

RESEARCH ARTICLE

Developing new understanding of how global talent flow impact individual and firm performance by using big data

Yehuda Baruch¹  | David S. A. Guttormsen²  | Stanley B. Gyoshev^{3,4} | Trifon Pavkov⁵ | Miana Plesca⁶

¹Southampton Business School, University of Southampton, Southampton, UK

²Department of Business, Strategy and Political Sciences, USN School of Business, University of South-Eastern Norway, Drammen, Norway

³Xfi Centre for Finance and Investment, University of Exeter Business School, Exeter, UK

⁴Faculty of Economics and Business Administration, Sofia University St. Kliment Ohridski, Sofia, Bulgaria

⁵Department of Economics, University of Exeter Business School, Exeter, UK

⁶Department of Economics and Finance, Gordon S. Lang School of Business and Economics, University of Guelph, Guelph, Ontario, Canada

Correspondence

Yehuda Baruch, Southampton Business School, University of Southampton, Southampton SO17 1BJ, UK.
Email: y.baruch@soton.ac.uk

Abstract

Drawing on human capital theory, we explore the impact of global mobility on individuals and their employing firms. We also investigate the role of cultural distance between workers who move across country borders and the local culture, and the role that HRM may play to improve capitalizing on global talent mobility. We use a big data set comprising the entire population in one country, including about 30,000 expatriates from 143 countries employed by 15,000 firms, over 11 years of data covering about 100,000 observations on expatriates and 80,000 on their firms. Our findings support the existence of positive impact of global firms on performance (6.7% higher revenues after labor costs) and individuals' wages (10%–20% higher salaries). Both relationships are statistically and economically significantly influenced by cultural distance for the performance of global firms, leading to HRM implications.

KEYWORDS

big data, cultural distance, firm performance, Global firms, mobility, talent, wages

Abbreviations: CEO, Chief Executive Officer; HRM, Human Resource Management.

All author contributed equally to the writing.

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2023 The Authors. Human Resource Management Journal published by John Wiley & Sons Ltd.

1 | INTRODUCTION

Managing the global mobility of people and human capital, in particular among expatriates and migrants, has emerged as a major challenge for global firms as well as nations (Deloitte, 2021)–and is gaining increasing attention from the international business research community (Fan et al., 2021; Shin et al., 2017; Sullivan & Al Ariss, 2021). Global mobility of individuals is part of both migration trends (Latukha et al., 2021) and corporate management of expatriation and repatriation (Schmutzler et al., 2021) via strategic HRM policies and strategies (Bader et al., 2021; Vaiman et al., 2012). As talent flow has moved from local to global flow (Carr et al., 2005), the effective use of people and staffing is critical for firm performance and for achieving strategic objectives, especially for global firms (Cascio & Boudreau, 2016; Ogbari et al., 2018). Global talent flow is a significant phenomenon due to the knowledge transfers (Carr et al., 2005), capacity building (Cohen, 1992) and capability-building (Kim et al., 2022) that may transpire because of cross-border mobility.

The premises of globalization are critical for global businesses, including HRM (Farndale et al., 2019, 2021). Global talent flow is essential for gaining competitive advantages (Doherty et al., 2011) and strategic objectives (Collings & Ilichi, 2018), enabling economic growth and enhancing productivity (Kerr et al., 2016). For individuals, global mobility is positively related to promotion and income (Andresen et al., 2022). Global talent flow has come under threat from nationalistic ideologies, which can affect traditional assumptions concerning talent flow and HRM-related value creation (Horak et al., 2019). Such macro environmental changes can potentially reduce global talent movements, with significant negative implications for individuals, organizations and nations (Vaiman et al., 2018). The COVID-19 pandemic has further exacerbated these challenges, increasing the need for careful management of talent and for flexible “flow to work” models (Caligiuri et al., 2020; Lazarova et al., 2023; McKinsey, 2021).

However, there are limited theoretical developments from a macro-perspective (Khilji et al., 2015; see Vaiman et al., 2018, for an exception) leading to empirical findings which investigate global mobility to peripheral countries (Andresen et al., 2015). While mobility plays out at the individual level, the trend is relevant to national level outcomes (Horak et al., 2019). Studies focusing on talent flow into peripheral countries tend to be anecdotal, often concentrating on the specific individual or organizational cases; a more comprehensive analysis of the global mobility phenomenon could help develop a new understanding of the impact of cross-border mobility, both on the income and careers of individuals, as well as on firm performance, especially one examining expatriates from 143 countries. This study is vastly relevant for most countries, as at the firm level, global firms are and becoming even more influential players in the labor market and in the local economies, via the activities of subsidiaries and other stakeholders. They are significant players in a wider career and labor market ecosystem (Baruch, 2015) where individual, organizational and environmental factors play a role (Li et al., 2022). Yet, although HRM is a critical factor on firm's performance (Crook et al., 2011; Delaney & Huselid, 1996), the research community has directed less attention to the movement of human capital on the global stage. Existing analyses in management have been limited to specific case studies, rather than using comprehensive data sources representative of the entire population. We respond to the need of scholarly examination of global talent moves at a wide scale, to answer outstanding issues in global talent moves (e.g., Mayrhofer et al., 2020), by building on theoretically based analysis utilizing a big data set.

