of regression results

Discussion

In this study, we developed a theoretically grounded explanation of how the relative size of a firm's OFDI project shapes domestic employment outcomes, and how this relationship is contingent on establishment mode, regional orientation, and state ownership. Drawing on a Penrosean capacity-constraint perspective, we argue that foreign expansion generates additional organizational activities that must be accommodated within the firm's existing workforce. When OFDI projects are large relative to firm size, these additional activity demands place increasing pressure on firms' limited organizational capacity, making it more difficult to absorb them through internal task reallocation alone. As these capacity constraints become binding, firms respond by expanding domestic employment to sustain effective organization of foreign operations. Consistent with this logic, our results show that domestic employment growth increases with the relative size of OFDI projects, with particularly strong effects for larger investments and under organizational conditions that further constrain internal capacity. That is, our findings indicate that this effect co-depends on the type of project as well as firm-level characteristics, as the strongest domestic employment gains are observed when firms make relatively large greenfield investments and when large projects are carried out by more home region-oriented firms and by SOEs.

Policy insights and implications

Given the important role that MNEs play in providing employment, many governments will take interest in understanding the relationship between OFDI and changes to domestic employment. This applies particularly to governments of emerging and developing economies. Despite substantial progress in economic development in recent years, many emerging and developing countries have to cover a lot of ground if they are to fulfill the Sustainable Development Goals (SDGs) (Van Tulder et al., 2021). Among these, SDG 8 (decent work and economic growth) places particular emphasis on the creation of productive employment opportunities. To make further progress, raising employment will likely be key, as it is a way for citizens to secure a living and provide for their families. Indeed, the remarkable progress some countries have made on poverty targets can in no small part be attributed to the creation of new jobs in a time of relative economic prosperity (Huang et al., 2010). Our findings indicate that MNEs could play an important role in this process, as they provide employment opportunities at home in direct support of SDG8 (Van Zanten & Van Tulder, 2018). That is, these findings suggest that OFDI activity of firms has the potential to contribute to progress toward SDG

8, which promotes economic growth, full and productive employment, and decent work for all.

Many governments stimulate their firms to internationalize in order to realize development benefits at home (Buckley, 2018; Iammarino, 2018; Torres et al., 2016), yet the design, scope, and objective of OFDI support policies differ across countries. While developed economies have long relied on fiscal and financial instruments such as export credits, investment guarantees, and project insurance to actively promote OFDI, emerging economies have historically placed stronger emphasis on attracting inward FDI as a development strategy. At the same time, several emerging economies have increasingly adopted explicit OFDI promotion policies as their firms internationalized, exemplified by initiatives such as China's "Go Out" policy (Luo et al., 2010). These policies are often motivated by a mix of objectives, including securing access to natural resources, acquiring strategic assets, and enhancing firms' global competitiveness, alongside broader economic and developmental considerations (Buckley et al., 2010, 2020; Sauvart, 2021). Our findings indicate that OFDI can also generate meaningful domestic employment effects, suggesting that a more deliberate and differentiated policy approach toward OFDI, particularly in emerging economies, may be warranted.

The policy implications of our findings should, however, be interpreted in light of the empirical context of the study. Our analysis focuses on emerging market multinational enterprises, for which employment generation often remains a central policy objective and organizational capacity constraints may be particularly salient. In more advanced economies, where firms operate in different institutional environments and labor market conditions, governments may place relatively greater weight on other objectives, such as innovation, productivity growth, or strategic autonomy. Moreover, outward FDI is typically pursued for multiple, sometimes competing, policy goals. While our findings highlight domestic employment as an often-overlooked benefit, policymakers will need to balance this objective against other considerations, including fiscal costs, national security concerns, and the potential downsides associated with international expansion. Accordingly, the policy insights derived here are best understood as contingent and context-dependent, rather than universally prescriptive.

These considerations also unfold against a broader policy backdrop of rising protectionism, with governments increasingly screening outward FDI in sectors deemed critical to national security such as semiconductors, artificial intelligence, and defense technologies as documented in UNCTAD's World Investment Report 2025. While such measures are often justified on national security grounds, our findings suggest that they may carry unintended domestic employment consequences if applied too broadly. Policymakers therefore face a trade-off between safeguarding national

security and preserving the economic benefits of OFDI. A more nuanced approach would involve targeted screening focused on genuinely sensitive technologies, combined with differentiated treatment of OFDI projects that are unlikely to entail strategic risks but have strong potential to stimulate domestic employment through complementary activities.

Yet, policymakers often treat OFDI as a single-dimensional lever, in line with the idea that “more dollars abroad equals more prosperity at home”. Our findings show that this intuition may not be fully right. The employment dividend materializes not because firms spend a lot abroad in absolute terms, but because certain kinds of OFDI projects overload the firm’s existing capacity and force it to expand the domestic workforce. Against this backdrop, we translate the underlying mechanism into a set of illustrative policy takeaways. Figure 2 provides a visual summary of this mechanism and the associated policy implications. It illustrates how outward FDI generates additional organizational activities that strain firms’ internal capacity and lead to domestic hiring, with stronger effects when investments are large relative to firm size. The figure also highlights how establishment mode, state ownership, and geographic orientation shape the magnitude of these effects. Building on this overview, we now discuss the key policy implications in turn.

First, our evidence shows that the trigger point for hiring is not the absolute dollar value of an investment but its *size relative to* the firm that undertakes it. A US \$200 million OFDI project launched by a US \$2 billion firm places modest strain on headquarters, but the same investment by an US \$800 million firm pushes every ledger, server and back-office team to its limit, and that is when domestic hiring begins. Once a project climbs above roughly ten to 20% of the investor’s annual sales or assets, the load on headquarters outstrips existing human resources and prompts new domestic recruitment. Policy regimes that currently reward sheer magnitude could therefore benefit from a simple recalibration: introduce a project-to-firm-size threshold into measures such as loan-guarantees and tax-credit formulas so that scarce fiscal resources are channeled toward projects empirically proven to yield the largest employment benefits at home.

Establishment mode is the second lever. Large greenfield ventures impose the entire burden of subsidiary design, staffing and systems integration onto a firm’s headquarters, whereas acquisitions purchase a pre-fabricated organizational structure abroad. The result is that, at any given relative size, a greenfield triggers markedly more domestic hiring than an acquisition. Governments that regard job creation as a central objective may therefore consider prioritizing performance-contingent measures, such as interest-rate rebates or accelerated depreciation allowances, for sizeable greenfield deals.

A third lesson centers on the distinctive role of SOEs. Because SOEs operate within more rigid administrative structures, their managerial and human resources are consumed more rapidly during foreign expansion. Consequently, they exhibit an even stronger propensity to enlarge their home-country workforce. Yet the same procedural layers that create this propensity can also stifle its realization if approvals for new domestic positions are delayed. One possible policy response could involve a ‘fast-track’ channel that ties HR authorizations directly to outward-investment projects, coupled with performance metrics that reward SOE executives for verified domestic employment gains rather than for foreign asset growth alone. While particularly relevant for SOEs, similar considerations may apply more broadly to firms facing internal rigidities in reallocating organizational resources.

