Expatriate staffing in foreign subsidiaries and host market contestability

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Abstract

Purpose – This paper aims to study the decision of multinational enterprises (MNEs) whether to employ a host-country (HCN) or a parent-country national (PCN) manager in their subsidiaries, focusing on the role of host market contestability.

Design/methodology/approach – We develop an empirical model for the probability of appointing a PCN manager in the population of all foreign-owned firms registered in Slovenia over a nine-year period. We combine four different micro databases: a matched employer–employee database, firm-level inward FDI data, firm-level outward FDI data and firm-level financial data, and apply a heteroskedastic probit model, a random effects probit estimator and a fixed effects panel data estimator. The final, fully merged database contains on average of about 28,000 firms per year.

Findings – We find that the propensity to appoint a PCN manager is higher in subsidiaries that compete with less-productive local rival firms in tacit knowledge-intensive industries with lower competition. The results also suggest that the likelihood of employing expatriates is higher in larger, younger and more export-oriented subsidiaries in less distant locations. In addition, cultural distance between the investing and host countries has been found to be more relevant than physical distance and to account for much of the differences between investors from different regions.

Originality/value – An important advantage of our paper is that we use comprehensive firm-level data on the entire population of firms operating in a host country, including both domestic and foreign-owned firms. This allows us to introduce a wide range of host-country market structure and local rival firm characteristics into our empirical model of the expatriation decision, which have not been previously tested. Additionally, we account for MNE heterogeneity in terms of investor origin, while controlling for investor country characteristics such as cultural, institutional and geographical distance from the host country.

Keywords FDI, Expatriate staffing, Host-country national (HCN) manager,
Parent-country national (PCN) manager, Market structure, Host market contestability, Panel data

Paper type Research paper

1. Introduction

The dilemma of whether an expatriate or a local manager should run a foreign subsidiary is an attractive topic in the international business and (HR) management literature. The multinational enterprises (MNE's)decision to employ a host-country manager (HCN) or a parent-country national (PCN) manager in its subsidiary is often addressed in the context of technology transfer effectiveness and subsidiary performance. Several studies shed light on

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expat-worker-augmented technology transfer either directly by confirming their significant role in technology transfer from headquarters to subsidiaries, e.g. Tsang (2001) for China, Santacreu-Vasut and Teshima (2011) using Mexican plant-level data and Inzelt (2008) for expat managers in a survey-based study for Hungary, or indirectly by attributing superior subsidiary performance in terms of (labour or TFP) productivity to the fact that expat employees were employed, e.g., Golob Šušteršič and Zajc Kejžar (2020) for Slovenia [1]. Wang *et al.* (2009) confirm for China that expatriates with technical skills, motivation and adaptability enhanced a subsidiary's performance with a mediating effect of the knowledge transferred. Similarly, Kawai and Chung (2019) confirm an indirect, mediated effect of expatriate utilization on subsidiary financial performance through its links with subsidiaries' knowledge creation and product performance.

However, not all subsidiaries employ expatriates. Further, subsidiaries with a host-country national (hereafter HCN) top manager might perform better than those headed by a parent-country national (hereafter PCN) managers, as established by Dörrenbächer *et al.* (2013) for a sample of Danish, German and UK subsidiaries, and further supported by the evidence of Hahn *et al.* (2013) revealing a positive correlation between the HCN-manager ratio and productivity improvements for developing countries and in less R&D-intensive industries. Singh *et al.* (2019) show that a high presence of PCNs in culturally distant locations might cause cultural friction, leading to a detrimental effect on subsidiary performance, especially when the cultural friction occurs at the top management team level. Based on the experience of the COVID-19 pandemic shock in foreign subsidiaries located in Greece, Georgopoulos *et al.* (2024) suggest that optimal staffing choices vary according to distinct MNE subsidiary strategies. For example, an integration strategy tends to favour assigned expatriates, a locally responsive strategy tends to utilize HCNs, while a multi-focal strategy favours self-initiated expatriates and former inpatriates. The mixed evidence on the link between expatriation decision and subsidiary's performance supports tentative conclusion that the outcome of the trade-off between PCN and HCN manager appointment is not uniform.

The expatriation decision is the result of various firm-specific, industry-specific and country-specific factors. Among firm-specific determinants, the literature confirms the importance of the size and age of the subsidiary (Peng and Beamish, 2014), ownership share (Bebenroth *et al.*, 2008), strategic dependence of the parent on the subsidiary and organizational experience in the country (Belderbos and Heijltjes, 2005), degree of global integration (Dörrenbächer *et al.*, 2013) and centralization of decision making (Ando *et al.*, 2008). Studies have also acknowledged the role of institutional environment (Gaur *et al.*, 2007; Ando and Paik, 2013; Ando and Endo, 2013) and cultural distance (Bebenroth *et al.*, 2008; Singh *et al.*, 2019). However, since MNEs mainly enter industries with relatively high barriers to entry and high market concentration (Caves, 1996), strategic behaviour and interactions between MNEs (headquarters and subsidiaries) and (local) competing firms are also expected to be an important determinant of subsidiary HR strategy. The strategic behaviour of firms is governed by the structural characteristics of the host market and industry-specific factors, the two primary sets of factors that define market contestability. This aspect is clearly lacking in the existing literature on the expatriation decision. As highlighted by Yao *et al.* (2024), there is a need to deepen our understanding of the micro-foundations of competitive dynamics and to incorporate more country-level factors into the analysis of firm-level competitive interactions. In this paper, therefore, we attempt to fill this gap by introducing indicators of industry and host market structure into an empirical model of the decision to hire PCNs in foreign subsidiaries, while controlling for investor country characteristics (e.g. cultural, institutional and geographic distance from the host country).

This paper makes two key contributions. First, to better understand the factors influencing staffing decisions, it introduces a broad range of host-country market structure indicators—such as average industry mark-up, the number of local rival firms and the size of the local market—as well as incumbent firm characteristics, including the average total factor productivity of local rival firms within an industry and their productivity gap compared to

foreign subsidiaries. These factors, with the notable exception of the productivity gap between foreign subsidiaries and their competitors considered in Lee *et al*. (2023a, b), have not been tested in prior research. To accurately measure and account for these factors, we utilize a comprehensive dataset that covers the entire population of firms operating in a host country, rather than focusing solely on a sample of foreign-owned firms, as is common in previous studies.

Second, this study contributes to the diversification of the empirical setting. There are a large number of empirical studies on expatriation decisions based on Asian MNE data, predominantly of Japanese subsidiaries. Therefore, there is a need to broaden the empirical setting to other regions in order to comprehend whether the previous findings can be generalized. In this paper, we aim to complement the existing empirical evidence from the perspective of incoming FDI in the region of Central and Eastern Europe (hereafter CEE), an area largely neglected in the empirical body of the expatriation literature. We ground the empirical verification on the decisions and operations of all foreign-owned firms registered in Slovenia over the nine-year period. CEE is a particularly interesting area for studying the factors underlying expatriation decisions because since 1990, when the transition process started, FDI has been recognized as the primary channel for transferring technology to CEE countries (Damijan *et al.*, 2003). CEE countries took similar paths by introducing market mechanisms, restructuring public institutions and pursuing an open-economy-based growth model. Rapid changes in the institutional and market environments (Meyer and Gelbuda, 2006) were triggered by CEE countries' heavy involvement in both multilateral liberalization and regional integration processes mostly related to the approaching EU membership. Slovenia, a small CEE country entered the EU in 2004 as one of the eight first-wave accession countries from CEE. Moreover, our empirical setting allows us to overcome the shortcoming of the most of previous studies relying on single investing-country datasets by introducing heterogeneity of MNEs in terms of the investor's origin.

We specify an empirical probit model of the likelihood of appointing a PCN manager in the population of foreign subsidiaries [2] located in Slovenia. We focus on foreign (expat) workers in managing positions since this is a category of workers with a key role in facilitating the transfer of MNEs technology, as indicated in the mentioned literature. For this purpose, we combine data from four distinct micro-level databases: a matched employer-employee database, firm-level inward FDI data, firm-level outward FDI data, and firm-level financial data. Our full dataset consists of approximately 28,000 firms per year on average, spanning a nine-year period (2002–2010). While this comprehensive database captures the population of firms over nearly a decade, its primary limitation is that it concludes in 2010. However, it covers multiple phases of the business cycle, macroeconomic shocks, and institutional changes, providing a robust framework for testing the core factors of interest, e.g. market structure, tacitness and distance, on expatriate staffing decisions, which are arguably persistent and relatively time-independent [3]. To ensure that our findings are not confined to a specific period, we incorporate a broad set of multilevel control variables (including year-, company-, host market-, and investing country-specific factors) to account for various factors, including changes in the macroeconomic environment. Additionally, the use of panel data allows us to control for unobserved heterogeneity across firms and years, which is essential for producing unbiased results. There is enough variability at the firm, industry and country levels to provide robust econometric evidence. While we use the entire database covering the population of both domestic and foreign-owned firms in Slovenia to construct and calculate the market structure factors and incumbent firms' characteristics that enter as explanatory variables in the regression, the regression analysis itself (probit model) is performed on the subpopulation of foreign-owned firms (i.e., all firms registered in Slovenia with a foreign ownership share above the 10% threshold) to test the factors influencing staffing decisions in foreign subsidiaries. In our database, we cannot directly distinguish expatriates who have been appointed from within the firm, from other foreign managers without previous working experiences in the investing firm. Therefore, we estimate the empirical specification

separately for foreign and PCN managers, where a PCN refers to a manager who comes from the same country as any of the three largest foreign investors in the subsidiary. In our dataset, 75% of the foreign managers appointed in subsidiaries in Slovenia are PCNs, suggesting that expat managers make up a significant share of foreign managers.

The rest of the paper is structured as follows. The next section presents review of background literature and develops hypotheses on expatriate staffing decision of an MNE. Data and descriptive statistics are presented in Section 3. This is followed by a description of the methodological approach in Section 4. The results are presented in Section 5, whereas the paper ends with discussion and concluding remarks in Section 6.

2. Literature background and hypotheses development

2.1 Factors underlying the decision to appoint an expatriate

According to resource-based theory, PCN and HCN managers are two types of managerial resources of MNEs with varying capabilities for different managerial tasks (Tan and Mahoney, 2006). While PCN managers serve as a knowledge-transfer mechanism since they have learned and assimilated firm-specific knowledge (Wang *et al.*, 2009), among the advantages of HCN managers the literature identifies a higher capability in dealing with local uncertainties (Santacreu-Vasut and Teshima, 2011), easier access to local knowledge and competencies, and building local networks (Hahn *et al.*, 2013). Local context embeddedness is important for a firm's internal hierarchical knowledge as it helps in transferring the knowledge generated in a heterogeneous context (Mukherjee *et al.*, 2017). Among other reasons behind the management localization practice of MNEs located in China, Fayol-Song (2011) lists cost-cutting, the shortage of appropriate expatriates, developing and retaining local talents, and maintaining good relations with the local government. While resource- and network-based perspectives emphasize expatriates as a resource or as means to access resources, transaction cost and agency theory emphasize their role in reducing costs of organizing (Meyer *et al.*, 2020). In line with agency theory (Gong, 2003; Bebenroth and Froese, 2020), expatriate assignments are expected to reduce economic incentive misalignment problems between the headquarters (principal) and the foreign subsidiary managers (agents). According to transaction cost theory, expatriates are expected to mitigate potential bargaining problems since MNEs typically make more irreversible investments in expatriates than in HCN managers (Tan and Mahoney, 2006).