Taking departure from the above ‘state of the field’, we advance our knowledge about the factors that may impact on individuals' careers and on firms' performance in relation to the flow of global talent. We achieve this with substantial explanatory power as result of analyzing a big data set comprising the working population in one country, including about 30,000 expatriates from 143 countries employed by 15,000 firms, restricted to only those firms who have some international presence among their workforce, over 11 years of data. In addition, we consider the relationships between Cultural Distance (CD) and firm and worker performance, which provides robust and comprehensive support for both individual and firm level hypotheses.

We offer the following contributions to the field of global mobility (Kraimer et al., 2016), within the context of international HRM (Vaiman et al., 2021). First, drawing on human capital theory (Becker, 1975), as well as the Career Ecosystem Theory (CET) (Baruch, 2015; Baruch & Rousseau, 2019), our work advances contemporary knowledge of

the impact of global mobility on both individual and organizational outcomes. We expand the scope of the career ecosystem to the global level, where human capital is the main 'currency' in labor markets. Second, making use of the cultural distance framework, based on Hofstede's (1980) seminal study, we contribute to a more nuanced understanding of the impact of CD on the effects of global mobility for individuals and firms. Third, our study leads to practical recommendations for the management of global talent flow.

2 | THEORETICAL FRAMEWORK

Many interrelated and connected stakeholders can influence internal and external organizational processes (Meyer et al., 2011). Value chain creation means that global firms create employment for both local and global employees, with implication for the labor market (Narula, 2019). For most organizations, the most critical factor accounting for firm performance is their people, through their human capital (Felício et al., 2014). As firms become increasingly more global, accessing and utilizing global talent can further enhance firm performance (Caligiuri & Bonache, 2016). By setting the tone in the global enterprise, leadership is another critical factor influencing human capital performance (Reiche et al., 2017).

Human capital is embedded with employees, and, for global firms, many employees may need to work outside of their home country. Corporate expatriation (and repatriation) is a role of HRM, moving people across country borders to meet organizational needs (Harzing, 2001). There can be three types of worker global mobility: (i) firm assigned, where, within the firm, individuals may be put forward for undertaking international assignments; (ii) self-initiated expatriation, which relates to individuals looking for employment overseas on their own accord and not being expatriated by a home organization (Andresen et al., 2013; Moulai et al., 2021); and (iii) immigrants, who come to other countries to settle as future locals. While in our data we cannot differentiate between the three types of foreign workers, we consider them jointly in their common movements which transfer qualifications, competence and knowledge across country borders. Ultimately, we are interested in the overall effect that this transfer of human capital has on firm performance (Dickmann et al., 2018) and on the wages of foreign workers compared to international ones.

3 | HYPOTHESES DEVELOPMENT

Global firms possess more resources compared to international firms— both financial and human capital related— enabling them to be more competitive and to attract strong talent that would lead to improved outcomes.¹ To remain competitive and retain their talent, these global firms need to establish their positioning in the labor market, for example, by developing effective strategies and policies for the treatment of their employees (Canestrino & Magliocca, 2010). They can benefit from stronger global value chains (Kano et al., 2020) and can pay higher wages compared to what local and/or international firms may afford for the same talent (Noe et al., 2017). Global firms can benefit from value-added activities that are dispersed across geographical borders by employing multinational workforce (Da Rocha et al., 2017). Labor costs are a significant factor for firms to operate overseas (Braconier et al., 2005).

To remain competitive and attract the optimal human capital, all firms utilize compensation and remuneration strategies, ready to pay the higher wages to attract and retain best employees (Bender et al., 2013). Benefiting from resource slack (Cheng & Lin, 2014), and from their global staff, multinational enterprises can afford to pay higher wages as part of their competitive advantage. Overall, the literature suggests that global firms benefit from economies of scale and reputation, hence offer higher pay as part of global strategic HRM.

Large global firms are expected to be market leaders and benefit from optimization of labor market costs, thus have a dual advantage over local and international firms (Gleason et al., 2006; Weerawardena & Mavondo, 2011). They can utilize resources in a more efficient way and gain competitive advantage, thus operate with better revenues than other firms (Martin et al., 2017). Approaching the issue from a people-management perspective, the human

resources is a major factor and a significant player in gaining competitive advantage (Delery & Roumpi, 2017). The positive impact of globalization can be achieved due to a combination of factors, including the informal knowledge sharing and other capabilities (Fee & Gray, 2020).

Combining these factors, we hypothesize:

Hypothesis 1. Global firms will be positively associated with higher firm revenue and with higher ratio of labor costs per revenue compared to international firms

As firms adjust their remuneration and compensation strategies to best benefit their resources, firms will pay higher wages to attract and retain employees who have created positive impact on firm performance (Gooderham et al., 2018). As argued above, expatriates bring competitive advantage due to their unique human capital (Fan et al., 2021), and their capacity to share relevant knowledge (Castellani et al., 2022). As a result, they are remunerated accordingly when moving to other countries (Kim et al., 2018). Yet, global firms have better resources at their disposal and financial capacity to be competitive in the local labor market. As a result, they pay higher wages than those paid to expatriates by local firms.