Fourth, the geography of expansion matters. Firms that internationalize primarily within their home region cannot redistribute coordination tasks across an extensive trans-continental network, so that the burden is concentrated at a firm’s headquarters, amplifying the hiring response. Governments may exploit this feature by sequencing incentives: offer the most generous terms for first-wave regional projects, and taper support as firms become truly global.

Finally, our study highlights the importance of measurement. National FDI flow tables are ill-suited to capturing the heterogeneity we observe: two projects of identical value can differ dramatically in their domestic employment effects depending on relative size and project characteristics such as the establishment mode. Firm-level dashboards that track domestic headcount changes for every incentive recipient, for example cross-checked against tax files, would let government agencies compute a “domestic employment multiplier” for each project-to-firm ratio and associated features such as establishment mode, providing a more fine-grained level of insight.

Framing outward-investment support explicitly in terms of decent work (SDG 8) positions incentive programs within the broader sustainable-development agenda and mitigates concerns that OFDI merely exports jobs. With these five guidelines, we aim to demonstrate how a nuanced, firm-level understanding of Penrosean capacity constraints can transform OFDI promotion from a blunt financial tool into a targeted mechanism for inclusive domestic growth.

Literature contributions

Our study contributes to the literature on the employment effects of OFDI. In line with previous work (Hong et al., 2019; Lee et al., 2020), we build on the idea that OFDI can generate domestic employment by giving rise to additional activities at the home base, such as production support, monitoring, integration, and organizational tasks associated

Table 3 Regression on a CEM sample

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Relative investment size (RIS)	–	0.06 (.03) [.040]	0.06 (.03) [.050]	0.06 (.03) [.038]	0.07 (.03) [.016]	0.07 (.03) [.014]
RIS squared (H1)	–	0.40 (.15) [.010]	0.40 (.16) [.016]	0.42 (.17) [.015]	0.49 (.17) [.004]	0.50 (.17) [.003]
RIS x Investment is a greenfield	–	–	0.21 (.08) [.007]	–	–	0.21 (.08) [.009]
RIS squared x Investment is a greenfield (H2a)	–	–	0.25 (.10) [.012]	–	–	0.25 (.10) [.012]
RIS x Firm's state ownership	–	–	–	0.23 (.11) [.036]	–	0.24 (.10) [.017]
RIS squared x Firm's state ownership (H2b)	–	–	–	0.26 (.13) [.040]	–	0.27 (.13) [.031]
RIS x Firm's home region focus	–	–	–	–	0.27 (.13) [.038]	0.26 (.13) [.042]
RIS squared x Firm's home region focus (H2c)	–	–	–	–	0.34 (.15) [.020]	0.35 (.15) [.018]
Investment is a greenfield	– 0.04 (.08) [.630]	– 0.04 (.08) [.605]	– 0.11 (.08) [.171]	– 0.04 (.08) [.615]	– 0.05 (.08) [.505]	– 0.12 (.08) [.099]
Firm's percentage of state ownership	0.19 (.11) [.074]	0.25 (.11) [.022]	0.25 (.11) [.022]	0.23 (.12) [.048]	0.24 (.11) [.034]	0.21 (.12) [.073]
Firm's home region focus	0.09 (.07) [.220]	0.13 (.08) [.102]	0.13 (.07) [.080]	0.14 (.07) [.061]	0.05 (.08) [.485]	0.05 (.08) [.490]
Firm's foreign employment growth	0.18 (.18) [.310]	0.16 (.17) [.351]	0.17 (.17) [.312]	0.17 (.17) [.331]	0.17 (.17) [.288]	0.16 (.17) [.344]
Firm size	– 0.07 (.07) [.321]	– 0.07 (.07) [.305]	– 0.08 (.07) [.297]	– 0.08 (.06) [.211]	– 0.08 (.07) [.272]	– 0.09 (.06) [.144]
Firm's depth of internationalization	– 0.04 (.08) [.555]	– 0.02 (.09) [.822]	– 0.06 (.12) [.615]	– 0.03 (.12) [.815]	– 0.02 (.13) [.870]	– 0.05 (.12) [.666]
Firm's labor productivity	0.15 (.08) [.057]	0.18 (.09) [.051]	0.19 (.10) [.051]	0.19 (.11) [.070]	0.19 (.11) [.066]	0.19 (.11) [.071]
Firm's prior compound annual growth rate	0.17 (.07) [.021]	0.17 (.07) [.021]	0.16 (.07) [.027]	0.17 (.06) [.008]	0.17 (.06) [.008]	0.17 (.07) [.020]
Firm is listed on domestic stock exchange	0.07 (.09) [.390]	0.07 (.08) [.395]	0.04 (.08) [.637]	0.05 (.08) [.589]	0.07 (.09) [.390]	0.08 (.08) [.321]
Firm's number of foreign stock listings	– 0.12 (.07) [.101]	– 0.14 (.07) [.058]	– 0.14 (.07) [.051]	– 0.13 (.07) [.072]	– 0.14 (.07) [.050]	– 0.15 (.07) [.041]
Firm's prior investments in the host country	– 0.02 (.04) [.610]	– 0.06 (.04) [.218]	– 0.06 (.04) [.225]	– 0.06 (.05) [.281]	– 0.06 (.05) [.270]	– 0.07 (.05) [.223]
Investment is in high-tech industry	0.09 (.07) [.210]	0.05 (.07) [.481]	0.08 (.07) [.277]	0.06 (.07) [.388]	0.05 (.07) [.477]	0.08 (.07) [.284]
Investment is in related industry	– 0.06 (.06) [.315]	– 0.07 (.06) [.283]	– 0.07 (.07) [.291]	– 0.07 (.07) [.301]	– 0.08 (.06) [.231]	– 0.08 (.06) [.230]
Investment done with strategic partner	0.03 (.07) [.667]	0.03 (.07) [.643]	0.05 (.07) [.480]	0.04 (.07) [.585]	0.03 (.07) [.660]	0.05 (.07) [.461]
Geographic distance	0.06 (.07) [.408]	0.03 (.07) [.655]	0.02 (.07) [.744]	0.04 (.07) [.570]	0.01 (.07) [.870]	0.01 (.08) [.898]
Linguistic distance	– 0.02 (.07) [.790]	– 0.00 (.07) [.951]	– 0.00 (.07) [.980]	– 0.01 (.08) [.897]	– 0.01 (.07) [.886]	– 0.01 (.07) [.877]
Religious distance	0.04 (.09) [.620]	0.04 (.09) [.633]	0.01 (.09) [.877]	0.01 (.09) [.911]	0.01 (.09) [.901]	0.03 (.09) [.711]
Home-country GDP per capita	0.09 (.11) [.377]	0.06 (.11) [.555]	0.06 (.11) [.566]	0.06 (.11) [.571]	0.06 (.11) [.571]	0.05 (.11) [.587]
Host-country GDP per capita	0.02 (.13) [.856]	0.02 (.13) [.844]	0.03 (.13) [.821]	0.05 (.13) [.690]	0.05 (.13) [.687]	0.06 (.13) [.633]
Home-country size	0.34 (.12) [.003]	0.43 (.12) [.001]	0.47 (.13) [.000]	0.46 (.13) [.000]	0.45 (.12) [.000]	0.48 (.13) [.000]

Table 3 (continued)