The expatriation decision in knowledge creation and learning models focuses on the role expatriates play in intraorganizational technology transfer, where assigning a PCN as a managing director develops the organization in such a way that a knowledge network is established by means of the expatriation (Belderbos and Heijltjes, 2005; Bonache and Cerviño, 1997; Edström and Galbraith, 1977a, b; Scullion, 1991). PCNs embody professional skills, specialist know-how and enjoy better social ties with other managers within the MNE (Ando and Endo, 2013; Wang *et al.*, 2009; Michailova *et al.*, 2016), enabling them to become knowledge carriers capable of transferring intellectual capital between the parent and subsidiaries more effectively than HCN managers (Belderbos and Heijltjes, 2005; Bird, 1996). A considerable share of knowledge transfer among MNE units is tacit in nature and highly context specific (Riusala and Suutari, 2004), meaning expatriate selection is not solely based on technical expertise but also on cultural adaptability and flexibility (Richman and Copen, 1973). In the context of knowledge creation and learning, the model proposed by Santacreu-Vasut and Teshima (2011) shows that in the presence of local market uncertainties MNEs with expatriates among their staff engage in more technological transfer. However, when local uncertainty is on a high level, MNEs tend to rely less on expatriates as they lack local knowledge.

The other strand of literature on the decision to expatriate is the control and coordination framework where the use of expatriates is a way of controlling operations in a subsidiary and aligning the subsidiary and parent company's objectives. Using a PCN manager to directly monitor a foreign subsidiary's behaviour can, to some extent, reduce goal incongruence and

information asymmetry (Belderbos and Heijltjes, 2005; Kren and Liao, 1988; Zajac, 1990; Egelhoff, 1988). Contingent on the subsidiary's strategic motives, its alignment with the parent firm's strategy, and the ability of expatriate managers to cope with host-country challenges, the firm-specific knowledge embedded in expatriates can be more useful for a subsidiary to exploit the local market when the parent firm emphasizes value appropriation over value creation (Qian *et al.*, 2024).

As concerns the role of firm-specific factors in the trade-off between relying on a PCN or HCN manager, existing empirical evidence suggests the likelihood of appointing an expatriate to a foreign subsidiary tends to grow when the parent is strategically dependent on the subsidiary (Belderbos and Heijltjes, 2005), the level of global integration (Dörrenbächer *et al.*, 2013), and the degree to which decision-making is centralized (Ando *et al.*, 2008), whereas localization of the subsidiary and organizational experience in the country reduces it (Belderbos and Heijltjes, 2005). The impact of the subsidiary's size on the expatriate staffing level follows a U-shaped curve moderated by parent company size, the parent company's equity exposure to the subsidiary, and the subsidiary's age (Peng and Beamish, 2014). Moreover, the ratio of PCN to foreign subsidiary employees is higher in larger subsidiaries with a high ownership ratio (Bebenroth *et al.*, 2008).

2.2 Hypotheses development

The focus of this paper is on the role of factors in PCN vs HCN manager appointment beyond the specifics of the firm itself, especially host market-specific factors, e.g. host market structure and host-industry environment, while controlling for investor country characteristics (e.g. cultural, institutional, geographic distance to host country). Due to the importance of firms' strategic motives when deciding on FDI and the fact that MNEs mainly enter industries with relatively high barriers to entry and concentration (Caves, 1996), a full understanding of the expatriation decision requires taking into an account contestability of host-country markets, and the strategic interactions between MNEs and local competitors. Therefore, this paper draws on oligopolistic game-theory models within the new Industrial Organization (IO) theory to select core variables and explanatory factors. These models examine MNE entry and the strategic interactions of incumbent firms, viewing market structure as the outcome of a multi-stage game between international oligopolists (e.g., Smith, 1987; Horstmann and Markusen, 1992; Motta, 1992; Petit and Sanna-Randaccio, 2000; Mattoo *et al.*, 2004). They build on the seminal works of Caves (1996) and Knickerbocker (1973), which emphasize competition and "oligopolistic reaction" as central elements of MNE strategy in limited competitive environments.

Our paper is closely related to the recent work by Lee *et al.* (2023a, b), who developed a model addressing the trade-off between expatriate managers, who are relatively more reliable and expensive, and HCN managers, who are prone to job-hopping. Their model, tested on subsidiary-level data from Korean MNEs, confirmed a positive relationship between the productivity gap and the share of expatriate managers in a foreign subsidiary, supporting the notion that MNEs choose governance structures to minimize the risk of opportunism in their subsidiaries. The productivity gap is also among the core variables in our model specification. However, it alone cannot fully capture the complex competitive dynamics in the host country. Therefore, we complement it with other market structure factors, as discussed below. Our paper also relates to the recent work by Qian *et al.* (2024), who developed a multilevel framework for expatriate staffing effectiveness, incorporating host country, subsidiary-level, and parent firm-level factors. Similar to their approach, we use comprehensive firm-level data and consider multilevel variables. However, while they use a panel dataset of foreign subsidiaries of South Korean global enterprises, our perspective differs: we examine subsidiaries located in Slovenia that are part of MNEs headquartered in various countries.

2.2.1 Tacitness (industry-specific factors) and expatriate appointment. Theoretical and empirical literature suggests that attempts to move knowledge (especially tacit) and

technology are more effective when accompanied by the movement of people. According to Nonaka (1994), tacit knowledge requires the use of personnel and human resources to facilitate the transfer process, often relying on the engagement of expatriates (Wang *et al.*, 2004). Expatriates who have learned and assimilated firm-specific knowledge serve as an effective tacit knowledge transfer mechanism (Wang *et al.*, 2009; Michailova *et al.*, 2016; Belderbos and Heijltjes, 2005; Riusala and Suutari, 2004). Ando and Endo (2013) confirmed the ratio of PCN to foreign subsidiary employees is higher in human-capital-intensive service industries (Ando and Endo, 2013), which tend to be more tacit knowledge intensive (Muller and Doloreux, 2009). In line with knowledge creation and learning models, full technology transfer is less likely in the case of an HCN manager than in the case of a PCN national. We expect that the greater the intensity of tacit knowledge, the less effective technology transfer is for an HCN manager:

H1. Tacitness and high-tech intensity are positively associated with the likelihood of a PCN manager being appointed in an MNE's subsidiary.

2.2.2 Host market structure and expatriate appointment. If the appointment of a PCN manager in a local subsidiary leads to more effective technology transfer and, in turn, superior productivity of the subsidiary on one hand, then, on the other, the appointment of a PCN manager tends to be associated with higher costs than for an HCN manager, chiefly fixed costs due to unfamiliarity with the local environment, more difficult access to local knowledge and competencies, and weaker local networks (Hahn *et al.*, 2013). By employing an HCN manager, an MNE can reduce its fixed costs by relying on the manager's local environment knowledge. This reflects the fundamental trade-off behind the expatriation decision of an MNE, i.e. the "local market familiarity" vs "technology transferability". An HCN manager ensures less effective technology transfer but good knowledge of the local market, while employment of the PCN manager leads to more effective technology transfer but is accompanied by higher fixed costs arising from dealing with an unfamiliar environment. The premise that an expatriate is seen as better at transmitting the value of the project while a local manager is better at handling the uncertainty of local conditions also builds on Santacreu-Vasut and Teshima's (2011) information-based leadership theory of MNEs. In this case, we anticipate that appointing a PCN manger will be associated with relatively higher fixed costs compared to appointing a HCN manager. Given that a larger market size allows for the distribution of fixed costs over a greater volume of sales, *ceteris paribus*, we expect an increase in the size of the host-country market to favour the option with higher fixed costs. Consequently, this makes appointing a PCN manager more attractive than appointing a HCN manager. This expectation is based on the rationale that the economies of scale achieved in larger markets can offset the higher initial investment required for PCNs, thereby justifying their selection in such contexts:

H2. The larger the size of the host-country market, the more it is likely an MNE will decide to appoint a PCN manager in its subsidiary.

How do the profile of local rival firms and nature of the competitive process within an industry affect the above-mentioned trade-off in a subsidiary staffing decision? The less competitive incumbent firms are, the easier it is for an MNE to cash in on its firm-specific advantage [4]. In line with oligopolistic models of MNE entry and mode decision (e.g., Smith, 1987; Horstmann and Markusen, 1992; Motta, 1992; Petit and Sanna-Randaccio, 2000; Mattoo *et al.*, 2004), when local rival firms are less productive, the expected market share and profit of the MNE increases. Specifically, when firms are heterogeneous in their production technology, the most productive firms gain the largest market share. Therefore, the larger the productivity gap, the greater the expected market share for the MNE in a host country. This market share effect is more pronounced with a PCN manager, who ensures more effective transfer of tacit knowledge, thereby further enhancing the MNE's productivity advantage. Consequently, the MNE's operating profit is more likely to outweigh the higher fixed costs associated with

managing an unfamiliar environment (than would be incurred with a PCN manager) when local rival firms are less productive. This makes the appointment of a PCN manager more likely.

Additionally, Lee *et al*. (2023a, b) found evidence supporting another mechanism where a larger productivity gap between a MNS and its competitor correlates with a higher share of expatriate managers in a foreign subsidiary. In their model, expatriate managers are relatively more reliable but expensive, while local managers are prone to job-hopping, posing a risk of unintended knowledge leakage to competitors. When the productivity gap is relatively high, the defection of a HCN manager becomes more detrimental to the MNE. Such a defection reduces the technology gap and consequently decreases production and profits. Therefore, the larger the productivity gap, the more likely the superior firm will appoint a PCN manager to avoid profit loss. This argument supports the notion that by choosing more expatriate managers, MNEs minimize the hazard of opportunism in their subsidiaries (Heiman and Nickerson, 2004).

H3. The less productive incumbent firms are, the more likely it is an MNE will decide to appoint a PCN manager in its subsidiary.

Since the competitive strength of incumbent firms is not the sole determinant of the complex nature of the competitive process and market contestability, we also use more direct measures of the degree of competition in the host market, i.e. average mark-ups as a performance measure of market competition [5] and the number of local rival firms. In markets with little competition, e.g. characterized by high markups and/or a small number of incumbent firms, MNEs' subsidiaries may gain larger market shares, making it more likely they will be able to make sufficient profit to absorb the higher fixed costs entailed in the PCN manager decision. The reasoning here parallels that of H2, as the low productivity of local rival firms can, ceteris paribus, also be associated with less intense rivalry. The MNE can better capitalize on the less intense rivalry and secure a dominant market position, thereby justifying the higher fixed costs associated with employing a PCN manager, as opposed to an HCN manager who, being more familiar with the host-country environment, would incur lower fixed costs. Therefore, in a low-competition setting, a PCN manager gains an advantage over an HCN manager.

H4. The more intensive the competition in the host-country market (i.e. the lower the average industry mark-up and when more local rival firms are present), the less likely it is that an MNE will select a PCN manager for its subsidiary.