Changing employers is one approach that an individual may pursue to improve their remuneration and wage (Cassidy et al., 2016; Yankow, 2003). Job mobility is a clear opportunity for obtaining wage increase. The impact, though, is context dependent (Reichelt & Abraham, 2017). For example, highly educated workers demonstrate significant extended returns to migration, though it could take some time for the benefits to materialize (Yankow, 2003). Conversely, a recent study found some impact on financial gains relating to job hopping among less-educated workers but not for college graduates (Fan & DeVaro, 2020).

Hypothesis 2. Expatriates who switch employers will improve their earnings compared to expatriates who stay with the same employer.

The CET suggests that individuals will move within the labor market due to push/pull forces (Baruch, 2015; Baruch & Rousseau, 2019). Both legal and psychological contracts for global workforce would suggest that, to compensate for the highly demanding and challenging need to cross geographical boundaries, global movers will be associated with higher salaries and higher expectations. Coupled with new career orientations, like the protean career (Hall, 2004) and boundaryless career (Arthur & Rousseau, 1996), careers are considered more dynamic and more global than they had been in the past. In terms of employers, global firms tend to relocate expatriates to benefit from knowledge gains and their experiences acquired in host-markets (Canestrino & Magliocca, 2010).

Expatriates working in international firms are often associated with lower pay, benefits and remuneration due to being employed on a local contract with local terms (KPMG, 2013). The following hypothesis stems from the above argument:

Hypothesis 3. Expatriates employed in global firms will switch employer more frequently than expatriates working in international firms.

Based on comparing self-initiated expatriation to corporate expatriates (Andresen et al., 2013), in the past, global firms tended to apply a long-term strategic plan and were sending workers abroad for a significant period of time. More recently, other work arrangements mean that the time period could vary (Gunz et al., 2020). HRM investment and support help to retain expatriates in global firms (van der Heijden et al., 2009). On the contrary, self-initiated expatriates might find early in the process that their expectations were not met in lieu of organizational support, and, without formal contractual obligations, they can leave after short period, even if their intention was for a long-term period (Przytuła, 2015).

Hypothesis 4. Expatriates employed in global firms will stay in the country longer than expatriates working in international firms.

Employing Hofstede's (1980) cultural dimension-based framework, we examine the variance in cultural values firm performance due to 'cultural distance' (CD) between the cultures of the individuals and of the host country may influence career variance across nations (Hofstede, 1980, 2001). Albeit credible concerns about the validity and reliability of the CD concept (e.g., Tung & Verbeke, 2010), Hofstede's framework, alongside other measures of cultural variance (e.g., GLOBE) remain consistently and widely applied in cross-cultural international business studies (Beugelsdijk et al., 2018; Maseland & Van Hoorn, 2009; Shenkar, 2012).

CD is a highly critical possible explanatory factor for explaining differences across firms (Shenkar, 2012). For example, CD may influence embeddedness, which can be important for knowledge transfer (Stoermer et al., 2021). The CD concept (the CD between the home- and host country) is a salient factor for explaining firm performance, contemplating on the thrust that firms embark on their internationalization process by investing in countries where the CD is smaller due to facing less complexities and 'foreignness' (Beugelsdijk et al., 2018). The larger the distance, the less likelihood for a global firm to invest in the host country (Shenkar, 2012). Furthermore, CD is a primary factor regarding why mergers and acquisitions fail (Malhotra et al., 2011) and having a strong negative effect on subsidiary performance (Beugelsdijk et al., 2018).

Most international business studies measure and operationalize CD as an Euclidean distance index, utilizing Hofstede's cultural dimensions that depict differences between "national cultures" (Hofstede, 1980). Kogut and Singh (1988) aggregated these differences into an overall index.

Extant literature has assumed that a larger CD produces a negative consequence on performance when doing business in more culturally distant countries (Kostova et al., 2016). The direction of CD is important. The more incongruent the levels of the host and the home countries' values are (Tang, 2012), the smaller the global firm's overseas financial performance (Dow & Ferencikova, 2010). Positive effects of CD on performance have also been identified. For example, the learning from a more culturally different country might have resulted in building a different range of useful skills and capabilities (Morosini et al., 1998). Tihanyi et al. (2005, p. 276) highlighted that 'the estimate of the multivariate relationship indicated that CD was not meaningfully related to firm performance.' Importantly, the reason for the divergent findings might be due to the fact that very few studies 'have explored additional moderating conditions where the performance effect of distance turns positive' (Beugelsdijk et al., 2018, p. 100).

Traditionally, more expatriates are staffed in global firms when operating in more culturally distant locations and are often holding the most senior management position locally to ensure transfer of organizational/national culture and policies (Harzing, 1996). Expatriates have been found to positively affect firm performance—both at the headquarters and subsidiary levels (Bonache & Brewster, 2001). However, CD has been identified to negatively moderate this relationship (Colakoglu & Caligiuri, 2008) and a direct relation between CD and staffing has not been identified (Gong, 2003). When CD was not considered, the relationship between expatriates and firm performance was not significant, nevertheless in the US, an increasing number of expatriates decreased firm performance at the subsidiary level (Jones & Gálvez-Muñoz, 2001)—because of increasing CD adjoined with increasing number of expatriates.

We suggest that global firms have higher potential to be more innovative, applying 'out-of-the-box' thinking, and the ability to benefit from the use of global rather than local systems. By exhibiting this global orientation in both leadership and involvement of employees, global firm performance will surpass that of international firms when the CD is higher.