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Host-country size	– 0.10 (.09) [.290]	– 0.09 (.09) [.315]	– 0.06 (.09) [.501]	– 0.08 (.09) [.340]	– 0.07 (.09) [.431]	– 0.08 (.09) [.345]
Home-country GDP growth	0.08 (.09) [.397]	0.06 (.09) [.490]	0.05 (.09) [.570]	0.06 (.09) [.481]	0.06 (.09) [.475]	0.05 (.09) [.566]
Host-country GDP growth	0.19 (.08) [.020]	0.20 (.08) [.013]	0.15 (.08) [.061]	0.20 (.08) [.014]	0.18 (.08) [.029]	0.13 (.08) [.093]
Home-country rule of law	0.10 (.10) [.328]	0.12 (.10) [.225]	0.12 (.10) [.231]	0.13 (.10) [.222]	0.12 (.10) [.241]	0.11 (.11) [.305]
Host-country rule of law	0.14 (.16) [.377]	0.13 (.16) [.431]	0.17 (.16) [.301]	0.11 (.16) [.494]	0.12 (.15) [.446]	0.18 (.16) [.233]
Home-country labor market efficiency	0.05 (.14) [.750]	0.06 (.14) [.725]	0.05 (.14) [.723]	0.05 (.14) [.741]	0.05 (.14) [.712]	0.04 (.14) [.780]
Host country's economic dependence on home country	0.02 (.11) [.845]	0.06 (.12) [.631]	0.06 (.12) [.640]	0.08 (.12) [.503]	0.06 (.12) [.611]	0.06 (.12) [.616]
F-statistic	1.93 [.007]	2.10 [.002]	2.30 [.000]	2.37 [.000]	2.38 [.000]	2.45 [.000]
R ²	0.17	0.20	0.22	0.22	0.22	0.24

Intercept and year dummies included but not shown; Robust standard errors in parentheses; $N = 363$

with foreign expansion. However, rather than focusing on the absolute amount of OFDI, we argue that the extent to which additional activities must be performed, and thus the magnitude of the domestic employment response, depends on the *relative* size of an OFDI project compared to firm size. Relative investment size more directly captures the extent to which foreign expansion strains firms' ability to organize and sustain these additional activities with their existing workforce, and thus whether domestic employment expansion becomes necessary. The literature on the development effects of OFDI may benefit from this perspective, as it helps illuminate firm-specific organizational processes and their consequences for development outcomes such as employment, wages, and working conditions. Overall, our study adds to research that has shifted the analysis of OFDI's employment effects from host to home countries and from aggregate to firm-level outcomes (Hong et al., 2019; Lee et al., 2020), and supports prior findings that accounting for firm heterogeneity is critical for understanding the OFDI–employment relationship (e.g., Driffield et al., 2019; Lee et al., 2020).

In addition, drawing on Penrose's (1959) insights on organizational capacity constraints, our study contributes to international business research by broadening how such constraints are conceptualized in the context of foreign expansion. Prior work has largely treated managerial attention as the primary bottleneck limiting firms' ability to expand internationally (e.g., Hutzschenreuter et al., 2011; Mohr et al., 2018; Slangen, 2016). We move beyond this narrow focus by adopting a broader capacity-constraint perspective that encompasses the domestic workforce as a whole. Specifically, we conceptualize domestic employees across functions such as finance, IT, compliance, logistics,

and production support as a scarce organizational resource whose services are required to organize, sustain, and integrate foreign operations. Because the volume and complexity of these additional activities increase with the scale of foreign expansion, they cannot be accommodated indefinitely within a firm's existing workforce. When OFDI projects are large relative to firm size, they expose organizational capacity limits at the home base and prompt firms to expand domestic employment. From this perspective, domestic hiring is not a residual or incidental outcome of OFDI, but an adaptive organizational response that enables firms to cope with the additional activity demands generated by foreign expansion. By applying this capacity-constraint logic, our study complements prior Penrosean work that has focused primarily on patterns of subsidiary expansion and network growth (e.g., Hutzschenreuter et al., 2011; Slangen, 2016; Tan, 2009). We show that scaling up organizational capacity at the home base represents an important and distinct dimension of firm adjustment to OFDI—one that has received limited attention in existing research.

Finally, our findings help sharpen the control-and-coordination framework proposed by Zeng et al. (2023). While their model systematically outlines the organizational mechanisms MNEs can deploy to manage geographically dispersed operations (e.g., centralization, standardization) and the outcomes those mechanisms generate, it remains largely silent on the organizational *preconditions* required for these mechanisms to function effectively. We identify domestic organizational capacity as one such precondition. This focus on organizational capacity directly complements Zeng et al.'s emphasis on coordination mechanisms, because the effectiveness of such mechanisms ultimately depends on the capacity available to implement them. When OFDI