2.2.3 Distance and expatriate appointment. Finally, the costs of operating in an unfamiliar foreign environment presumably are increasing for home and host countries that are more distant, as result of higher level of uncertainty and complexity for managerial decision-making, the liability of foreignness in different host countries and the overall transaction and operating costs (Kim *et al*., 2020; Lee *et al*., 2023a, b). In the context of the "local market familiarity" vs "technology transferability" trade-off, distance lowers MNEs' incentives to appoint a PCN manager. Studies have acknowledged the role of the institutional environment (Gaur *et al*., 2007; Ando and Paik, 2013; Ando and Endo, 2013) and cultural distance (Bebenroth *et al*., 2008; Singh *et al*., 2019). The evidence on the role of institutional differences is mixed. While Ando and Paik (2013) and Ando and Endo (2013) confirm that the ratio of PCNs to foreign subsidiary employees decreases as the institutional distance between the host and home countries increases, Gaur *et al.* (2007) found that Japanese MNEs rely more on expatriates in institutionally distant environments. With respect to cultural distance, which captures the role of informal institutions, Singh *et al.* (2019) found that a high presence of PCNs in culturally distant locations might cause cultural friction, leading to a detrimental effect on subsidiary performance. Cultural distance is predominantly defined in the literature based on the dimensions proposed by Hofstede's (2011), although different conceptualizations of culture are available and used in the empirical studies (Hutzschenreuter *et al*., 2016), e.g. the GLOBE-based Mahalanobis cultural distance in Singh *et al.* (2019). In cross-cultural studies,

individualism is often identified as a key cultural dimension (Gorodnichenko and Roland, 2017) since it influences how people resolve conflicts between personal interests and optimize mutual benefits. Empirical evidence on expatriate utilization in foreign subsidiaries in Japan suggests another two dimensions, i.e. "Uncertainty Avoidance" and "Power Distance", in the parent country as decisive cultural variables in the decision to appoint a PCN manager. Asian countries were most likely to appoint a PCN to top management and board positions, English-speaking countries were the least likely, with European countries falling in between (Bebenroth *et al.*, 2008).

When comparing physical and institutional (cultural) differences (see discussion in Hutzschenreuter *et al.* (2016)), geographic distance primarily deters international expansion by increasing the costs of cross-border operations, whereas cultural distance discourages international expansion by amplifying the challenges of local adaptation (Li *et al.*, 2020). While technological advances in transportation and information and communication technologies have facilitated easier and faster cross-border communication and exchange, effectively "shrinking" the world and making geographical distances less significant, it remains less clear how strong a driver of cultural convergence technology is (Salehan *et al.*, 2018). Li *et al.* (2020) confirmed that for Chinese firms' FDI location choices, that larger, older, and state-owned firms are less concerned about the high operating costs associated with larger geographic distances, while they are less adaptable to culturally distant countries and thus are more concerned about larger cultural distances. As follows from the above discussion, we hypothesize that distance lowers MNEs' incentives to appoint a PCN manager and that cultural distance is more relevant than physical distance in influencing expatriate staffing decisions.

H5. The greater the distance between the investing and host country, where the cultural distance is more relevant than physical distance, the less likely it is that a foreign firm will appoint a PCN manager.

3. Data

3.1 Data sources

To verify empirically the role of host-country market contestability for the foreign manager appointment decision, we combine four different databases. The first is a matched employer–employee database, SRDAP, provided by the Statistical Office of the Republic of Slovenia. It contains detailed information on the economically active population, such as a person's education level, their nationality, identification of their employer and their position in the firm. The second database includes all firms operating in Slovenia with at least 10% foreign ownership. It also provides information on inward FDI countries of origin. The third database contains firms operating in Slovenia having outward FDI. The two FDI databases were provided by the Bank of Slovenia. These three databases were merged with a fourth one which contains financial data on Slovenian firms and was provided by AJPES (Agency of the Republic of Slovenia for Public Legal Records and Related Services). The final full merged database contains roughly 28,000 firms on average per year, covering the 2002–2010 period. Firms simultaneously having negative capital and zero employees are excluded from the database. While the entire database covering the population of firms in Slovenia is needed for the purpose of the calculating the market structure factors and the average TFP of domestic firms, the regression analysis itself is performed only on the subpopulation of foreign-owned firms.

3.2 Descriptive statistics

Table 1 presents basic descriptive statistics for three categories of foreign-owned firms: ones that only employ Slovenian national (HCN) managers, those that employ at least one foreign

Table 1. Summary statistics

	HCN manager		Foreign manager		PCN manager	
	No. of obs.	Mean (s.d.)	No. of obs.	Mean (s.d.)	No. of obs.	Mean (s.d.)
Age	12,763	9.13 (6.57)	1,628	9.16 (7.15)	1,075	8.71 (6.64)
Employment	12,763	36.26 (129.0)	1,628	91.94 (319.33)	1,075	60.08 (257.62)
Capital int. (EUR)	11,252	422,593 (1.5e+7)	1,428	137,927 (787,515)	955	120,182 (583,477)
Export share (%)	12,372	31.95 (38.51)	1,565	35.36 (39.94)	1,027	31.75 (39.44)
TFP	10,364	16.95 (93.54)	1,254	13.13 (27.33)	777	13.67 (30.15)

Source(s): Authors' own work, based on data provided by the Statistical Office of the Republic of Slovenia, the Bank of Slovenia, and the Agency of the Republic of Slovenia for Public Legal Records and Related Service

manager and foreign-owned firms employing at least one PCN manager. As seen in Table 1, the average age for firms in all three groups is quite similar, although significant differences exist when it comes to their size. Foreign-owned firms managed by HCN are the smallest, on average employing around 36 workers. Companies using foreign managers are, on the other hand, the largest, with their average number of employees reaching almost 92. Positioned in the middle are firms managed by at least one PCN, with 60 workers on average. Further, capital intensity proves to be the highest for firms headed by an HCN, whereas it is considerably smaller for the other two firm categories. At 35.36%, the export share is highest for companies with foreign managers, whereas it is surprisingly similar for firms with HCN managers and PCN managers. Average TFP is the highest for foreign-owned companies managed by an HCN, but quite similar for the other two categories of firms. One possible explanation for this is that in case of firms with only HCN managers foreign investors were cherry picking, selecting more productive firms. Full summary statistics of the regression variables are presented in Appendix.

As shown in Table 2, the largest share of investors comes from EU member states and Western Balkan countries. The share of foreign-owned firms that report the EU-15 as one of the three main FDI source countries is almost 68%, whereas around 15% of foreign-owned

Table 2. Shares of foreign-owned firms by region of FDI origin

Region of FDI origin	Share of foreign firms with FDI from this region (%)
EU 15	67.5
Western Balkan	15.43
EFTA	6.08
EU 12 (new members)	4.59
North America	2.77
Middle East	1.63
Asia	1.05
FSU	0.35
Oceania	0.35
Central America	0.15
North Africa	0.06
South America	0.03

Source(s): Authors' own work, based on data provided by the Statistical Office of the Republic of Slovenia, the Bank of Slovenia, and the Agency of the Republic of Slovenia for Public Legal Records and Related Service

firms have owners from the Western Balkans (including Croatia). Further, 4.6% of foreign-owned firms report at least one of their largest three foreign owners come from the new EU member states (EU-12) and 6.08% from EFTA states. The most important FDI origin region outside Europe is North America, accounting for around 3% of foreign-owned firms in Slovenia.

Further, Table 3 presents the average shares of foreigners between managers in different units of foreign-owned firms in Slovenia. The largest average share of foreigners can be observed between directors and board members, namely 19.2%. Human resource and general affairs departments, on the other hand, have the smallest average share of foreign managers, just slightly above 2%. The share is also quite big for smaller firms, where foreigners on average account for 13.7% of managers.

4. Empirical approach and methodological issues

To test the factors influencing a multinational firm's decision on manager appointment in its subsidiary, we employ a probit mode where we estimate the likelihood of appointing foreign (PCN) managers to the post in foreign-owned subsidiaries located in Slovenia. Probit model is applied on the subpopulation of foreign-owned firms in Slovenia, therefore, empirical exercise focuses on the expatriation decision given foreign firm decision to invest.

In our database, we cannot distinguish expatriates from foreign managers without previous working experience in the investing firm. Therefore, to further validate the results for PCNs in the context of expatriation, we estimate empirical model specifications for both foreign and PCN manager appointments separately (the former including both PCN and third-country national (TCN) managers), given that the likelihood of a PCN being an expatriate is presumably higher than that of a TCN. We expect, therefore, the results for posting PCN managers to be more significant than those for foreign managers in general. In our database, 75% of the foreign managers appointed in subsidiaries in Slovenia are PCN, suggesting that expat managers make up a significant share of foreign managers. The category of managers is defined according to the International Standard Classification of Occupations (ISCO-88). For managers, we consider all occupations classified under: (1) a group of corporate managers (heading 12), i.e. directors and chief executives (heading 121), production and operations managers (heading 122) and other specialist managers (heading 123); and (2) occupations classified in the group of managers of small enterprises (heading 13). Based on hypotheses from Section 2, we identify in the next subsection the crucial factors and expected direction of their impact on the subsidiary staffing decision.

Table 3. Shares of foreigners between managers in different units of foreign-owned companies in Slovenia

	Mean share (%)	s.d.
Production and operational units	5.37	21.29
Directors and board members	19.19	38.37
Financial units	2.75	14.73
Human resource, general affairs and employer relations units	2.15	14.42
Sales and marketing units	3.41	16.66
Advertising and public relations units	3.08	16.45
Procurement and distribution units	9.71	29.45
R&D units	7.51	24.65
Other company units	14.33	34.78
Smaller companies	13.70	34.16

Source(s): Authors' own work, based on data provided by the Statistical Office of the Republic of Slovenia, the Bank of Slovenia, and the Agency of the Republic of Slovenia for Public Legal Records and Related Service

4.1 Variable definition

We first describe how we define our core explanatory variables that correspond to the testable hypotheses 1-5 developed in Section 2 and continue with the specification of additional firm-level and annual-specific control variables.

4.1.1 Host market structure factors. We measure the competitiveness of local rival firms based on their total factor productivity (hereafter TFP). We use logarithm value of the average industry TFP of local firms (*lnTFPlocal*) defined at 3-digit level of the NACE (Rev2) classification. Additionally, we consider alternative measure in terms of a productivity difference between average TFP of incumbent firms within an industry and the foreign-owned subsidiary in question (*TFPgap*), specified as the difference between the natural logarithm of industry average TFP of incumbent firms, calculated on 3-digit NACE (Rev2) level, and the natural logarithm of a foreign subsidiary's TFP. This alternative specification allows us to focus more directly on the competitive difference between a foreign subsidiary and local rival firms. In line with hypothesis 3, we expect a negative sign of the regression coefficients of *lnTFPlocal* and *TFPgap* when controlled for the number of firms in an industry. We calculate TFP following the procedure by Levinsohn and Petrin (2003) using the Stata levpet command. Fixed assets are selected as a proxy for capital, labour costs for labour and energy costs for intermediate inputs. The rationale behind using energy costs as a proxy for intermediate inputs is that it might be a more appropriate choice in the case of service firms. Namely, in the computer age and amid efforts to preserve the natural environment, many service firms are using less and less material. TFP is estimated cross-sections separately for the manufacturing and service sectors. The revenue version of the production function is selected as the basis for the TFP estimation.

Host market size (*lnMarketSize*) is measured by domestic sales of firms operating in an industry defined at the 3-digit level of NACE classification. It enters our regression in logarithmic form. According to hypothesis 2, we expect a positive sign of the market size regression coefficient in probit models of placing foreigners in managing positions in local subsidiaries.

Further we include industry mark-up (*IndMarkup*) and the number of local firms operating in an industry (*NoLocalFirms*) in the empirical model specifications. All market-structure-related regressors are determined using the 3-digit Nace Rev2 classification level of industries. They are calculated considering the entire population of firms operating in the Slovenian market. Industry mark-up is used as a proxy for the level of competition in the host market, measured as the ratio of total industry revenue and industry direct variable costs, where total revenue is defined as the sum of sales revenue and stocks while direct variable costs are defined as the sum of labour costs and material costs. We expect in line with hypothesis 4 the negative impact of degree of market competition for the propensity to appoint a new foreign (PCN) manager, i.e. positive sign of the regression coefficient for *IndMarkup* and negative for *NoLocalFirms*.