Hypothesis 5. The larger the CD, the more positive impact on firm performance.

4 | DATA AND METHOD

Using big data that covers the entire working population across 11 years in one country (Bulgaria), which hosts expatriates from 143 countries, we focus on global firms and workforce to develop nuanced understanding concerning the impact of global mobility. We cover the entire universe of expatriate workers from said countries employed by

15,000 firms in Bulgaria (from which we exclude the agriculture sector), leaving us with more than 100,000 observations on expatriate individuals. On the firm side we consider firms with some international exposure, constituting in all about 80,000 observations.

The main advantage of our unique dataset is that it covers the entire universe of firms and workers in one country; it also happens that such data has a huge volume, especially when compared to other studies on similar topics. While we use the label of “Big Data” primarily because the data has very large volume (and it is free of noise or errors, given its administrative nature), we are aware that we may not satisfy all the requirements that data scientists hope to associate with the “Big data” label (Kitchin & McArdle, 2016).

4.1 | Sample: International and global firms

The data were obtained from all firms and workers in Bulgaria, a European Union country, covering a period from 2009 to 2019. The database comes from administrative data submitted every month for tax and social security purposes. We restrict the analysis to only those firms with employees who come from the global workforce. From the initial universe of all firms in Bulgaria with at least 10 employees (70,808 firms), we consider only those firms who have ever employed expatriates (15,031 firms). After further dropping firms who do not report Revenues (usually public sector enterprises such as schools), we are left with 12,694 unique employers, amounting to 78,842 observations on firms used in the analysis.

Because we know the 143 countries of origin for all workers, as well as their 1-digit ISCO occupation, we can further define whether the managers of the firm are expatriates or not. While we do not explicitly know who the top manager, CEO, or managing Director of the firm is, as we have only the 1-digit ISCO code, we label as “CEO” the highest paid earner among all the managers at the firm. We refer to all the firms in our analysis as “international firms” because they employ expatriates, and we refer to those firms with an expatriate CEO as “global firms”. As shown in the bottom panel of Table 1 with sample correlations, about 8% of the sample of “international” firms are also “global” firms.

To pin down firm performance we construct a proxy for profit as the difference between revenues and labor cost, ignoring capital costs. We argue that, in regression analysis, this captures the intended profitability of the firm: because firm size and refined two-digit industry codes (about eighty industries in all) are controlled for, as long as we can assume there is little variation in capital costs between firms of similar size in the same two-digit industries, revenue minus labor costs will provide a good approximation for profit in regression analysis.

Other firm characteristics include: expatriate workers in management (ISCO code 1) and professional jobs (ISCO codes 2 and 3), and the fraction of workers who are male. From the correlations in Table 1, these characteristics are positively correlated with firm performance measures such as revenue and labor costs. The CD measure is computed from the value scores concerning Hofstede's six dimensions of culture; power distance, individualism, masculinity, uncertainty avoidance, long term orientation and indulgence. The index is constructed using the Euclidian distance measure of the standardized distance $\sqrt{\sum_{k=1}^6 \frac{(I_k - I_{kBG})^2}{SD_k^2}}$ as in Konara and Mohr (2019). For sensitivity purposes, we estimate a specification where instead of the CD index we use the regional groupings from the Globe cultural measure, with the home country Bulgaria belonging to the Eastern European region; results are similar.

4.2 | Sample: International workers

To have a better understanding about the global presence of workers in Bulgaria, we focus some of the analysis on expatriates. We start from the roughly seventeen and a half million observations on workers born between 1950s and 1999 who are working in firms with at least ten employees and filter out firm with only native workers. Using

TABLE 1 Means, standard deviations, and correlations with confidence intervals.

Variable	Mean	SD	1	2	3	4	5	6	7	8
1 Log revenue	14.86	1.75								
2 Log labor costs	10.27	1.46	0.76**							
3 Log (revenue-labor costs)	14.86	1.72	1.00**	0.77**						
4 "Global" firm	0.08	0.27	0.07**	0.11**	0.08**					
5 Hofstede cultural distance	0.6	2.34	0.07**	0.11**	0.08**	0.95**				
6 Foreign workers in management	0.79	0.41	0.34**	0.43**	0.35**	0.15**	0.14**			
7 Foreign workers in professional	0.81	0.4	0.31**	0.41**	0.32**	0.05**	0.05**	0.36**		
8 Fraction male workers	0.51	0.28	0.21**	0.08**	0.21**	0.03**	0.02**	0.14**	0.11**	
9 Services sector	0.59	0.49	-0.05**	-0.05**	-0.04**	-0.02**	-0.03**	-0.04**	-0.14**	-0.14**

Note: Correlations at the firm level.

*indicates $p < 0.05$. ** indicates $p < 0.01$.

TABLE 2 Means, standard deviations, and correlations with confidence intervals.

Variable	Mean	SD	1	2	3	4	5	6	7
1 "Global" firm	0.21	0.41							
2 Worker new in country	0.23	0.42	0.04**						
3 Tenure in country	6.26	3.21	-0.13**	-0.34**					
4 With new employer	0.36	0.48	0.01	0.74**	-0.35**				
5 Male	0.51	0.5	0.23**	0.08**	-0.26**	0.09**			
6 Firm pays above average	0.47	0.5	0.25**	0	-0.05**	-0.01*	0.17**		
7 Service sector	0.66	0.47	-0.07**	0.02**	-0.10**	0.05**	-0.02**	0	
8 Log real wage	6.92	1.06	0.43**	-0.06**	-0.10**	-0.07**	0.35**	0.53**	0.08**

Note: Correlations at the foreign worker level.