Table 4 Instrumental variable regression

Independent variables	First stage	Second stage				
		Model 1	Model 2	Model 3	Model 4	Model 5
Relative investment size (RIS)	–	0.05 (.02) [.018]	0.05 (.02) [.021]	0.06 (.02) [.013]	0.05 (.02) [.024]	0.06 (.02) [.014]
RIS squared (H1)	–	0.37 (.14) [.010]	0.40 (.14) [.006]	0.48 (.14) [.001]	0.47 (.13) [.002]	0.56 (.15) [.000]
RIS x Investment is a greenfield	–	–	0.13 (.08) [.094]	–	–	0.12 (.08) [.110]
RIS squared x Investment is a greenfield (H2a)	–	–	0.21 (.10) [.027]	–	–	0.20 (.10) [.030]
RIS x Firm's state ownership	–	–	–	0.37 (.14) [.009]	–	0.23 (.11) [.034]
RIS squared x Firm's state ownership (H2b)	–	–	–	0.35 (.16) [.027]	–	0.22 (.12) [.048]
RIS x Firm's home region focus	–	–	–	–	0.41 (.14) [.003]	0.33 (.13) [.011]
RIS squared x Firm's home region focus (H2c)	–	–	–	–	0.28 (.14) [.044]	0.34 (.15) [.022]
Investment is a greenfield	0.03 (.06) [.587]	– 0.01 (.07) [.940]	– 0.04 (.07) [.556]	– 0.02 (.07) [.785]	– 0.03 (.07) [.701]	– 0.07 (.07) [.322]
Firm's percentage of state ownership	0.09 (.08) [.252]	0.21 (.10) [.035]	0.22 (.10) [.028]	0.31 (.11) [.004]	0.22 (.10) [.029]	0.25 (.10) [.015]
Firm's home region focus	0.05 (.06) [.402]	0.09 (.07) [.210]	0.09 (.07) [.213]	0.08 (.07) [.310]	0.02 (.07) [.672]	0.07 (.07) [.333]
Firm's foreign employment growth	0.06 (.15) [.696]	0.26 (.19) [.176]	0.26 (.19) [.177]	0.25 (.19) [.183]	0.25 (.19) [.188]	0.24 (.18) [.188]
Firm size	0.05 (.05) [.350]	– 0.10 (.06) [.120]	– 0.08 (.06) [.238]	– 0.09 (.06) [.167]	– 0.11 (.06) [.083]	– 0.10 (.06) [.111]
Firm's depth of internationalization	0.03 (.06) [.650]	– 0.08 (.10) [.437]	– 0.07 (.10) [.506]	– 0.07 (.10) [.508]	– 0.09 (.10) [.399]	– 0.05 (.10) [.606]
Firm's labor productivity	0.07 (.05) [.168]	0.23 (.06) [.000]	0.23 (.06) [.000]	0.23 (.06) [.000]	0.22 (.06) [.000]	0.22 (.06) [.000]
Firm's prior compound annual growth rate	0.04 (.05) [.425]	0.17 (.06) [.005]	0.16 (.06) [.007]	0.17 (.06) [.005]	0.16 (.06) [.008]	0.15 (.06) [.012]
Firm is listed on domestic stock exchange	0.02 (.06) [.751]	0.02 (.08) [.905]	0.02 (.08) [.890]	0.03 (.08) [.798]	0.04 (.08) [.655]	0.04 (.08) [.670]
Firm's number of foreign stock listings	0.05 (.05) [.318]	– 0.16 (.07) [.019]	– 0.16 (.07) [.017]	– 0.17 (.06) [.010]	– 0.19 (.06) [.004]	– 0.19 (.06) [.003]
Firm's prior investments in the host country	0.18 (.06) [.003]	– 0.03 (.05) [.553]	– 0.03 (.05) [.560]	– 0.02 (.05) [.664]	– 0.03 (.05) [.590]	– 0.03 (.05) [.584]
Investment is in high-tech industry	0.01 (.05) [.865]	0.04 (.07) [.600]	0.04 (.07) [.544]	0.02 (.07) [.741]	0.03 (.07) [.701]	0.03 (.07) [.681]
Investment is in related industry	– 0.03 (.05) [.542]	– 0.00 (.06) [.953]	– 0.00 (.06) [.981]	– 0.00 (.06) [.961]	– 0.00 (.06) [.940]	– 0.01 (.06) [.841]
Investment done with strategic partner	0.02 (.05) [.698]	0.00 (.06) [.995]	– 0.00 (.06) [.982]	0.00 (.06) [.965]	0.01 (.06) [.901]	0.01 (.06) [.846]
Geographic distance	0.06 (.05) [.233]	0.01 (.06) [.840]	0.01 (.06) [.800]	0.02 (.06) [.720]	0.02 (.06) [.715]	0.02 (.06) [.694]
Linguistic distance	– 0.01 (.05) [.827]	– 0.06 (.06) [.363]	– 0.06 (.06) [.303]	– 0.05 (.06) [.415]	– 0.05 (.06) [.395]	– 0.06 (.06) [.305]
Religious distance	– 0.04 (.06) [.507]	0.10 (.08) [.250]	0.11 (.08) [.198]	0.10 (.08) [.240]	0.09 (.08) [.257]	0.08 (.08) [.313]
Home-country GDP per capita	– 0.03 (.08) [.713]	0.03 (.11) [.790]	0.03 (.11) [.805]	0.04 (.10) [.703]	0.05 (.10) [.545]	0.03 (.10) [.741]
Host-country GDP per capita	0.08 (.11) [.482]	0.03 (.13) [.821]	0.02 (.13) [.870]	0.03 (.13) [.819]	0.04 (.13) [.787]	0.04 (.13) [.794]

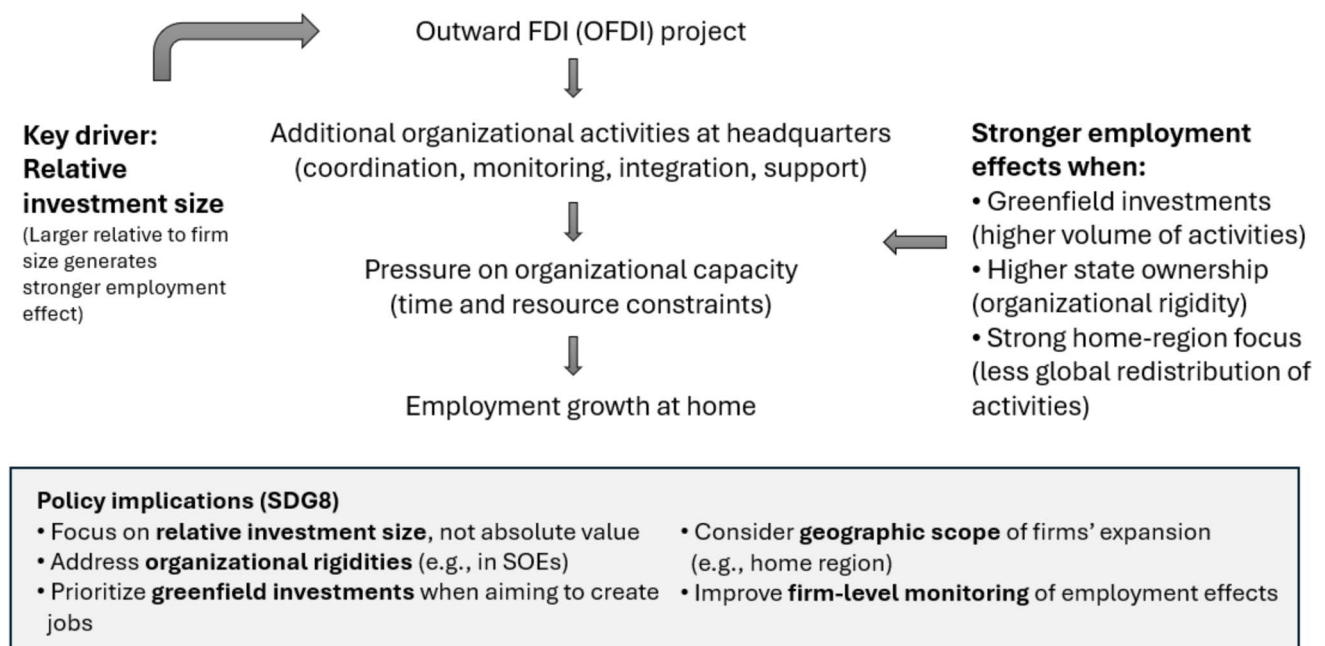
Table 4 (continued)

Independent variables	First stage	Second stage				
		Model 1	Model 2	Model 3	Model 4	Model 5
Home-country size	0.19 (.08) [.019]	0.39 (.11) [.001]	0.38 (.11) [.001]	0.41 (.11) [.000]	0.42 (.11) [.000]	0.41 (.11) [.000]
Host-country size	0.01 (.06) [.862]	− 0.00 (.07) [.955]	− 0.00 (.08) [.969]	− 0.00 (.07) [.940]	− 0.00 (.07) [.933]	− 0.01 (.07) [.890]
Home-country GDP growth	0.06 (.07) [.396]	0.08 (.08) [.310]	0.08 (.08) [.331]	0.09 (.08) [.298]	0.08 (.08) [.315]	0.08 (.07) [.285]
Host-country GDP growth	0.09 (.06) [.128]	0.13 (.07) [.052]	0.12 (.07) [.090]	0.13 (.07) [.070]	0.14 (.07) [.051]	0.14 (.07) [.050]
Home-country rule of law	0.05 (.07) [.466]	0.08 (.08) [.311]	0.09 (.08) [.295]	0.10 (.09) [.288]	0.11 (.09) [.233]	0.11 (.09) [.226]
Host-country rule of law	− 0.03 (.10) [.763]	0.09 (.12) [.506]	0.09 (.12) [.497]	0.10 (.12) [.445]	0.10 (.12) [.436]	0.09 (.12) [.502]
Home-country labor market efficiency	0.04 (.09) [.666]	0.07 (.11) [.510]	0.08 (.11) [.482]	0.07 (.10) [.495]	0.08 (.11) [.490]	0.07 (.10) [.481]
Host country's economic dependence on home country	0.03 (.05) [.592]	0.06 (.06) [.327]	0.05 (.06) [.417]	0.05 (.06) [.438]	0.05 (.06) [.476]	0.04 (.06) [.515]
Industry-level OFDI growth (Bartik instrument)	0.30 (.07) [.000]					
Kleibergen-Paap rk Wald F		24.8 [.000]	23.9 [.000]	25.6 [.000]	24.3 [.000]	23.7 [.000]