4.1.2 Industry-specific factors. To our knowledge, no direct measure of tacitness of knowledge in different industries has yet been proposed in the literature. However, tacit knowledge has a crucial impact on the success of the innovation process of firms (Seidler-de Alwis and Hartmann, 2008), which is a characteristic feature of the high-tech industries. We therefore control for tacitness indirectly by including a dummy variable for knowledge- and technology-intensive industries (*HighTech), i.e.* knowledge-intensive service sectors and medium-high and high-tech manufacturing industries, in addition to the inclusion of a set of industry dummies at the 2-digit NACE level (*industry*) defined according to the Eurostat aggregation. As an alternative measure of tacitness we consider the firm skill intensity, measured as a share of highly educated employees (*ShareHEemp*), i.e. workers with attained tertiary education. Human-capital-intensive service industries namely tend to be more tacit knowledge intensive (Muller and Doloreux, 2009). According to the hypothesis 1, we expect a positive impact of the tacitness on the likelihood to appoint a foreign (PCN) manager.

4.1.3 Country-specific (macro) factors. We account for the costs of operations in an unfamiliar environment incurred by PCN-managed local subsidiaries by considering both the physical and cultural distance between the investing and recipient countries. The simple physical distance between the capitals of Slovenia and the country of inward FDI origin [6] (*dist*) is provided by the CEPII gravity database (Conte *et al.*, 2022), while the cultural distance between Slovenia and countries of origin of inward FDI is quantified by absolute distances in Hofstede's following six cultural dimensions (Hofstede, 2011): (1) *Power Distance* (*dist_c_pdi*) – measuring the extent to which the less powerful members of society accept and expect the unequal distribution of power; (2) *Uncertainty Avoidance (dist_c_uai*) – telling us to what extent members of society are comfortable with the unknown future; (3) *Individualism* (*dist_c_idv*) – telling us about the extent to which members of society are integrated into groups; (4) *Masculinity* (*dist_c_mas*) – relating to the way in which emotional roles are divided between genders; (5) *Long-Term vs Short-Term orientation (dist_c_ltovs)* – categorizing societies based on whether their efforts are more focused on the future, the present or the past; (6) *Indulgence vs Restraint* (*dist_c_ivr*) – differentiating societies based on whether they allow relatively free gratification of basic human desires related to enjoying life or control the gratification of these needs.

We also control for the FDI country of origin by introducing a set of regional dummies for the investor's origin (*FDIregion*) to account for any specific effects constant for all investors from a particular region [7]. According to hypothesis 5, we expect an increase in distance and thus costs G to reduce the probability of appointing a PCN manager. Moreover, we account for annual-specific shocks common to all firms in the sample with the inclusion of annual dummies (*year*).

4.1.4 Firm-specific controls. Among the group of controlling variables at the firm level, our empirical model includes a specification of age, size, export orientation of the foreign subsidiaries and a dummy variable indicating whether the subsidiary has any outward FDI. Firm size (*lnSize*) is measured by the number of employees and enters the regression in logarithmic form. Firm age (*lnAge*) is counted from the year of formation according to the Business Register of the Republic of Slovenia. Since age also enters our empirical model in logarithmic form, we start counting age with the value of 1 in order to prevent dropping observations with less than 1 year of operation time, e.g. the initial year of greenfield investments. Export propensity (*ExPropensity*) refers to the share of exports in total firm sales, while *dOutFDI* stands for a dummy variable indicating whether the firm has any outward FDI or not.

4.2 Empirical model specification and methodological issues

The resulting baseline empirical model specification is defined as follows:

$$\begin{aligned}\Pr(MgrForeign_{it} = 1) &= \beta_0 + \beta_1 lnTFPlocal_{jt-1} + \beta_2 lnMarketSize_{jt-1} + \beta_3 lndMarkup_{jt-1} \\ &\quad + +\beta_4 lnNoLocalFirms_{jt-1} + \beta_5 HighTech_j + \mathbf{Z}_c'\beta_6 + \mathbf{X}_{it}'\beta_7 \\ &\quad + \sum \beta_{8.c} FDIregion_c + \sum \beta_{9.j} Industry_j + \sum \beta_{10.t} Year_t + u_{it} \qquad (1)\end{aligned}$$

where the subscripts *i*, *j*, *c* and *t* refer to firms, industries, countries and years, respectively. We specify two versions of the dependent variable, *MgrForeign*, that tests the likelihood of appointing a foreign manager and *MgrPCN* to estimate the probability of appointing a PCN manager. They are binary variables, defined for foreign-owned subsidiaries located in Slovenia, and take values of 1 if the foreign-owned firm employs at least one new foreign manager or PCN manager, respectively, in a current year and 0 otherwise. A manager is defined as a PCN if he/she comes from the same country as any of the three largest foreign

investors in the subsidiary. Here we require a new appointment of the foreign (PCN) manager to exclude situations where we have foreign (PCN) manager appointed already before FDI happens. The conditioning on the new appointment allows us to strengthen further the foreign/PCN manager definition towards expat managers. Vector Z_c' comprises physical distance (*dist*) and cultural distances (*dist_c_pdi*, *dist_c_uai*, *dist_c_idv*, *dist_c_mas*, *dist_c_ltovs and dist_c_ivr*). Vector $\mathbf{X}_{it}'$ includes firm-level control variables: *lnAge*, *lnSize*, *ExPropensity* and *dOutFDI* which enter the right-hand side of equation (1) as 1-year lagged values.

The baseline models are first estimated using a pooled probit estimator. In order to account for possible heteroscedasticity, we also apply a heteroscedastic probit model. With the latter, the probit model is generalized, namely, the cumulative distribution function (CDF) of a standard normal random variable Φ() with a mean of 0 and variance of 1 is reformulated into a normal CDF where variance is allowed to vary as a function of the independent variables (Harvey, 1976). Since the majority of models dealing with heterogeneous firm dynamics predict that firm size influences the conditional variance of a firm's performance, we test for heterogeneity induced by firm size in our staffing decision case. In addition, we estimate a random effects probit model and explicitly exploit the panel structure of our data. This panel data approach allows us to control for unobserved firm-specific heterogeneity that remains constant during the observation period.

As a first robustness check, we test the determinants of foreign (PCN) manager appointment within a modified cross-section data setting and consider alternative definitions of the dependent variable. The dataset is rearranged so that it encompasses all firms that received initial FDI or where the amount of foreign capital increased by at least 100% in a single year between 2002 and 2010 (inclusive). The firms are observed in the year of initial FDI or the first such increase in foreign capital. The dependent dummy variables in this setting take a value of 1 if a foreign-owned firm hires a new foreign (PCN) manager within one year (*MgrForeign_1 yr* and *MgrPCN_1 yr*) after the inward FDI and, alternatively, within 2 years after the inward FDI (*MgrForeign_2 yr* and *MgrPCN_2 yr*).

For the second robustness check, we respecify the dependent variable as a share of PCN managers among all managers in a subsidiary (*MgrPCN_share*) This alternative definition allows us to take into an account the situations where we have more than one manager appointed which is different from the theoretical model which imposes an either-or condition in manager choice. By measuring the share of PCN managers, we account for different degrees of PCN manager representation across firms.

5. Empirical results

In this section, we first present our baseline estimations. We then proceed with our robustness check results.

5.1 Baseline results

The baseline results are depicted in Table 4 with *MgrForeign* and *MgrPCN* as dependent variables taking values of 1 if the foreign-owned firm employs at least one new foreign manager or a PCN manager in a current year, respectively, and 0 otherwise. Standard errors are adjusted for firm clusters in all heteroscedastic probit specifications (models (1), (2), (4) and (5)), requiring that observations are independent only across clusters (firms) but not necessarily within clusters (firms). Based on the Wald test, the lnsigma2 = 0 hypothesis is rejected in all heteroscedastic probit models, indicating that heteroscedasticity induced by firm size actually exists, meaning that the use of heteroscedastic probit models is appropriate. For this reason, the results for ordinary pooled probit models are not reported in Table 4. For each of the two-outcome variables, two sets of heteroscedastic probit model results are presented in Table 4. The first of the two specifications (models (1) and (4)) does not control for the impact of Hofstede's cultural distances on the decision whether to appoint a foreign manager or not while other specifications do.

Table 4. Heteroscedastic probit and random effects probit model results of foreign and PCN manager appointment in foreign-owned firms in Slovenia

	(1) MgrForeign heteroscedastic probit	(2) MgrForeign heteroscedastic probit	(3) MgrForeign RE probit	(4) MgrPCN heteroscedastic probit	(5) MgrPCN heteroscedastic probit	(6) MgrPCN RE probit	(7) MgrPCN RE probit (lim. export)
Firm-specific factors							
lnAge	−0.132***	−0.101**	−0.149***	−0.084*	−0.045	−0.048	−0.040
	[−0.008]***	[−0.006]**	[−0.006]***	[−0.003]*	[−0.002]	[−0.001]	[−0.001]
	(0.037)	(0.041)	(0.058)	(0.045)	(0.052)	(0.075)	(0.118)
lnSize (−1)	0.281***	0.277***	0.221***	0.253***	0.242***	0.116***	0.208***
	[0.010]***	[0.010]***	[0.009]***	[0.004]***	[0.004]***	[0.003]***	[0.006]***
	(0.025)	(0.027)	(0.033)	(0.039)	(0.039)	(0.042)	(0.067)
ExPropensity	0.210**	0.260***	0.374***	0.181*	0.248**	0.362**	/
(−1)	[0.013]***	[0.015]***	[0.015]***	[0.007]*	[0.009]**	[0.009]**	
	(0.082)	(0.090)	(0.122)	(0.098)	(0.111)	(0.154)	
OutwardFDI	−0.079	−0.145	−0.134	−0.223**	−0.311**	−0.302	−0.797
(−1)	[−0.005]	[−0.008]	[−0.005]	[−0.009]*	[−0.012]**	[−0.008]	[−0.024]
	(0.085)	(0.093)	(0.152)	(0.126)	(0.144)	(0.226)	(0.644)
Host market structure factors							
lnTFPlocal (−1)	−0.111	−0.093	−0.147	−0.206**	−0.223**	−0.307*	−0.775*
	[−0.007]	[−0.005]	[−0.006]	[−0.008]**	[−0.008]**	[−0.008]*	[−0.023]*
	(0.083)	(00.930)	(0.149)	(0.093)	(0.096)	(0.167)	(0.417)
HighTech	0.557	0.355	0.716	1.103*	1.155	1.823*	3.227***
	[0.035]	[0.021]	[0.029]	[0.045]*	[0.043]	[0.047]*	[0.095]***
	(0.603)	(0.665)	(1.013)	(0.672)	(0.724)	(1.056)	(1.046)
lnMaketrSize	0.022	0.018	0.068	0.080	0.083	0.169*	0.330**
(−1)	[0.001]	[0.001]	[0.003]	[0.003]	[0.003]	[0.004]*	[0.010]**
	(0.049)	(0.054)	(0.071)	(0.060)	(0.064)	(0.090)	(0.146)
lnNoLocalFirms	−0.064	−0.061	−0.089	−0.092	−0.092	−0.168**	−0.310***
(−1)	[−0.004]	[−0.004]	[−0.004]	[−0.004]	[−0.003]	[−0.004]**	[−0.009]***
	(0.041)	(0.047)	(0.063)	(0.057)	(0.062)	(0.076)	(0.107)
IndMarkup (−1)	0.23e−4	0.28e−4	0.44e−4	0.35e−4	0.43e−4*	0.60e−4*	2.9e−5