*indicates $p < 0.05$. ** indicates $p < 0.01$.

2009 as base year, we deflate monthly earnings into real leva (1 leva has been fixed to 1 deutsche mark, approximately 0.5 Euro since 1 July 1997) using a consumer price deflator, and drop from the analysis workers whose wages are less than two thirds of the mandatory minimum wage (170 leva/month), or above a maximum of 30,000 leva/month, to avoid extreme outliers. This leaves 114,324 observations on 28,155 expatriates who worked in Bulgaria between 2009 and 2019. From Table 2 we find that the average length of stay is a little over six years, that 36% of international workers switch employer and 66% of them work in the Services sector (vs. 34% in Manufacturing).

4.3 | Procedure

A main contribution resides in choosing the subsamples of interest as described above. In terms of the regression with the international firm as the unit of analysis, we run a specification

$$Y_j = \beta_0 + \beta_1 \cdot \text{Global firm}_j + \beta_2 \cdot \text{Firm size}_j + \beta_3 \cdot \text{Expat Mgmt}_j + \beta_4 \cdot \text{Expat professnl}_j + \beta_5 \cdot \text{Nb workers by ISCO}_j + \beta_6 \cdot \text{Year}_j + \beta_6 \cdot \text{Industr}_j + u_j \tag{1}$$

where j indexes the individual firm. Y_j are measures of firm performance and they include: (1) log revenue; (2) log(revenue - labor cost) as proxy for profit; and (3) log(labor costs). Global firm is an indicator whether the top paid manager (most likely the CEO, Managing Director or owner) is an expatriate. Firm size are two indicators whether the firm is medium size 50 to 249 workers, relative to baseline (small firms 10 to 49 workers) or whether the firm is large (250 workers or more) relative to small. Expat mgmt and Expat professnl are indicators whether the firm has hired any expatriates in management occupations or in professional occupations. If a firm has an expatriate as the top highest earner (Global firm = 1) then the expatriate management indicator will also be equal to one, but there can be some other firms whose CEO is Bulgarian that nevertheless have expatriates in management positions; those firms will also have the Expat mgmt indicator at one. The Number of workers by ISCO code variable accounts separately for the size of the workforce in each of the nine ISCO code occupations (Managers, Professional, Technicians, Office, Sales, Skilled agricultural, Trades, Machine operators and Elementary), including both international and local employees for this computation. The remaining variables, year and industry, are factors and therefore get dummied up in estimation.

To investigate the effect of CD on firm performance we augment the specification from Equation (1) by adding the Hofstede CD index:

$$Y_j = \beta_0 + \beta_1 \cdot \text{Global firm}_j + \gamma \cdot \text{Hofstede}_j + \beta_2 \cdot \text{Firm size}_j + \beta_3 \cdot \text{Expat Mgmt}_j + \beta_4 \cdot \text{Expat professnl}_j + \beta_5 \cdot \text{Nb workers by ISCO}_j + \beta_6 \cdot \text{Year}_j + \beta_6 \cdot \text{Industr}_j + u_j \tag{2}$$

By doing so we allow for the overall effect of the global firm CEOs to differ by the CD between the country of origin of the CEO and Bulgaria. If the variation in the CD index has no effect on firm performance Y_j then the γ coefficient will be statistically not significant. Even so, if the CD did not matter but on average firms with foreign CEOs have better performance than Bulgarian ones, this would still be reflected in a statistically significant β_1 coefficient β_1 for the Global firm indicator.

For the international workforce analysis, we look at three outcomes in relation to global firms: wage outcomes, the determinants of an employer switch and the determinants of length of stay in the host country (truncated at a maximum of 11 years which is the length of our data). We estimate a multi-level model of the form (we thanks an anonymous referee for this advice):

$$Y_i = \beta_0 + \beta_1 \cdot \text{Global firm}_i + \beta_2 \cdot \text{Global firm}_i * \text{Sector}_i + \beta_3 \cdot \text{AboveAvgfirm}_i + \beta_4 \cdot \text{AboveAvgfirm}_i * \text{Sector}_i + \beta_5 \cdot \text{New Employer}_i + \beta_6 \cdot \text{New Employer}_i * \text{Sector}_i + \beta_7 \cdot \text{Sector}_i + \beta_8 \cdot \text{Firm size}_i + \beta_9 \cdot \text{Birth cohort}_i + \beta_{10} \cdot \text{ISCO}_i + \beta_{11} \cdot \text{Year}_i + u_i \quad (3)$$

where Y_{ij} stands for one of the three outcomes specified above, and where ij indexes the individual worker i working in firm j . In this specification β_{0j} represents a firm-specific intercept. A firm fixed effects model assumes β_{0j} is a constant, while a random effects model allows to be a random variable. We perform a Hausman test to determine whether a fixed effects or random effects model is appropriate; under the null, both models are consistent and random effects is preferred (for being more efficient), while under the alternative only the fixed effects model is consistent. We further allow for the effect of an international CEO on the worker outcome to differ by sector (services, relative to benchmark manufacturing). We also account for whether the firm in which the worker is employed is a firm that pays salaries which are higher than the average salary in the 2-digit industry of the firm, and the effect of the high-wage firms is also allowed to differ by sector. The variable whether the worker has a new employer is reflecting a switch in employer (tenure zero with the current employer) and is only present in the log wage specification as in the firm analysis. Firm size, Birth cohort and Year are factor variables which are dummied up during the estimation.