Intercept and year dummies included but not shown; Robust standard errors in parentheses; $N = 409$; The IV specification is exactly identified; overidentification tests are therefore not applicable

projects are modest relative to firm size, existing capacity typically suffices. However, once projects exceed approximately ten to 20% of sales or assets, the associated coordination and integration demands rise sharply and begin to

strain the firm's organizational capacity, prompting firms to expand their domestic workforce. Embedding this capacity-constraint logic into the Zeng et al. (2023) model also clarifies why establishment mode, state ownership, and

**Fig. 2** How outward FDI creates jobs at home: mechanism and policy implications

home-region focus systematically shape coordination outcomes, as each influences how quickly available capacity is stretched. More broadly, our perspective suggests that the effectiveness of coordination mechanisms depends not only on their formal design, but also on the underlying organizational capacity available to enact them. Future work may therefore examine how other forms of internal capacity, such as digital infrastructure, analytical systems, or financial buffers, condition the effectiveness of coordination mechanisms across macro-, meso-, and micro-levels.

Limitations and future research

Some limitations apply to this study. First, to isolate the domestic employment effects of OFDI that are primarily related to firms' complementary activities, we empirically studied a context in which offshoring of manufacturing jobs likely does not play as large of a role, and hence, neither does the potentially negative effect of OFDI on employment. With our study now finding evidence for a positive effect in relation to the relative size of OFDI projects in such a context, we invite scholars to perform further firm-level studies that directly contrast the effects relating to production offshoring and those coming from domestic coordination and production to better understand under what conditions OFDI affects domestic employment positively or negatively. To do so, scholars may also seek to extend the empirical analysis of our framework to firms from developed and (non-emerging) developing countries. Moreover, given that developing Asia represents a substantial share of OFDI from developing countries globally, it would be particularly valuable to examine these relationships separately in the developing Asia context, including whether firms in this region make greater use of OFDI-related incentives relative to other emerging or developing regions. Such analyses could yield important regional comparisons and suggest that the policy implications of this paper may be especially relevant for developing Asia.

Second, we aimed to study how individual OFDI projects shape firms' own domestic employment growth. To unambiguously establish what effect the relative size of an OFDI project has on domestic employment, we restricted our sample to firms that engaged in only one OFDI project during the time windows we used for measuring that growth. Firms may also, however, set up several OFDI projects over time, sometimes within relatively short periods, and they typically follow a sequential process, in which early OFDI projects tend to be smaller in scale and later projects may differ in size, scope, and strategic intent. Scholars may attempt to shed further light on the relationship between OFDI and a firm's domestic employment growth by studying how the existence, the timing, sequencing of, and the interaction

between multiple concurrent OFDI projects co-shapes that growth.

Third, as our main time window, we picked a 2-year period since it is likely short enough to capture that the hiring of new staff relates to a given OFDI project and its associated additional activities and capacity constraints. We also performed robustness checks with a firm's domestic employment growth over a 1-year and 3-year period as the dependent variable. Because of data limitations we were unable to look at periods longer than 3 years, but scholars are advised to look into such periods in future work to investigate whether the capacity-related employment effects of OFDI taper off over time and gradually diminish in importance.

Fourth, as we have considered the size of OFDIs *relative* to the size of the firm, rather than investment size by or of itself, we expect that our framework is applicable to the vast majority of firms engaging in OFDI activity. That is, our sample firms exhibit activity that is very much in line with previous observations on relative investment sizes, with the largest investment being an OFDI that amounts to 82% of a firm's own size in sales value. Although it is unlikely that firms are regularly able to afford investments that exceed their own turnover in value, there may be cases, however, when firms make extremely large investments. In such cases, it may be possible that domestic employment growth will taper off as a function of relative investment size, due to limits an organization will face in effectively screening and hiring new employees. Scholars may seek to study these extreme cases in future work, to better understand the boundary conditions of our framework.

Fifth, while Penrose's (1959) theory emphasizes both underutilised resources and capacity constraints as conditions shaping firm expansion, our analysis deliberately focuses on the latter. This focus abstracts from the potential role of underutilised resources, such as excess financial resources, technological slack, or organizational capabilities, that may enable firms to undertake OFDI and shape subsequent domestic employment outcomes. Future research could extend our capacity-constraint perspective by explicitly incorporating measures of underutilised resources and examining how resource availability interacts with capacity constraints (including beyond the workforce) in influencing OFDI strategies and their employment effects.

Sixth, as we have focused on the number of new jobs created by firms, we encourage scholars to also investigate other possible home-country effects of OFDI activity, for example on economic growth and the quality of jobs. Anecdotal evidence seems to suggest that many of the newly created jobs by firms from emerging economies are of decent quality. For example, through a series of OFDIs, Huawei expanded domestic employment by 100,000 relatively high-skilled jobs over 11 years (Hendriks, 2020; Schaefer, 2020). Future research may establish whether this observation applies to

more firms across a range of different country contexts. In order to get a complete picture of firms' domestic development impact, we also encourage future research to investigate effects on economic growth and productivity, and assess how OFDI affects industrialization in conjunction with employment.

Acknowledgements We thank Area Editor Axèle Giroud, Editor-in-Chief Ari Van Assche, and three anonymous reviewers for their constructive comments on earlier versions of this manuscript.

Funding Open access funding provided by Copenhagen Business School. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Data availability Data are not fully available due to third-party property rights