(*continued*)

Table 4. Continued

	(1) MgrForeign heteroscedastic probit	(2) MgrForeign heteroscedastic probit	(3) MgrForeign RE probit	(4) MgrPCN heteroscedastic probit	(5) MgrPCN heteroscedastic probit	(6) MgrPCN RE probit	(7) MgrPCN RE probit (lim. export)
	[1.5e−6]	[1.6e−6]	[1.8e−6]	[1.4e−6]	[1.6e−6]	[1.6e−6]	[8.6e−7]
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(7.38e−5)
Country-specific factors							
lndist		−0.088	−0.135		−0.003	−0.124	−0.431
		[−0.005]	[−0.005]		[−0.0001]	[−0.003]	[−0.013]
		(0.168)	(0.235)		(0.226)	(0.307)	(0.646)
dist_c_pdi		−0.009**	−0.013**		−0.011***	−0.011	−0.023*
		[−0.001]**	[−0.001]**		[−0.0004]***	[−0.0003]	[−0.001]*
		(0.004)	(0.006)		(0.004)	(0.007)	(0.012)
dist_c_idv		−0.004	−0.009		−0.002	−0.003	−0.004
		[0.0002]	[−0.0004]		[0.0001]	[0.0001]	[0.0001]
		(0.005)	(0.006)		(0.006)	(0.009)	(0.023)
dist_c_mas		−0.004	−0.005		0.003	0.006	0.006
		[−0.0002]	[−0.0002]		[0.0001]	[0.0002]	[0.0002]
		(0.003)	(0.004)		(0.003)	(0.007)	(0.014)
dist_c_uai		0.007	0.010		0.002	−0.002	0.004
		[0.0004]	[0.0004]		[0.0001]	[−0.0001]	[0.0001]
		(0.005)	(0.007)		(0.006)	(0.009)	(0.021)
dist_c_ltovs		−0.010**	−0.014**		−0.013**	−0.018**	0.5e−3
		[−0.001]**	[−0.001]**		[−0.001]**	[−0.001]**	[0.0000]
		(0.005)	(0.006)		(0.006)	(0.008)	(0.016)
dist_c_ivr		−0.009	−0.012		−0.007	−0.009	−0.029
		[−0.001]	[−0.0005]		[0.0002]	[−0.0002]	[−0.0001]
		(0.008)	(0.013)		(0.012)	(0.017)	(0.042)
dEU12	0.159	0.275	0.214	−0.068	−0.096	−0.361	0.162
	[0.010]	[0.021]	[0.011]	[−0.002]	[−0.003]	[−0.005]	[0.008]

(*continued*)

Table 4. Continued

	(1) MgrForeign heteroscedastic probit	(2) MgrForeign heteroscedastic probit	(3) MgrForeign RE probit	(4) MgrPCN heteroscedastic probit	(5) MgrPCN heteroscedastic probit	(6) MgrPCN RE probit	(7) MgrPCN RE probit (lim. export)
	(0.141)	(0.237)	(0.281)	(0.251)	(0.320)	(0.426)	(0.502)
dEFTA	−0.073	0.041	0.079	−0.361	−0.236	−0.338	/
	[−0.003]	[0.002]	[0.004]	[−0.006]**	[−0.005]	[−0.005]	
	(0.112)	(0.138)	(0.209)	(0.259)	(0.289)	(0.393)	
dWBalkan	0.405***	−0.270	−0.566	0.550***	0.125	0.442	−0.593
	[0.033]***	[−0.011]	[−0.016]	[0.034]***	[0.005]	[0.013]	[−0.013]
	(0.081)	(0.372)	(0.543)	(0.094)	(0.361)	(0.650)	(1.097)
dFSU	1.068***	1.336***	1.624***	1.202***	1.444**	1.743**	2.371
	[0.170]***	[0.251]*	[0.206]*	[0.165]***	[0.229]	[0.163]	[0.376]
	(0.147)	(0.402)	(0.546)	(0.146)	(0.578)	(0.793)	(2.052)
dMiddle_east	0.323	0.142	−0.049	0.599*	0.572	0.732	1.071
	[0.024]	[0.009]	[−0.002]	[0.040]	[0.037]	[0.029]	[0.082]
	(0.348)	(0.388)	(0.736)	(0.339)	(0.352)	(0.833)	(1.146)
dNAfrica	1.410***	/	/	1.430***	/	/	/
	[0.287]***			[0.241]**			
	(0.361)			(0.379)			
dNorthAmerica	0.070	0.303	0.514	−0.151	−0.130	−0.409	0.484
	[0.004]	[0.024]	[0.032]	[−0.003]	[−0.003]	[−0.006]	[0.026]
	(0.143)	(0.375)	(1.533)	(0.189)	(0.473)	(0.720)	(1.338)
dCentralAmerica	0.515**	/	/	/	/	/	
	[0.048]						
	(0.210)						
dRestOfAsia	0.835***	1.046**	1.235*	1.068***	1.059	1.375	2.178
	[0.108]***	[0.161]	[0.126]	[0.127]***	[0.119]	[0.097]	[0.318]
	(0.163)	(0.488)	(0.660)	(0.174)	(0.696)	(0.963)	(2.146)
dSEAsia	0.930*	0.211	0.335	/	/	/	/
	[0.131]	[0.015]	[0.018]				

(*continued*)

Table 4. Continued

	(1) MgrForeign heteroscedastic probit	(2) MgrForeign heteroscedastic probit	(3) MgrForeign RE probit	(4) MgrPCN heteroscedastic probit	(5) MgrPCN heteroscedastic probit	(6) MgrPCN RE probit	(7) MgrPCN RE probit (lim. export)
	(0.549)	(0.713)	(0.979)				
Constant	−2.121**	−0.714	−1.196	−3.140***	−2.683	−5.132*	−3.233
	(0.915)	(1.663)	(2.119)	(1.102)	(2.015)	(2.693)	(4.807)
Year dummies	yes	yes	yes	yes	yes	yes	yes
Industry dummies	yes	yes	yes	yes	yes	yes	yes
Observations	10,452	9,413	9,413	9,262	8,160	8,160	3,268
Log (pse.) likelihood	−1032.615	−870.9817	−859.0587	−588.6372	−483.9481	−481.9065	−194.7968
Wald test	/	/	$\chi^2(75) = 174.07$***	$\chi^2(56) = 829.36$***	$\chi^2(57) = 791.93$***	$\chi^2(57) = 132.72$***	$\chi^2(37) = 85.63$***
Wald's test for heteroscedasticity. H0: lnsigma2 = 0							
lnsigma2	−0.087***	−0.072***	/	−0.113***	−0.094***	/	/
lnemp(−1)	(0.029)	(0.028)		(0.032)	(0.029)		
$\chi^2(1)$	9.20***	6.62***		12.22***	10.91***		
Likelihood-ratio test; rho = 0: $\chi^2(1)$ (Prob > χ^2)							
	/	/	28.68***	/	/	10.07***	0.43

Note(s): Marginal effects (dydx) in square brackets, robust std. err. in round brackets, adjusted for firm level clusters; ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$
Source(s): Authors' own work, based on data provided by the Statistical Office of the Republic of Slovenia, the Bank of Slovenia, and the Agency of the Republic of Slovenia for Public Legal Records and Related Service

The specification controlling for the impact of Hofstede's cultural distances is additionally estimated using the random effects probit estimator (hereafter RE probit) to account for any unobserved firm-level heterogeneity (models (3), (6) and (7)). A likelihood–ratio test rejects the hypothesis of rho = 0 [8] in all RE probit specifications and confirms the importance of unobserved heterogeneity ("frailty") in this subsample. Hence, the appropriateness of RE probit estimator is validated. In order to recognize that hypotheses related to the market structure determinants might be less relevant for the subsidiaries that are highly export oriented, we further limit the sample to those subsidiaries focused on local market and estimate specification (1) on a subsample of firms that report an export share of less than or equal to 10% [9]. The results are presented in the last column (7) of Table 4. Since regression coefficients in probit models cannot be interpreted as a simple slope as in ordinary linear regression, but in Z-scores (i.e. as a change in z-score for one unit increase in regressor), we also report marginal effects in Table 4 in square brackets.

The impact of average TFP of local rival firms within an industry is negative, albeit only significant in the case of PCN managers. The negative sign is in line with the hypothesis 3. The more productive local rival firms are, the lower the propensity of foreign subsidiaries to appoint a new PCN. In this case, the MNE's market share tends to be too small to cover the fixed costs associated with doing business in an unfamiliar environment incurred in the case of a PCN manager decision. The results also suggest that the likelihood of appointing a new PCN manager tends to be greater in knowledge- and technology-intensive industries, offering support for the hypothesis 1. The positive regression coefficient of the high-tech dummy variable is weakly significant in most PCN specifications but becomes highly significant in the more demanding random effects specification for the subsample of the local-market orientated subsidiaries (column (7) in Table 4). The effects of other market structure factors are not significant in heteroscedastic probit specifications ((4)–(5)). However, they all become significant when controlling for unobserved heterogeneity with the random effects probit specification for a PCN manager (columns (6) and (7)). The impact of the number of local firms in an industry on appointing a PCN manager becomes significantly negative, while the average firm mark-up in an industry and the size of the domestic market seem to increase the likelihood of appointing a PCN manager, supporting hypothesis 4 and weakly supporting hypothesis 2, respectively. The results for specification in column (7) reaffirm and even strengthen the full sample PCN manager results related to host market-specific factors. Moreover, the coefficients for the knowledge- and technology-intensity dummy, market size and number of domestic firms in an industry become even more statistically significant, offering convincing evidence in support of the stated hypotheses.

Interestingly, the market structure characteristics seem much more important for employing a PCN manager than third-country national (hereafter TCN) managers since their impact is mostly insignificant in specifications with *MgrForeign* as a dependent variable (1–3) where we consider both PCN and TCN managers. In contrast, firm- and country-specific (macro) factors bring a much more homogenous impact on PCN and TCN appointments to managing positions.

As far as subsidiary characteristics are considered, we find that the size of a subsidiary and its export share significantly positively affect the propensity to hire a new foreign (PCN) manager in all specifications from Table 4. Conversely, we find evidence implying that a subsidiary's age tends to reduce the likelihood of appointing a foreign manager. The impact of firm age is, however, robust only in foreign manager specifications, while in the PCN specifications it becomes insignificant when distances are controlled for. Foreign subsidiaries with their own outward FDI tend to be less likely managed by PCN managers, but this result is not robust when we control for unobserved firm-level heterogeneity.

When it comes to distances in Hofstede's cultural dimensions, we see in Table 4 that two dimensions are crucial for the decision regarding a foreign manager employment decision, i.e. the Power Distance dimension and Long-Term vs Short-Term orientation. The significantly negative impact of these two cultural distance dimensions agrees with the hypothesis 5 that a

higher distance leads to a lower probability of foreign manager appointment. In all specifications from Table 4, the impact of physical distance is nonsignificant, indicating that cultural differences between the parent country and the host economy are a more relevant factor in the decision of foreign manager appointment than physical distance. As far as the regions of inward FDI origin are concerned, the EU-15, i.e. the old EU member states, were chosen as a reference region. According to the results of models that do not control for Hofstede's cultural dimensions, i.e. in columns (1) and (4), owners from EFTA members, the new EU-12 member states and North America do not differ significantly from the owners with the old EU-15 origin, while the owners from other regions, e.g. from the Western Balkans (dWBalkan), the former Soviet Union (dFSU), North Africa (dNAfrica), and Asia, are more inclined to appoint foreign (PCN) managers, as indicated by the positive significant regression coefficients for those regions in specifications (1) and (4). After controlling for Hofstede's cultural distances, the results of the models show that only owners from the former Soviet Union and rest of Asia (excluding South-East Asia) are more inclined to bring foreign managers into their subsidiaries (specifications 2–3).