5 | FINDINGS

Table 1 and 2 presents the correlations. The top panel reports correlations in the international firm sample, while the bottom panel reports the correlations in the expatriate worker sample. From the firm data we notice that, among all international firms (who employ or have employed expatriate workers), global firms (with an expatriate CEO) are associated with higher revenues, and also with higher labor costs, but most importantly with higher revenues after labor costs; from the worker data we notice that expatriates working in global firms receive higher pay. We investigate these results in more detail in the regression framework.

In Table 3 we report the results of the analysis on firm performance on the following three outcomes, expressed in logs: (1) firm revenues; (2) revenues minus labor costs as a proxy for profit; and (3) total labor costs. The difference between specifications (3) and (1), $\log(\text{labor costs}) - \log(\text{revenues}) = \log(\text{labor costs}/\text{revenues})$ gives the measure of labor costs as share of revenue (in logs). Besides the covariates reported in the table, we also control for refined two-digit industry codes. While the eighty or so industry coefficients were too many to include, the full output is available on request.

All else equal, being a global firm is associated with a large positive effect on firm performance. Relative to an international firm, being a global firm increases revenues by 6.3% and profitability (defined as revenues minus labor costs) by 6.7%. Global firms are also associated with 20% higher labor costs.

We also account for the presence of expatriate workers in management and professional occupations, which is associated with much higher positive firm performance than expatriate CEO. We visualize the relationship between Labor Cost and the Revenue after Labor Cost in Figure 1 the expatriate CEO increases the profitability (revenue after

TABLE 3 The performance of global firms.

	(1)	(2)	(3)
	Revenue	Rev. - labor cost	Labor cost
	In logs	In logs	In logs
"Global" firm (expatriate "CEO")	0.063*** (0.015)	0.067*** (0.015)	0.203*** (0.010)
Presence expatriates in management	0.422*** (0.010)	0.415*** (0.010)	0.450*** (0.006)
Presence expatriates in professional occ.	0.447*** (0.011)	0.448*** (0.010)	0.427*** (0.007)
Medium firm	1.406*** (0.009)	1.410*** (0.009)	1.435*** (0.006)
Large firm	2.641*** (0.018)	2.648*** (0.018)	2.713*** (0.011)
Fraction workers born in 50s	-0.563*** (0.047)	-0.581*** (0.046)	-0.286*** (0.030)
Fraction workers born in 60s	0.019 (0.046)	0.008 (0.045)	-0.004 (0.029)
Fraction workers born in 70s	0.798*** (0.042)	0.769*** (0.041)	0.338*** (0.027)
Fraction workers born in 80s	0.524*** (0.047)	0.514*** (0.045)	0.314*** (0.029)
Fraction male workers	0.598*** (0.021)	0.617*** (0.020)	0.045*** (0.013)
Number workers in ISCO 1	0.007*** (0.0003)	0.006*** (0.0003)	0.005*** (0.0002)
Number workers in ISCO 2	0.002*** (0.0001)	0.002*** (0.0001)	0.002*** (0.0001)
Number workers in ISCO 3	-0.001*** (0.0001)	-0.001*** (0.0001)	-0.0004*** (0.0001)
Number workers in ISCO 4	0.0001** (0.00004)	0.0001** (0.00004)	0.0001*** (0.00003)
Number workers in ISCO 5	0.001*** (0.00005)	0.001*** (0.00005)	0.001*** (0.00003)
Number workers in ISCO 6	0.002** (0.001)	0.002** (0.001)	0.001** (0.001)
Number workers in ISCO 7	0.0002*** (0.0001)	0.0002*** (0.0001)	0.001*** (0.00004)
Number workers in ISCO 8	0.001*** (0.0001)	0.001*** (0.0001)	0.001*** (0.00003)
Number workers in ISCO 9	0.0003** (0.0001)	0.0003** (0.0001)	0.0003*** (0.0001)

TABLE 3 (Continued)

	(1)	(2)	(3)
	Revenue	Rev. - labor cost	Labor cost
	In logs	In logs	In logs
Year 2010	0.024 (0.018)	0.024 (0.018)	0.038*** (0.012)
Year 2011	0.023 (0.018)	0.021 (0.018)	0.055*** (0.011)
Year 2012	0.028 (0.018)	0.032* (0.017)	0.087*** (0.011)
Year 2013	0.059*** (0.018)	0.061*** (0.017)	0.128*** (0.011)
Year 2014	0.092*** (0.018)	0.085*** (0.017)	0.210*** (0.011)
Year 2015	0.108*** (0.018)	0.107*** (0.017)	0.272*** (0.011)
Year 2016	0.115*** (0.018)	0.119*** (0.017)	0.372*** (0.011)
Year 2017	0.167*** (0.018)	0.171*** (0.018)	0.422*** (0.011)
Year 2018	0.236*** (0.018)	0.235*** (0.018)	0.492*** (0.011)
Year 2019	0.292*** (0.018)	0.298*** (0.018)	0.510*** (0.011)
Constant	12.016*** (0.113)	12.004*** (0.110)	8.300*** (0.071)
Observations	78,842	78,557	78,842
R ²	0.653	0.662	0.802