Declarations

Conflict of interest None.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Agarwal, J. P. (1997). Effect of foreign direct investment on employment in home countries. *Transnational Corporations*, 6(2), 1–28.
- Alfoldi, E. A., Clegg, J. L., & McGaughey, S. L. (2012). Coordination at the edge of the empire: The delegation of headquarters functions through regional management mandates. *Journal of International Management*, 18(3), 276–292.
- Anderson, J., Sutherland, D., & Severe, S. (2015). An event study of home and host country patent generation in Chinese MNEs undertaking strategic asset acquisitions in developed markets. *Journal of World Business*, 24(5), 758–771.
- Asmussen, C. G. (2009). Local, regional, or global? Quantifying MNE geographic scope. *Journal of International Business Studies*, 40(7), 1192–1205.
- Aybar, B., & Ficici, A. (2009). Cross-border acquisitions and firm value: An analysis of emerging-market multinationals. *Journal of International Business Studies*, 40(8), 1317–1338.
- Baaij, M. G., & Slangen, A. H. (2013). The role of headquarters–subsidiary geographic distance in strategic decisions by spatially disaggregated headquarters. *Journal of International Business Studies*, 44(9), 941–952.
- Banalieva, E. R., & Santoro, M. D. (2009). Local, regional, or global? Geographic orientation and relative financial performance of emerging market multinational enterprises. *European Management Journal*, 27(5), 344–355.
- Becker, S. O., Ekholm, K., Jäckle, R., & Muendler, M. A. (2005). Location choice and employment decisions: A comparison of German and Swedish multinationals. *Review of World Economics*, 141(4), 693–731.
- Belderbos, R., Du, H. S., & Slangen, A. (2020). When do firms choose global cities as foreign investment locations within countries? The roles of contextual distance, knowledge intensity, and target-country experience. *Journal of World Business*, 55(1), Article 101022.
- Belderbos, R., Leten, B., Nguyen, N. H., & Vancauteren, M. (2025). Multinational firms and the quest for global talent: Employing (skilled) foreign workers at home and abroad. *Journal of International Business Studies*, 56, 151–173.
- Blomström, M., Fors, G., & Lipsey, R. E. (1997). Foreign direct investment and employment: Home country experience in the United States and Sweden. *The Economic Journal*, 107(445), 1787–1797.
- Blomström, M., & Kokko, A. (1998). Multinational corporations and spillovers. *Journal of Economic Surveys*, 12(2), 1–31.
- Brouthers, K. D., & Brouthers, L. E. (2000). Acquisition or greenfield start-up? Institutional, cultural and transaction cost influences. *Strategic Management Journal*, 21, 89–97.
- Brouthers, K. D., & Hennart, J. F. (2007). Boundaries of the firm: Insights from international entry mode research. *Journal of Management*, 33(3), 395–425.
- Buckley, P. J. (2018). Towards a theoretically-based global foreign direct investment policy regime. *Journal of International Business Policy*, 1(3), 184–207.
- Buckley, P. J., Clegg, J. L., Cross, A. R., & Voss, H. (2010). What Can Emerging Markets Learn from the Outward Direct Investment Policies of Advanced Countries? In K. P. Sauvart, G. McAllister, & W. A. Maschek (Eds.), *Foreign Direct Investments from Emerging Markets*. Palgrave Macmillan.
- Buckley, P. J., Strange, R., Timmer, M. P., & de Vries, G. J. (2020). Catching-up in the global factory: Analysis and policy implications. *Journal of International Business Policy*, 3, 79–106.
- Casillas, J. C., & Moreno-Menéndez, A. M. (2014). Speed of the internationalization process: The role of diversity and depth in experiential learning. *Journal of International Business Studies*, 45(1), 85–101.
- Chen, W., & Kamal, F. (2016). The impact of information and communication technology adoption on multinational firm boundary decisions. *Journal of International Business Studies*, 47(5), 563–576.
- Cho, H. J., & Pucik, V. (2005). Relationship between innovativeness, quality, growth, profitability, and market value. *Strategic Management Journal*, 26(6), 555–575.
- Contini, B., & Revelli, R. (1989). The relationship between firm growth and labor demand. *Small Business Economics*, 1(3), 309–314.
- Cuervo-Cazurra, A., & Li, C. (2021). State ownership and internationalization: The advantage and disadvantage of stateness. *Journal of World Business*, 56(1), Article 101112.
- Cuervo-Cazurra, A., Narula, R., & Un, A. (2015). Internationalization motives: Sell more, buy better, upgrade and escape. *Multinational Business Review*, 23(1), 25–35.
- Cui, L., & Jiang, F. (2012). State ownership effect on firms' FDI ownership decisions under institutional pressure: A study of Chinese outward-investing firms. *Journal of International Business Studies*, 43, 264–284.
- Datta, D. K. (1991). Organizational fit and acquisition performance: Effects of post acquisition integration. *Strategic Management Journal*, 12(4), 281–297.
- Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of Business and Psychology*, 29(1), 1–19.