5.2 Robustness check results

The first set of robustness check results is given in Table 5 where the baseline specifications are re-estimated and modified in a cross-section data setting. Due to the confirmed presence of heteroscedasticity induced by firm size in the PCN models, we report the results employing a heteroscedastic probit model for the PCN specifications, while for the foreign manager specifications, with no heteroscedasticity detected, ordinary pooled probit results are presented.

The results obtained in the cross-section setting, where we consider a 1- and 2-year window for foreign manager employment after the FDI are similar to the baseline results in terms of both the sign and significance of the regression coefficients, with certain minor deviations. In particular, we find further evidence in support of the hypothesis 3 based on the negative and significant impact of the average TFP of local firms within an industry. In the cross-section setting, the coefficient for the average TFP of incumbent firms is even significant in the foreign manager specifications (1–2) in addition to PCN specifications (3–4). Moreover, the significant positive effect of knowledge- and technology-intensive industries in the PCN specifications (3–4) confirms and strengthens our conclusions from the baseline results with respect to the hypothesis 1, namely that tacit knowledge intensity increases the incidence of PCN manager appointment. Interestingly, the role of tacitness is only significant in both the baseline and robustness check results for the PCN specifications. This points to the importance of expat manager appointment in tacit-knowledge-intensive industries, while the decision to employ a TCN manager seems unaffected by tacitness. The robustness check results further provide support not only for the impact of the number of domestic firms in the PCN manager specifications (3–4) but also for the impact of competition intensity in the market more directly. Namely, the positive impact of the industry-level mark-up turns significant in all specifications from Table 5, indicating that the propensity to appoint a new foreign manager tends to be higher in less competitive oligopolistic industries. On the other hand, we fail to reconfirm the positive impact of local market size on the likelihood of foreigner appointments in managerial positions found with the baseline specifications; hence, we cannot confirm H2.

Regarding the distance, Power Distance (*dist_c_pdi*) remains a significant cultural dimension in the PCN manager specifications (3–4) and is in line with the hypothesis 5, while in the foreign manager specifications (1–2) *Indulgence vs Restraint* aspect (*dist_c_ivr)* becomes a key dimension of the cultural distance between the investing and recipient country with a positive significant regression coefficient. Similar to the baseline results, the impact of physical distance is non-significant and even turns significantly positive in specification (4). Concerning firm-specific factors, the positive effect of the subsidiary's size on foreign

Table 5. Cross section probit results of foreign (PCN) manager appointment in foreign-owned firms in Slovenia

	(1) MgrForeign_1 yr probit	(2) MgrForeign_2 yr probit	(3) MgrPCN_1 yr heteroscedastic probit	(4) MgrPCN_2 yr heteroscedastic probit
Firm-specific factors				
lnAge	−0.447***	−0.247**	−0.291**	−0.225**
	(0.128)	(0.114)	(0.119)	(0.089)
lnSize (−1)	0.306***	0.259***	0.323***	0.318***
	(0.080)	(0.066)	(0.038)	(0.042)
ExPropensity	0.207	0.077	0.041	−0.057
(−1)	(0.298)	(0.267)	(0.269)	(0.241)
dOutFDI (−1)	0.373	−0.092	0.348	0.143
	(0.304)	(0.282)	(0.242)	(0.191)
Host market structure factors				
IndMarkup (−1)	0.608***	0.440***	0.529***	0.509***
	(0.168)	(0.138)	(0.133)	(0.117)
HighTech	0.356	0.574	0.632**	0.774***
	(0.436)	(0.357)	(0.293)	(0.299)
lnTFPlocal (−1)	−0.591***	−0.376**	−0.423***	−0.302**
	(0.165)	(0.151)	(0.149)	(0.138)
lnMarketSize	−0.028	−0.007	0.154	0.096
(−1)	(0.110)	(0.083)	(0.109)	(0.091)
lnNoLocalFirms	−0.112	−0.094	−0.217**	−0.137*
(−1)	(0.103)	(0.085)	(0.098)	(0.083)
Country-specific (macro) factors				
dist	−2.20e−6	−2.81e−5	6.55e−6	5.13e−5*
	(4.3e−5)	(4.18e−5)	(3.56e−5)	(2.8e−5)
dist_c_pdi	−0.008	−0.008	−0.017**	−0.016***
	(0.009)	(0.008)	(0.009)	(0.006)
dist_c_idv	0.004	0.004	0.004	0.002
	(0.008)	(0.007)	(0.006)	(0.005)
dist_c_mas	−0.010	−0.007	0.001	0.004
	(0.009)	(0.007)	(0.006)	(0.005)
dist_c_uai	−0.024*	−0.016	−0.005	−0.003
	(0.014)	(0.0126)	(0.012)	(0.009)
dist_c_ltowvs	0.002	0.003	−0.007	−0.008
	(0.014)	(0.012)	(0.011)	(0.009)
dist_c_ivr	0.085***	0.055**	0.039*	0.028
	(0.028)	(0.024)	(0.022)	(0.018)
Constant	−5.279	−4.244**	−7.284***	−6.444***
	(2.109)	(1.799)	(2.053)	(1.799)
Observations	576	601	529	554
Log (pse.) likelihood	−83.3405	−111.7728	−44.0342	−51.3876
Wald test	$\chi^2(23) = 70.24$***	$\chi^2(24) = 54.98$***	$\chi^2(21) = 149.61$***	$\chi^2(22) = 93.09$***
Wald's test for heteroscedasticity. H0: lnsigma2 = 0				
lnsigma2	0.100	0.194	−0.205**	−0.245***
lnemp(−1)	(0.163)	(0.121)	(0.088)	(0.070)
$\chi^2(1)$	0.38	2.55	5.43**	12.35***

Note(s): Robust Std. Err. in round brackets; ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$. Industry dummies included
Source(s): Authors' own work, based on data provided by the Statistical Office of the Republic of Slovenia, the Bank of Slovenia, and the Agency of the Republic of Slovenia for Public Legal Records and Related Service

manager appointment is confirmed, as is the impact of the subsidiary's age which even becomes significantly negative in the PCN manager specifications. Surprisingly, however, the impact of export orientation becomes non-significant in this setting.

The second set of robustness check results is given in Table 6 where we replace the binary variable on manager appointment with the share of PCN managers among all managers in a

Table 6. Fixed effects results of PCN manager share in foreign-owned firms in Slovenia

	MgrPCN_share (1)	MgrPCN_share (2)	MgrPCN_share (3)
Firm-specific factors			
lnAge	0.0019	0.0021	0.00203
	(0.006)	(0.006)	(0.006)
lnSize (−1)	0.0009	0.0027	0.0027
	(0.003)	(0.003)	(0.003)
ExPropensity (−1)	0.0118	0.0112	0.0113
	(0.008)	(0.008)	(0.008)
dOutFDI (−1)	−0.0058	−0.0046	−0.0049
	(0.008)	(0.008)	(0.008)
ShareHEemp	0.0005***	0.0007***	0.0007***
	(0.0001)	(0.0001)	(0.0001)
ForeignOwner_share			−0.266
			(0.204)
Host market structure factors			
TFPgap (−1)	−0.0036*	−0.0046**	−0.0046**
	(0.002)	(0.002)	(0.002)
lnMarketSize (−1)	−0.0074*	−0.0054	−0.00544
	(0.004)	(0.004)	(0.00365)
lnNoLocalFirms(−1)	0.0112***	0.0059	0.00597
	(0.004)	(0.004)	(0.004)
IndMarkup (−1)	1.0e−06	5.0e−07	4.9e−07
	(1.5e−06)	(1.4e−06)	(1.4e−06)
Country-specific factors			
lndist		0.0255	0.0255
		(0.0551)	(0.055)
dist_c_pdi		−0.0006	−0.0006
		(0.001)	(0.001)
dist_c_idv		−0.0007	−0.0007
		(0.001)	(0.001)
dist_c_mas		0.0007	0.0007
		(0.001)	(0.001)
dist_c_uai		0.0005	0.0005
		(0.002)	(0.002)
dist_c_ltovs		−0.0003	−0.0003
		(0.001)	(0.001)
dist_c_ivr		−0.0029	−0.0029
		(0.002)	(0.002)
Constant	0.1030	−0.0222	−0.0200
	(0.121)	(0.383)	(0.383)
Year dummies	yes	yes	yes
Investor's region dummies	yes	yes	yes
Industry dummies	yes	yes	yes
Observations	6,715	6,208	6,199
R^2	0.067	0.057	0.057

Note(s): Robust Std. Err. in round brackets, adjusted for firm clusters; ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$
Source(s): Authors' own work, based on data provided by the Statistical Office of the Republic of Slovenia, the Bank of Slovenia, and the Agency of the Republic of Slovenia for Public Legal Records and Related Service

firm to account for the different representation of PCNs in the management of foreign subsidiaries in Slovenia. Moreover, we introduce new measure of tacitness, here proxied with firm skill intensity, and replace average industry-level TFP of local rival firms with the *TFPgap* that measures the difference in an average TFP of incumbent firms operating in a particular industry and a foreign firm's TFP. Further, we control for the share of foreign owners, defined as the ratio between the value of foreign direct investment and accounting value of firm's equity capital (*ForeignOwner_share*), to test whether the degree of control of foreign owners affects the PCN vs HCN manager decision. The alternative measure of tacitness in terms of skill intensity is strongly significant and positive providing further support for the hypothesis 1, namely that tacit knowledge intensity increases the incidence of PCN manager appointment. The results are robust also for the TFP gap between incumbent firms and their foreign peer, which again proves to have significantly negative impact for PCN managers appointment. The estimated coefficients for other firm- and industry- and country-specific variables turned out to be mostly statistically insignificant suggesting lower explanatory power for the share of PCN managers than for decision to employ at least one new PCN manager.

6. Discussion and conclusion

The paper contributes to the literature by bringing new empirical evidence on the impact of host-country market structure characteristics on the expatriation decision tested on foreign-owned subsidiaries and affiliates located in Slovenia in the 2002–2010 period. By considering the entire population of firms operating in the Slovenian market, we were able to test the role of the host-country market structure and competition pressure from local rival firms in the decision to appoint a PCN. We find the propensity to appoint a PCN manager is higher in subsidiaries competing with less productive local rival firms in more knowledge- and technology-intensive manufacturing and services industries. The results further suggest that the likelihood of appointing a new PCN manager tends to be higher in industries with higher average industry markup and fewer domestic firms in the industry. The host-country market structure holds greater relevance for the employment of PCN managers than for TCN managers, whereas subsidiary- and country-specific factors have a much more homogenous impact for PCN and TCN appointment in managing positions. However, the evidence on a positive relationship between host-country market size and PCN manager appointment is not robust in the case of Slovenia. The insignificant effect of market size is likely due to the small size of the Slovenian market, where even an increase in the size may not be substantial enough to make an impact. This suggests that market-seeking is not a primary motivation for internationalization into small host markets like Slovenia.