Note: "Global firms" are those where the current "CEO" (the highest earner manager) is foreigner. ISCO codes represent (1) Managers, (2) Professional, (3) Technicians, (4) Office, (5) Sales, (6) Skilled agricultural, (7) Trades, (8) Machine operators, and (9) Elementary. We also control for two-digit industry codes representing about 80 industries. Please email us if you want to see the results by industry. We are comparing to Fraction workers born in 90s, year 2009.

labor costs) by 6.7%, compared with expatriate managers who increase the profitability by 41.5% and the expatriate professionals by the largest 44.8%. Expatriate managers increase Labor cost the most by 45.0%, while expatriate professionals by 42.6% and the expatriate CEO by 20.3%. Hence, the benefit of increased profitability due to expatriates' human capital is shared by different stakeholders like co-workers (increased Labor cost) and shareholders (increased Profit). Relative to small international firms (between 10 and 50 workers), medium international firms and especially large international firms have significantly better performance (141% and 264% respectively) in terms of revenue and revenue minus labor costs (profit is 141% and 265% respectively bigger). So, essentially the percentage increase is the same, which means that the labor cost increases proportionally linearly to revenues, which assures that revenues, labor cost and profit are moving linearly together. Relative to workers born in the 1990s, who just entered the labor force and are expected to have the lowest salaries, having more workers born in the 1950s is associated with negative firm performance (58% less profit and 28% less labor cost), in the 1960s with the same firm performance, in the 1970s the highest (77% more profit and 34% more labor cost) and in the 1980s (51% more profit and

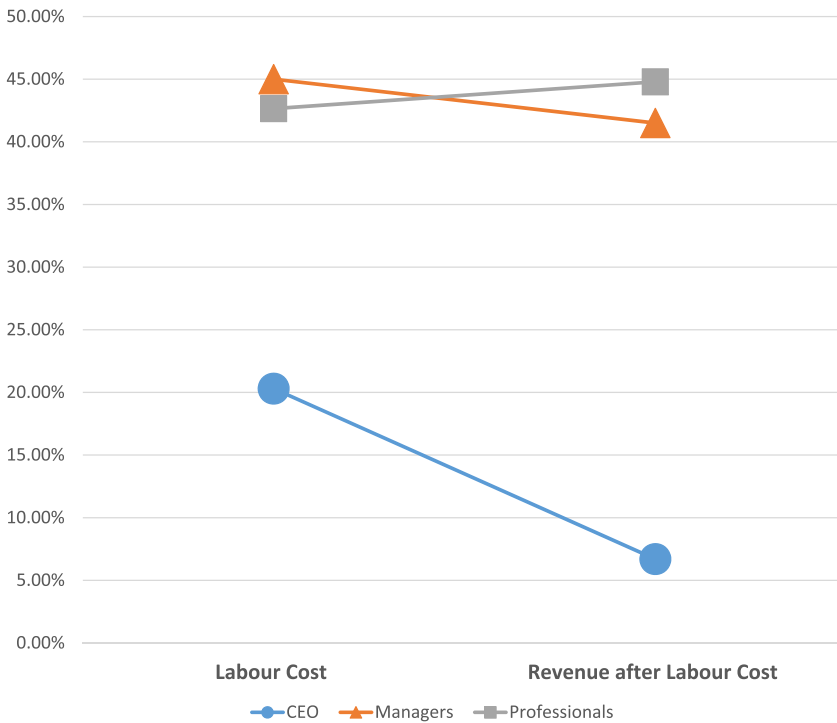


FIGURE 1 Percentage difference in performance of international firms with and without expatriates as CEO, managers and professionals.

31% more labor cost). One possible explanation being that the 1970s is the first generation after the fall of the Berlin wall to enter the labor market, and the 1950s were more negatively affected by communist labor practices than the 1960s generation, where it is natural younger 1980s to produce and receive less than the 1970s generation, and the same for 1990s. Overall, global firms generate on average 20% higher salaries and realize 6.7% higher profits after labor cost on 6.3% stronger revenues, producing a win-win-win situation for workers, shareholders, and the local economy.

5.1 | Expatriate worker experiences

Table 4 shifts the focus from the global firm to the expatriate workers. We consider three outcomes of interest: wages, employer switching and duration of stay (or tenure) in the host country. The Hausman test rejects the null that both fixed effects and random effects models are consistent, and therefore we should consider the fixed effects model for the analysis. A global firm is associated with an increase of about 20% in the wages of expatriate workers in Manufacturing (and about 7% for those in Services) when compared to other expatriates working in international firms with local CEOs. Following an employer switch, expatriate workers will experience a wage loss of about 10% points compared to expatriate workers who do not switch employers. The probability that expatriates are switching employers is larger when the new employer is a global firm, although this effect (2.5% increased switching probability) is reduced in half for the services sector. One possible explanation is that when the traditional expatriates contract expires, the expatriates who have developed a tie to the country, for example, via marriage, may agree to a significant pay cut to remain in the country. Other characteristics of employer switching show that workers are more likely to switch into the Service sector and into smaller firms. Younger workers and women are also more likely to switch employer. Finally, for the last outcome, tenure in the host country, expatriate workers in global firms have a shorter duration of stay in the country. The length of stay in the host country is shorter for those in the Services sector, for workers in smaller firms, for male workers, and

TABLE 4 Career outcomes of expatriate workers.