- Debaere, P., Lee, H., & Lee, J. (2010). It matters where you go: Outward foreign direct investment and multinational employment growth at home. *Journal of Development Economics*, 91(2), 301–309.
- Delis, A., Driffield, N., & Temouri, Y. (2019). The global recession and the shift to re-shoring: Myth or reality? *Journal of Business Research*, 103, 632–643.
- Dikova, D., & Brouthers, K. (2016). International establishment mode choice: Past, present and future. *Management International Review*, 56(4), 489–530.
- Dikova, D., & Van Witteloostuijn, A. (2007). Foreign direct investment mode choice: Entry and establishment modes in transition economies. *Journal of International Business Studies*, 38(6), 1013–1033.
- Dow, D., & Karunaratna, A. (2006). Developing a multidimensional instrument to measure psychic distance stimuli. *Journal of International Business Studies*, 37(5), 578–602.
- Driffield, N. (1999). Indirect employment effects of foreign direct investment into the UK. *Bulletin of Economic Research*, 51(3), 207–222.
- Driffield, N., Pereira, V., & Temouri, Y. (2019). Does offshore outsourcing impact home employment? Evidence from service multinationals. *Journal of Business Research*, 103, 448–459.
- Duanmu, J. L. (2014). State-owned MNCs and host country expropriation risk: The role of home state soft power and economic gunboat diplomacy. *Journal of International Business Studies*, 45(8), 1044–1060.
- Egelhoff, W. G. (1982). Strategy and structure in multinational corporations: An information-processing approach. *Administrative Science Quarterly*, 27(3), 435–458.
- Ekholm, K., Forslid, R., & Markusen, J. R. (2007). Export-platform foreign direct investment. *Journal of the European Economic Association*, 5(4), 776–795.
- Elia, S., Mariotti, I., & Piscitello, L. (2009). The impact of outward FDI on the home country's labour demand and skill composition. *International Business Review*, 18(4), 357–372.
- Filippov, S. (2011). Russia's emerging multinational companies amidst the global economic crisis. *UNU-MERIT Working Papers No. 003*. Maastricht: UNU-MERIT.
- Fors, G., & Kokko, A. (2001). Home-country effects of FDI: Foreign production and structural change in home-country operations. *Topics in empirical international economics: A festschrift in honor of Robert E. Lipsey* (pp. 137–162). University of Chicago Press.
- Giroud, A., & Bonilla-Feret, S. (2025). World Investment Report 2024: Investment facilitation and digital government. *Journal of International Business Policy*. <https://doi.org/10.1057/s42214-024-00208-0>
- Goerzen, A., & Beamish, P. (2003). Geographic scope and multinational enterprise performance. *Strategic Management Journal*, 24(13), 1289–1306.
- Goldeng, E., Grünfeld, L. A., & Benito, G. R. G. (2008). The performance differential between private and state-owned enterprises: The roles of ownership, management and market structure. *Journal of Management Studies*, 45(7), 1244–1273.
- Goldsmith-Pinkham, P., Sorkin, I., & Swift, H. (2020). Bartik instruments: What, when, why, and how. *American Economic Review*, 110(8), 2586–2624.
- Greenaway, D., & Kneller, R. (2007). Firm heterogeneity, exporting and foreign direct investment. *The Economic Journal*, 117(517), 134–161.
- Guo, W., Clougherty, J. A., & Duso, T. (2016). Why are Chinese MNEs not financially competitive in cross-border acquisitions? The role of state ownership. *Long Range Planning*, 49(5), 614–631.
- Hagedoorn, J., & Narula, R. (1996). Choosing organizational modes of strategic technology partnering: International and sectoral differences. *Journal of International Business Studies*, 27(2), 265–284.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th edition). Pearson Prentice Hall.
- Harrison, A. E., & Millman, M. S. (2006). Dispelling some myths about offshoring. *Academy of Management Perspectives*, 20(4), 6–22.
- He, X., Eden, L., & Hitt, M. A. (2016). The renaissance of state-owned multinationals. *Thunderbird International Business Review*, 58(2), 117–129.
- Hejazi, W., & Treffer, D. (2019). Implications of Canada's restrictive FDI policies on employment and productivity. *Journal of International Business Policy*, 2, 142–166.
- Helpman, E., Melitz, M. J., & Yeaple, S. R. (2004). Export versus FDI with heterogeneous firms. *American Economic Review*, 94(1), 300–316.
- Hendriks, G. (2020). How outward investment from emerging markets affects economic development at home: Using the eclectic paradigm to synthesize two IB literatures. *Multinational Business Review*, 28(4), 463–482.
- Hendriks, G. (2025). When does foreign technology help firms from periphery countries improve their environmental impact? An ability–motivation–opportunity framework. *Journal of International Business Policy*, 8(4), 447–473.
- Hendriks, G., Slangen, A. H. L., & Heugens, P. P. M. A. R. (2018). How a firm's domestic footprint and domestic environmental uncertainties jointly shape added cultural distances: The roles of resource dependence and headquarters attention. *Journal of Management Studies*, 55(6), 883–909.
- Hennart, J. F., & Park, Y. R. (1993). Greenfield vs. acquisition: The strategy of Japanese investors in the United States. *Management Science*, 39(9), 1039–1178.
- Hijzen, A., Jean, S., & Mayer, T. (2011). The effects at home of initiating production abroad: Evidence from matched French firms. *Review of World Economics*, 147(3), 457–483.
- Hong, E., Lee, I. H., & Makino, S. (2019). Outbound foreign direct investment (FDI) motivation and domestic employment by multinational enterprises (MNEs). *Journal of International Management*, 25(2), Article 100657.
- Hong, J., Wang, C., & Kafourous, M. (2014). The role of the state in explaining the internationalization of emerging market enterprises. *British Journal of Management*, 26(1), 45–62.
- Huang, C. H., Teng, K. F., & Tsai, P. L. (2010). Inward and outward foreign direct investment and poverty: East Asia vs. Latin America. *Review of World Economics*, 146(4), 763–779.
- Hutzschenreuter, T., & Voll, J. C. (2008). Performance effects of “added cultural distance” in the path of international expansion: The case of German multinational enterprises. *Journal of International Business Studies*, 39(1), 53–70.
- Hutzschenreuter, T., Voll, J. C., & Verbeke, A. (2011). The impact of added cultural distance and cultural diversity on international expansion patterns: A Penrosean perspective. *Journal of Management Studies*, 48(2), 305–329.
- Iammarino, S. (2018). FDI and regional development policy. *Journal of International Business Policy*, 1(3), 157–183.
- Jain, N. K., Kundu, S. K., & Newbury, W. (2015). Efficiency-seeking emerging market firms: Resources and location choices. *Thunderbird International Business Review*, 57(1), 33–50.
- Jain, N. K., Pangarkar, N., Yuan, L., & Kumar, V. (2019). Rapid internationalization of emerging market firms – The role of geographic diversity and added cultural distance. *International Business Review*, 28(6), Article 101590.
- Johnston, S., & Menguc, B. (2007). Subsidiary size and the level of subsidiary autonomy in multinational corporations: A quadratic