Second, we confirm the set of firm-specific factors in the expatriation decision identified based on the Asian data are also relevant in the CEE context. Namely, the likelihood of appointing a foreign manager in a local subsidiary is greater in larger (in line with Bebenroth *et al.* (2008)) and younger firms (in line with the conclusions of Belderbos and Heijltjes (2005) and Ando *et al.* (2008)) with a bigger share of sales in export markets (as found by Dörrenbächer *et al.* (2013) and Belderbos and Heijltjes (2005)); however, the latter effect is not robust in the cross-section data setting. Third, by explicitly accounting for the heterogeneity of MNEs in terms of the investor's origin, we complement existing evidence on the difference in the expatriation decision with respect to the origin of the investors by explicitly controlling for the cultural difference between the investing and recipient country. We find the cultural distance between the investing and recipient countries is more relevant than the physical distance for the decision to appoint foreign (PCN) nationals in managing positions. In most specifications, acceptance of the unequal distribution of power by less powerful members of society and the orientation between the future and the present and the past are two cultural dimensions whose distance negatively affects the likelihood to appoint a foreign manager. However, there is one exception to our general observation on the negative impact of cultural

distance on the foreign manager employment decision, namely the distance in terms of the Indulgence vs Restraint dimension seems to be positively related to the propensity to appoint a foreign manager, at least in the cross-section setting. We further find that foreign investors originating from both the old and new EU member states, EFTA members and North America are alike with respect to PCN vs HCN manager appointment in their subsidiaries located in the CEE region and are, compared to owners from other regions, less likely to appoint a foreign (PCN) manager. However, once absolute distance in terms of Hofstede's cultural dimensions between Slovenia and countries of origin of inward FDI are controlled for, the differences among investors from different regions largely disappear, with the notable exception of owners from the former Soviet Union and the rest of Asia (excluding South-East Asia).

The empirical evidence holds several managerial and policy implications. Previous empirical studies point to a complex set of factors undelaying the decision on whether to appoint PCN or HCN managers in local affiliates with mixed results regarding superior performance under the two employment options. The paper draws attention to industry- and market-specific factors and suggests that MNEs should go beyond the usual consideration of internal factors. It argues for the importance of an ex ante careful analysis of incumbent rival firms, host-country market structure characteristics and the nature of the competitive process in a given industry. In particular, when weighing up the two alternatives, i.e. PCNs and HCNs, for managing positions in affiliates, MNEs should take into consideration that appointing a PCN manager becomes more attractive option when competitiveness vis-à-vis local rival firms is higher, and in event of entry into less competitive oligopolistic industries with lower number of incumbent firms operating in the local market. In addition, they need to take into account that PCN vs HCN decision, in turn, influences the degree of the competitive pressure in the market (through the effectiveness of the technology transfer to local affiliates) that might lead to the crowding out of host-country firms.

Regarding policy implications, technology and knowledge transfer are primary benefits that host countries gain through inward FDI. In the process of transferring technology within MNEs, PCN managers play a very important role. Hence, the host-country skilled immigration regime – by affecting the conditions, costs, and processing time of skilled migrant workers' appointment to managing and expert positions – influences the effectiveness of the knowledge and technology transfer into the host economy. A relatively restrictive skilled immigration regime might limit the outcome of otherwise generous incentive schemes promoting FDI, resulting in the suboptimal technology transfer to local subsidiaries. Liberalization of the skilled immigration regime should therefore be considered part of the FDI-promotion policy mix. We expect that gains from relaxing the restrictions on the employment of skilled migrant workers would be largest for tacit knowledge-intensive industries with low-competitive domestic firms.

The paper has certain limitations that further research might address. First, like many of the existing studies on the expatriation decision, this paper is based on single-country data, however it incorporates also a cross-country dimension through the inclusion of multiple investing countries in our dataset. Extending the empirical analysis to a multi-country (both home and host) setting would provide a superior framework for examining the role played by cultural and institutional differences. Second, in this paper we address one-way knowledge transfer, i.e. the transfer of organization-specific knowledge from the parent firm to its local subsidiary. However, the reverse flow of market- and country-specific knowledge from the subsidiary back to the parent might also play an important role in the expatriation decision (recent evidence in Munjal *et al.* (2021)). Third, the paper studies the likelihood of appointing a foreigner (PCN) to a managing position in general; accounting for differences across managing positions in different departments, levels and also considering the expert positions involved could importantly contribute to the field.

Notes

1. For overall literature review on migration and FDI interactions see Hatzigeorgiou and Lodefalk (2021).
2. In fact, our dataset includes both foreign-owned subsidiaries and affiliates, with the former referring to firms whose parent company is a majority shareholder that owns more than 50% of the subsidiary's shares and the latter referring to foreign-owned firms where a parent company possesses up to 50% ownership of the affiliated firm. The empirical results therefore refer to both subsidiaries and affiliates, but for simplicity we continue to use the term subsidiaries in the empirical section.
3. The well-known example is the "distance puzzle" or "missing globalization puzzle." Despite reductions in trade costs, the impact of distance on international transactions has remained persistently high and constant (see Disdier and Head, 2008).
4. This predominately holds in case of market seeking FDI, whereas less so in case of export oriented FDI (e.g. export platform FDI and vertical integration). Dörrenbächer *et al*. (2013) and Belderbos and Heijltjes (2005) found that the local orientation of the subsidiary reduces the likelihood of employing a PCN as a managing director. If it produces mainly for export markets, knowledge of the local market becomes far less important, allowing the appointment of foreigners to managerial positions.
5. Mark-ups measure the extent to which price exceeds marginal cost and are an indicator of market power. As competition increases, firms are forced to lower their mark-up, with the limit at perfect competition when prices equal marginal costs. They provide a much better indication than changes in concentration of whether competitive pressure on a firm has diminished (OECD, 2021).
6. The home country of the largest foreign owner is considered the country of origin for inward FDI. The distance variable enters into the regression in its logarithmic value.
7. Home country of the largest foreign owner is considered as the inward FDI country of origin.
8. Here "rho" is the ratio of the heterogeneity variance to one plus the heterogeneity variance.
9. Due to sample size limitation estimation on the subsample of firms with zero exports is not feasible.

References

Ando, N. and Endo, N. (2013), "Determinants of foreign subsidiary staffing by service firms", *Management Research Review*, Vol. 36 No. 6, pp. 548-561, doi: 10.1108/01409171311325723.

Ando, N. and Paik, Y. (2013), "Institutional distance, host country and international business experience, and the use of parent country nationals", *Human Resource Management Journal*, Vol. 23 No. 1, pp. 52-71, doi: 10.1111/j.1748-8583.2012.00201.x.

Ando, N., Rhee, D.K. and Park, N.K. (2008), "Parent country nationals or local nationals for executive positions in foreign affiliates: an empirical study of Japanese affiliates in Korea", *Asia Pacific Journal of Management*, Vol. 25 No. 1, pp. 113-134, doi: 10.1007/s10490-007-9052-5.

Bebenroth, R. and Froese, F.J. (2020), "Consequences of expatriate top manager replacement on foreign subsidiary performance", *Journal of International Management*, Vol. 26 No. 2, 100730, doi: 10.1016/j.intman.2019.100730.

Bebenroth, R.R., Li, D.D. and Sekiguchi, T.T. (2008), "Executive staffing practice patterns in foreign MNC affiliates based in Japan", *Asian Business & Management*, Vol. 7 No. 3, pp. 381-402, doi: 10.1057/abm.2008.15.

Belderbos, R.A. and Heijltjes, M.G. (2005), "The determinants of expatriate staffing by Japanese multinationals in Asia : control, learning and vertical business groups", *Journal of International Business Studies*, Vol. 36 No. 3, pp. 341-354, doi: 10.1057/palgrave.jibs.8400135.

Bird, A. (1996), "Careers as repositories of knowledge: considerations for boundaryless careers", in Arthur, M.B. and Rousseau, D.M. (Eds), *The Boundaryless Career: A New Employment Principle for a New Organizational Era*, Oxford University Press, New York, pp. 150-168.

Bonache, J. and Cerviño, J. (1997), "Global integration without expatriates", *Human Resource Management Journal*, Vol. 7 No. 3, pp. 89-100, doi: 10.1111/j.1748-8583.1997.tb00427.x.

Caves, R.E. (1996), *Multinational Enterprise and Economic Analysis*, 2nd ed., Cambridge University Press, United Kingdom.

Conte, M., Cotterlaz, P. and Mayer, T. (2022), "The CEPII Gravity database", CEPII Working Paper N 2022-05 July 2022).

Damijan, J.P., Knell, M., Majcen, B. and Rojec, M. (2003), "The role of FDI, R&D accumulation and trade in transferring technology to transition countries: evidence from firm panel data for eight transition countries", *Economic Systems*, Vol. 27 No. 2, pp. 189-204, doi: 10.1016/S0939-3625(03)00039-6.

Disdier, A.C. and Head, K. (2008), "The puzzling persistence of the distance effect on bilateral trade", *The Review of Economics and Statistics*, Vol. 90 No. 1, pp. 37-48, doi: 10.1162/rest.90.1.37.

Dörrenbächer, C., Gammelgaard, J., McDonald, F., Stephan, A. and Tüselmann, H. (2013), "Staffing foreign subsidiaries with parent country nationals or host country national", Insights from European Subsidiaries.

Edström, A. and Galbraith, J. (1977a), "Alternative policies for international transfers of managers", *Management International Review*, Vol. 17 No. 2, pp. 11-22.

Edström, A. and Galbraith, J. (1977b), "Transfer of managers as a coordination and control strategy in multinational organizations", *Administrative Science Quarterly*, Vol. 22 No. 2, pp. 248-263, doi: 10.2307/2391959.

Egelhoff, W.G. (1988), *Organizing the Multinational Enterprise: an Information Processing Perspective*, Ballinger, Cambridge, MA.

Fayol-Song, L. (2011), "Reasons behind management localization in MNCs in China", *Asia Pacific Business Review*, Vol. 17 No. 4, pp. 455-471, doi: 10.1080/13602381.2010.546642.

Gaur, A.S., Delios, A. and Singh, K. (2007), "Institutional environments, staffing strategies, and subsidiary performance", *Journal of Management*, Vol. 33 No. 4, pp. 611-636, doi: 10.1177/0149206307302551.

Georgopoulos, A., Aggelopoulos, E., Paraschi, E.P. and Kalogera, M. (2024), "The mediating performance role of staffing options in MNE subsidiary strategies within rapidly deteriorating environments", *Journal of Global Mobility*, Vol. 12 No. 1, pp. 57-92, doi: 10.1108/JGM-03-2023-0019.

Golob Šušteršič, T. and Zajc Kejžar, K. (2020), "The role of skilled migrant workers in FDI-related technology transfer", *Review of World Economics*, Vol. 156 No. 1, pp. 103-132, doi: 10.1007/s10290-019-00360-3.

Gong, Y. (2003), "Subsidiary staffing in multinational enterprises: agency, resources, and performance", *Academy of Management Journal*, Vol. 46 No. 6, pp. 728-739, doi: 10.5465/30040664.

Gorodnichenko, Y. and Roland, G. (2017), "Culture, institutions, and the wealth of nations", *Review of Economics and Statistics*, Vol. 99 No. 3, pp. 402-416, doi: 10.1162/rest_a_00599.

Hahn, C.H., Hayakawa, K. and Ito, T. (2013), "Do local national managers improve multinationals' performance? – Evidence from Korean firm-level data", in Hayakawa, K. (Ed.), *Deepening of Corporate Global Activities in East Asia*, Bangkok.

Harvey, A.C. (1976), "Estimating regression models with multiplicative heteroscedasticity", *Econometrica*, Vol. 44 No. 3, pp. 461-465, doi: 10.2307/1913974.

Hatzigeorgiou, A. and Lodefalk, M. (2021), "A literature review of the nexus between migration and internationalization", *The Journal of International Trade & Economic Development*, Vol. 30 No. 3, pp. 319-340, doi: 10.1080/09638199.2021.1878257.

Heiman, B.A. and Nickerson, J.A. (2004), "Empirical evidence regarding the tension between knowledge sharing and knowledge expropriation in collaborations", *Managerial and Decision Economics*, Vol. 25 Nos 6-7, pp. 401-420, doi: 10.1002/mde.1198.

Hofstede, G. (2011), "Dimensionalizing cultures : the Hofstede model in context", *Online Readings in Psychology and Culture*, Vol. 2 No. 1, doi: 10.9707/2307-0919.1014.

Horstmann, I.J. and Markusen, J.R. (1992), "Endogenous market structures in international trade (natura facit saltum)", *Journal of International Economics*, Vol. 32 Nos 1-2, pp. 109-129, doi: 10.1016/0022-1996(92)90038-l.

Hutzschenreuter, T., Kleindienst, I. and Lange, S. (2016), "The concept of distance in international business research: a review and research agenda", *International Journal of Management Reviews*, Vol. 18 No. 2, pp. 160-179, doi: 10.1111/ijmr.12065.

Inzelt, A. (2008), "The inflow of highly skilled workers into Hungary: a by-product of FDI", *The Journal of Technology Transfer*, Vol. 33 No. 4, pp. 422-438, doi: 10.1007/s10961-007-9053-z.

Kawai, N. and Chung, C. (2019), "Expatriate utilization, subsidiary knowledge creation and performance: the moderating role of subsidiary strategic context", *Journal of World Business*, Vol. 54 No. 1, pp. 24-36, doi: 10.1016/j.jwb.2018.09.003.

Kim, H.G., Gaur, A.S. and Mukherjee, D. (2020), "Added cultural distance and ownership in cross-border acquisitions", *Cross Cultural & Strategic Management*, Vol. 27 No. 3, pp. 487-510, doi: 10.1108/ccsm-01-2020-0003.

Knickerbocker, F.T. (1973), "Oligopolistic reaction and multinational enterprise", *The International Executive*, Vol. 15 No. 2, pp. 7-9, doi: 10.1002/tie.5060150205.

Kren, L. and Liao, W.M. (1988), "The role of accounting information in control of organizations: a review of the evidence", *Journal of Accounting Literature*, Vol. 7, pp. 280-309.

Lee, S., Whang, U., Nahm, S. and Oh, C.H. (2023a), "Productivity gap and expatriate utilization", *Multinational Business Review*, Vol. 31 No. 2, pp. 266-289, doi: 10.1108/mbr-04-2022-0051.

Lee, H.S., Pattnaik, C. and Gaur, A.S. (2023b), "Internationalization of I-business Firms: the role of distance on location choice", *Journal of Business Research*, Vol. 164, 114010, doi: 10.1016/j.jbusres.2023.114010.

Levinsohn, J. and Petrin, A. (2003), "Estimating production functions using inputs to control for unobservables", *The Review of Economic Studies*, Vol. 70 No. 2, pp. 317-341, doi: 10.1111/1467-937X.00246.

Li, Y., Zhang, Y.A. and Shi, W. (2020), "Navigating geographic and cultural distances in international expansion: the paradoxical roles of firm size, age, and ownership", *Strategic Management Journal*, Vol. 41 No. 5, pp. 921-949, doi: 10.1002/smj.3098.

Mattoo, A., Olarreaga, M. and Saggi, K. (2004), "Mode of foreign entry, technology transfer, and FDI policy", *Journal of Development Economics*, Vol. 75 No. 1, pp. 95-111, doi: 10.1016/j.jdeveco.2003.08.002.

Meyer, K.E. and Gelbuda, M. (2006), "Process perspectives in international business research in CEE", *Management International Review*, Vol. 46 No. 2, pp. 143-164, doi: 10.1007/s11575-006-0042-5.

Meyer, K.E., Li, C. and Schotter, A.P. (2020), "Managing the MNE subsidiary: advancing a multi-level and dynamic research agenda", *Journal of International Business Studies*, Vol. 51 No. 4, pp. 538-576, doi: 10.1057/s41267-020-00318-w.

Michailova, S., Mustaffa, Z. and Barner-Rasmussen, W. (2016), "Subsidiaries of multinational corporations: a framework for analyzing employee allegiances", *Journal of Leadership & Organizational Studies*, Vol. 23 No. 2, pp. 116-127, doi: 10.1177/1548051816633071.

Motta, M. (1992), "Multinational firms and the tariff-jumping argument: a game theoretic analysis with some unconventional conclusions", *European Economic Review*, Vol. 36 No. 8, pp. 1557-1571, doi: 10.1016/0014-2921(92)90006-i.

Mukherjee, D., Lahiri, S., Ash, S.R. and Gaur, A.S. (2017), "Search motives, local embeddedness, and knowledge outcomes in offshoring", *Journal of Business Research*, Vol. 103, pp. 365-375, doi: 10.1016/j.jbusres.2017.10.035.

Muller, E. and Doloreux, D. (2009), "What we should know about knowledge-intensive business services", *Technology in Society*, Vol. 31 No. 1, pp. 64-72, doi: 10.1016/j.techsoc.2008.10.001.

Munjal, S., Andersson, U., Pereira, V. and Budhwar, P. (2021), "Exploring reverse knowledge transfer and asset augmentation strategy by developed country MNEs: case study evidence from the Indian pharmaceutical industry", *International Business Review*, Vol. 30 No. 6, 101882, doi: 10.1016/j.ibusrev.2021.101882.

Nonaka, I. (1994), "A dynamic theory of organizational knowledge creation", *Organization Science*, Vol. 5 No. 1, pp. 14-37, doi: 10.1287/orsc.5.1.14.

OECD (2021), "Methodologies to measure market competition", OECD Competition Committee Issues Paper, available at: https://oe.cd/mmmc

Peng, G.Z. and Beamish, P.W. (2014), "MNC subsidiary size and expatriate control: resource-dependence and learning perspectives", *Journal of World Business*, Vol. 49 No. 1, pp. 51-62, doi: 10.1016/j.jwb.2012.11.001.

Petit, M.L. and Sanna-Randaccio, F. (2000), "Endogenous R&D and foreign direct investment in international oligopolies", *International Journal of Industrial Organization*, Vol. 18 No. 2, pp. 339-367, doi: 10.1016/s0167-7187(98)00028-9.

Qian, C., Kim, M., Takeuchi, R. and Lee, S. (2024), "A multilevel model of expatriate staffing and subsidiary financial performance: an expanded fit perspective", *Journal of International Business Studies*, Vol. 55 No. 1, pp. 110-120, doi: 10.1057/s41267-023-00638-7.

Richman, B. and Copen, M. (1973), "Management techniques in developing nations", *Columbia Journal of World Business*, Vol. 8 No. 2, pp. 49-58.

Riusala, K. and Suutari, V. (2004), "International knowledge transfers through expatriates", *Thunderbird International Business Review*, Vol. 46 No. 6, pp. 743-770, doi: 10.1002/tie.20034.

Salehan, M., Kim, D.J. and Lee, J.N. (2018), "Are there any relationships between technology and cultural values? A country-level trend study of the association between information communication technology and cultural values", *Information & Management*, Vol. 55 No. 6, pp. 725-745, doi: 10.1016/j.im.2018.03.003.

Santacreu-Vasut, E. and Teshima, K. (2011), "Management structure and technological composition of FDI: evidence from MNC's subsidiaries in Mexico", *Paper Presented at the ETSG 2011 Copenhagen Conference*, available at: http://www.etsg.org/ETSG2011/Papers/Santacreu.pdf

Scullion, H. (1991), "Why companies prefer to use expatriates", *Personnel Management*, Vol. 23 No. 11, pp. 32-49.

Seidler-de Alwis, R. and Hartmann, E. (2008), "The use of tacit knowledge within innovative companies: knowledge management in innovative enterprises", *Journal of Knowledge Management*, Vol. 12 No. 1, pp. 133-147, doi: 10.1108/13673270810852449.

Singh, D., Pattnaik, C., Lee, J.Y. and Gaur, A.S. (2019), "Subsidiary staffing, cultural friction, and subsidiary performance: evidence from Korean subsidiaries in 63 countries", *Human Resource Management*, Vol. 58 No. 2, pp. 219-234, doi: 10.1002/hrm.21947.

Smith, A. (1987), "Strategic investment, multinational corporations and trade policy", *European Economic Review*, Vol. 31 Nos 1-2, pp. 89-96, doi: 10.1016/0014-2921(87)90018-3.

Tan, D. and Mahoney, J.T. (2006), "Why a multinational firm chooses expatriates: integrating resource-based, agency and transaction costs perspectives", *Journal of Management Studies*, Vol. 43 No. 3, pp. 457-484, doi: 10.1111/j.1467-6486.2006.00598.x.

Tsang, E.W. (2001), "Managerial learning in foreign-invested enterprises of China", *MIR: Management International Review*, Vol. 41 No. 1, pp. 29-51.

Wang, P., Tong, T.W. and Koh, C.P. (2004), "An integrated model of knowledge transfer from MNC parent to China subsidiary", *Journal of World Business*, Vol. 39 No. 2, pp. 168-182, doi: 10.1016/j.jwb.2003.08.009.

Wang, S., Tong, T.W., Chen, G. and Kim, H. (2009), "Expatriate utilization and foreign direct investment performance: the mediating role of knowledge transfer", *Journal of Management*, Vol. 35 No. 5, pp. 1181-1206, doi: 10.1177/0149206308328511.

Yao, F.K., Chen, M.J., Li, J., Combs, D. and Li, Q. (2024), "A review of 50 years of research since Knickerbocker (1973): competitive dynamics in international business", *Journal of International Business Studies*, Vol. 55 No. 5, pp. 1-29, doi: 10.1057/s41267-024-00707-5.

Zajac, E.J. (1990), "CEO selection, succession, compensation and firm performance: a theoretical integration and empirical analysis", *Strategic Management Journal*, Vol. 11 No. 3, pp. 217-230, doi: 10.1002/smj.4250110304.

Appendix

Table A1. Description of the values of the regression variables

	No. of observations	Mean	Std. dev.
MgrForeign	10,452	0.024	0.153
MgrPCN	10,452	0.013	0.115
MgrPCN_share	6,948	0.083	0.260
lnAge	10,452	2.057	0.787
lnSize (−1)	10,452	2.097	1.666
ExPropensity (−1)	10,452	0.314	0.382
OutwardFDI (−1)	10,452	0.077	0.266
ShareHEemp	10,452	32.531	32.520
lnTFPlocal (−1)	10,452	1.907	0.531
TFPgap (−1)	8,861	−0.137	0.986
HighTech	10,452	0.256	0.436
IndMarkup (−1)	10,452	1139.2	1199.9
lnMarketSize (−1)	10,452	20.223	1.261
lnNoLocalFirms (−1)	10,452	5.795	1.461
Lndist	10,190	6.284	0.932
dist_c_pdi	9,636	33.882	19.681
dist_c_idv	9,636	35.104	15.686
dist_c_mas	9,636	43.470	17.495
dist_c_uai	9,636	20.701	13.223
dist_c_ltowvs	10,019	16.682	9.658
dist_c_ivr	10,210	15.048	5.786

Source(s): Authors' own work, based on data provided by the Statistical Office of the Republic of Slovenia, the Bank of Slovenia, and the Agency of the Republic of Slovenia for Public Legal Records and Related Service

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