- model investigation of Australian subsidiaries. *Journal of International Business Studies*, 38(5), 787–801.
- Larsen, M. M., Birkinshaw, J., Zhou, Y. M., & Benito, G. R. G. (2023). Complexity and multinationals. *Global Strategy Journal*, 13(3), 535–551.
- Larsen, M. M., & Witte, C. (2023). Informal legacy and exporting among Sub Saharan African firms. *Organization Science*, 34(3), 987–1003.
- Lee, I. H., Hong, E., & Makino, S. (2020). The effect of non-conventional outbound foreign direct investment (FDI) on the domestic employment of multinational enterprises (MNEs). *International Business Review*, 29(3), Article 101671.
- Lee, S. H., & Makhija, M. (2009). The effect of domestic uncertainty on the real options value of international investments. *Journal of International Business Studies*, 40(3), 405–420.
- Lee, T. J., & Caves, R. E. (1998). Uncertain outcomes of foreign investment: Determinants of the dispersion of profits after large acquisitions. *Journal of International Business Studies*, 29(3), 563–581.
- Li, J., & Oh, C. H. (2016). Research on emerging-market multinational enterprises: Extending Alan Rugman's critical contributions. *International Business Review*, 25(3), 776–784.
- Li, M., Cui, L., & Lu, J. (2014). Varieties in state capitalism: Outward FDI strategies of central and local state-owned enterprises from emerging economy countries. *Journal of International Business Studies*, 45(8), 980–1004.
- Li, M., Li, D., Lyles, M., & Liu, S. (2016). Chinese MNEs' outward FDI and home country productivity: The moderating effect of technology gap. *Global Strategy Journal*, 6(4), 289–308.
- Liang, Y., Giroud, A., & Rygh, A. (2022). Strategic asset-seeking acquisitions, technological gaps, and innovation performance of Chinese multinationals. *Journal of World Business*, 57(4), Article 101325.
- Liu, R., Feils, D. J., & Scholnick, B. (2011). Why are different services outsourced to different countries? *Journal of International Business Studies*, 42, 558–571.
- Liu, X., & Giroud, A. (2016). International knowledge flows in the context of emerging-economy MNEs and increasing global mobility. *International Business Review*, 25(1A), 125–129.
- Luo, Y., Xue, Q., & Han, B. (2010). How emerging market governments promote outward FDI: Experience from China. *Journal of World Business*, 45(1), 68–79.
- Mitra, D., & Ranjan, P. (2010). Offshoring and unemployment: The role of search frictions labor mobility. *Journal of International Economics*, 81(2), 219–229.
- Moghaddam, K., Sethi, D., Weber, T., & Wu, J. (2014). The smirk of emerging market firms: A modification of the Dunning's typology of internationalization motivations. *Journal of International Management*, 20(3), 359–374.
- Mohr, A., Batsakis, G., & Stone, Z. (2018). Explaining the effect of rapid internationalization on horizontal foreign divestment in the retail sector: An extended Penrosean perspective. *Journal of International Business Studies*, 49(7), 779–808.
- Monteiro, P., & Adler, P. S. (2022). Bureaucracy for the 21st century: Clarifying and expanding our view of bureaucratic organization. *Academy of Management Annals*, 16(2), 427–475.
- Morosini, P., Shane, S., & Singh, H. (1998). National cultural distance and cross-border acquisition performance. *Journal of International Business Studies*, 29(1), 137–158.
- Müller, M., Hendriks, G., & Slangen, A. H. L. (2017). How the direction of institutional distance influences foreign entry mode choices: An information economics perspective. In A. Verbeke, J. Puck, & R. van Tulder (Eds.), *Progress in International Business Research (Volume 12)*. Emerald Group Publishing Ltd.
- Narula, R. (2014). Exploring the paradox of competence-creating subsidiaries: Balancing bandwidth and dispersion in MNEs. *Long Range Planning*, 47(1–2), 4–15.
- Narula, R. (2017). Emerging market MNEs as meta-integrators: The importance of internal networks. *International Journal of Technology Management*, 74(1–4), 214–220.
- Ni, X., Si, Y., & Zhang, B. (2025). Climate vulnerability and stock price crash risk worldwide. *Journal of International Business Studies*. <https://doi.org/10.1057/s41267-025-00831-w>
- Obukhova, E., & Tian, F. (2024). Referral bonuses in global talent acquisition: The role of social networks in China and the US. *Journal of International Business Studies*. <https://doi.org/10.1057/s41267-024-00682-x>
- Peng, M. W. (2012). The global strategy of emerging multinationals from China. *Global Strategy Journal*, 2(2), 97–107.
- Penrose, E. T. (1959). *The theory of the growth of the firm*. Oxford University Press.
- Persson, M. (2006). The impact of operational structure, lateral integrative mechanisms and control mechanisms on intra-MNE knowledge transfer. *International Business Review*, 15(5), 547–569.
- Pitelis, C. (2004). Edith Penrose and the resource-based view of (international) business strategy. *International Business Review*, 13(4), 523–532.
- Pitelis, C., & Verbeke, A. (2007). Introduction: Edith Penrose and the future of the multinational enterprise: New research directions. *Management International Review*, 47(2), 139–149.
- Ralston, D. A., Terpstra-Tong, J., Terpstra, R. H., Wang, X., & Egri, C. (2006). Today's state-owned enterprises of China: Are they dying dinosaurs or dynamic dynamos? *Strategic Management Journal*, 27(9), 825–843.
- Rugman, A. M., & Oh, C. H. (2013). Why the home region matters: Location and regional multinationals. *British Journal of Management*, 24(4), 463–479.
- Rugman, A. M., & Verbeke, A. (2004). A perspective on regional and global strategies of multinational enterprises. *Journal of International Business Studies*, 35(1), 3–18.
- Rui, H., & Yip, G. S. (2008). Foreign acquisitions by Chinese firms: A strategic intent perspective. *Journal of World Business*, 43(2), 213–226.
- Sauvant, K. P. (2021). Improving the distribution of FDI benefits: The need for policy-oriented research, advice, and advocacy. *Journal of International Business Policy*, 4(2), 244–261.
- Schaefer, K. J. (2020). Catching up by hiring: The case of Huawei. *Journal of International Business Studies*, 51(9), 1500–1515.
- Schotter, A. P. J., Stallkamp, M., & Pinkham, B. C. (2017). MNE headquarters disaggregation: The formation antecedents of regional management centers. *Journal of Management Studies*, 54(8), 1144–1169.
- Shleifer, A. (1998). State versus private ownership. *Journal of Economic Perspectives*, 12(4), 133–150.
- Slangen, A. H. L. (2011). A communication-based theory of the choice between greenfield and acquisition entry. *Journal of Management Studies*, 48(8), 1699–1726.
- Slangen, A. H. L. (2016). The comparative effect of subnational and nationwide cultural variation on subsidiary ownership choices: The role of spatial coordination challenges and Penrosean growth constraints. *Economic Geography*, 92(2), 145–171.
- Slangen, A. H. L., & Hennart, J. F. (2007). Greenfield or acquisition entry: A review of the empirical foreign establishment mode literature. *Journal of International Management*, 13(4), 403–429.
- Sutherland, D., Anderson, J., Bailey, N., & Alon, I. (2020). Policy, institutional fragility, and Chinese outward foreign direct investment: An empirical examination of the Belt and Road Initiative. *Journal of International Business Policy*, 3(3), 249–272.

- Tan, D. (2009). Foreign market entry strategies and post-entry growth: Acquisitions vs greenfield investments. *Journal of International Business Studies*, 40(6), 1046–1063.
- Tan, D., & Meyer, K. E. (2010). Business groups' outward FDI: A managerial resources perspective. *Journal of International Management*, 16(2), 154–164.
- Tan, D., Su, W., Mahoney, J. T., & Kor, Y. (2020). A review of research on the growth of multinational enterprises: A Penrosean lens. *Journal of International Business Studies*, 51(4), 498–537.
- Thite, M., Wilkinson, A., Budwhar, P., & Mathews, J. A. (2016). Internationalization of emerging Indian multinationals: Linkage, leverage and learning (LLL) perspective. *International Business Review*, 25(1), 435–443.
- Torres, M. M., Clegg, L. J., & Varum, C. A. (2016). The missing link between awareness and use in the uptake of pro-internationalization incentives. *International Business Review*, 25(2), 495–510.
- Tüselmann, H. J. (1998). Standort Deutschland: German direct foreign investment—Exodus of German industry and export of jobs? *Journal of World Business*, 33(3), 295–313.
- Uhlenbruck, K. (2004). Developing acquired foreign subsidiaries: The experience of MNEs in transition economies. *Journal of International Business Studies*, 35(2), 109–123.
- van Tulder, R., Rodrigues, S. B., Mirza, H., & Sexsmith, K. (2021). The UN's Sustainable Development Goals: Can multinational enterprises lead the Decade of Action? *Journal of International Business Policy*, 4(1), 1–21.
- van Zanten, J. A., & van Tulder, R. (2018). Multinational enterprises and the sustainable development goals: An institutional approach to corporate engagement. *Journal of International Business Policy*, 1(3), 208–233.
- Verbeke, A., & Asmussen, C. G. (2016). Global, local, or regional? The locus of MNE strategies. *Journal of Management Studies*, 53(6), 1051–1075.
- Verbeke, A., & Kano, L. (2015). The new internalization theory and multinational enterprises from emerging economies: A business history perspective. *Business History Review*, 89(3), 415–445.
- Verbeke, A., & Kano, L. (2016). An internalization theory perspective on the global and regional strategies of multinational enterprises. *Journal of World Business*, 51(1), 83–92.
- Verbeke, A., & Yuan, W. (2007). Entrepreneurship in multinational enterprises: A Penrosean perspective. *Management International Review*, 47, 241–258.
- Zeng, R., Grøgaard, B., & Björkman, I. (2023). Navigating MNE control and coordination: A critical review and directions for future research. *Journal of International Business Studies*, 54(9), 1599–1622.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Guus Hendriks is Assistant Professor of International Business at the University of Amsterdam in the Netherlands. He holds a PhD from Rotterdam School of Management, Erasmus University. His research interests relate to the portfolio growth strategies of multinational enterprises, the internationalization of emerging market multinationals as well as the development effects of foreign investment. His work on these topics is published in journals such as the *Journal of Management Studies*, UNCTAD's *Transnational Corporations*, *Long Range Planning*, and *International Business Review*.

Vera Kunczer is Assistant Professor at Copenhagen Business School. Her research interests lie at the intersection of international business, politics, and development. Particularly, she investigates how institutional dynamics and political risk shape MNE strategies and global investment flows, and how spillovers from firms influence economic growth.