	Firm fixed effects			Random fixed effects		
	(1)	(2)	(3)	(1)	(2)	(3)
	Log wage	New employer	Tenure in country	Log wage	New employer	Tenure in country
“Global” firm	0.190*** (0.011)	0.025** (0.010)	-0.365*** (0.052)	0.217*** (0.010)	0.033*** (0.008)	-0.484*** (0.048)
“Global” firm * services	-0.123*** (0.013)	-0.018 (0.012)	0.223*** (0.062)	-0.101*** (0.012)	-0.013 (0.009)	0.252*** (0.058)
Firm pays above avg wages	0.307*** (0.010)	-0.024*** (0.009)	0.013 (0.048)	0.421*** (0.009)	-0.023*** (0.006)	0.057 (0.042)
Firm pays above avg wages * services	-0.106*** (0.012)	0.042*** (0.011)	0.086 (0.057)	-0.083*** (0.011)	0.042*** (0.008)	0.066 (0.051)
New employer	-0.070*** (0.004)			-0.073*** (0.004)		
New employer * “global” firm	-0.023*** (0.007)			-0.018** (0.007)		
Service sector	0.089*** (0.022)	-0.019 (0.020)	0.083 (0.105)	0.144*** (0.009)	0.029*** (0.006)	-0.196*** (0.044)
Medium firm	0.076*** (0.009)	-0.002 (0.008)	-0.228*** (0.041)	0.127*** (0.006)	-0.078*** (0.004)	0.497*** (0.030)
Large firm	0.062*** (0.013)	0.037*** (0.011)	-0.661*** (0.059)	0.160*** (0.009)	-0.115*** (0.006)	0.474*** (0.044)
Born in 60s	-0.014** (0.006)	0.047*** (0.005)	0.319*** (0.026)	-0.004 (0.005)	0.055*** (0.004)	0.256*** (0.025)
Born in 70s	-0.027*** (0.006)	0.076*** (0.005)	-0.211*** (0.028)	-0.010* (0.005)	0.100*** (0.004)	-0.325*** (0.026)
Born in 80s	-0.108*** (0.006)	0.130*** (0.006)	-0.917*** (0.029)	-0.080*** (0.006)	0.172*** (0.005)	-1.056*** (0.027)
Born in 90s	-0.184*** (0.008)	0.271*** (0.007)	-2.153*** (0.038)	-0.148*** (0.008)	0.322*** (0.006)	-2.340*** (0.036)
Gender: Male	0.223*** (0.004)	0.040*** (0.004)	-0.223*** (0.020)	0.231*** (0.004)	0.062*** (0.003)	-0.353*** (0.019)
ISCO 2	-0.655*** (0.007)	0.037*** (0.006)	0.162*** (0.033)	-0.664*** (0.007)	0.028*** (0.006)	0.282*** (0.032)
ISCO 3	-0.887*** (0.007)	0.062*** (0.007)	0.235*** (0.034)	-0.894*** (0.007)	0.075*** (0.006)	0.268*** (0.033)
ISCO 4	-1.100*** (0.008)	0.123*** (0.007)	-0.017 (0.039)	-1.129*** (0.008)	0.116*** (0.007)	-0.023 (0.038)
ISCO 5	-1.287*** (0.009)	0.112*** (0.008)	-0.109*** (0.042)	-1.344*** (0.008)	0.140*** (0.006)	-0.139*** (0.038)

(Continues)

TABLE 4 (Continued)

	Firm fixed effects			Random fixed effects		
	(1)	(2)	(3)	(1)	(2)	(3)
	Log wage	New employer	Tenure in country	Log wage	New employer	Tenure in country
ISCO 6	-1.141*** (0.055)	0.111** (0.049)	-0.195 (0.259)	-1.177*** (0.051)	0.099** (0.039)	-0.200 (0.241)
ISCO 7	-1.229*** (0.009)	0.084*** (0.008)	0.180*** (0.043)	-1.262*** (0.008)	0.103*** (0.007)	0.228*** (0.040)
ISCO 8	-1.303*** (0.009)	0.093*** (0.008)	0.214*** (0.044)	-1.340*** (0.009)	0.124*** (0.007)	0.158*** (0.041)
ISCO 9	-1.396*** (0.009)	0.147*** (0.008)	-0.370*** (0.044)	-1.447*** (0.008)	0.162*** (0.007)	-0.348*** (0.040)
Year 2010	-0.036*** (0.008)	-0.784*** (0.007)	0.029 (0.035)	-0.031*** (0.008)	-0.735*** (0.007)	0.058* (0.035)
Year 2011	-0.037*** (0.008)	-0.803*** (0.007)	0.200*** (0.036)	-0.035*** (0.008)	-0.730*** (0.007)	0.252*** (0.035)
Year 2012	-0.006 (0.008)	-0.840*** (0.007)	0.334*** (0.036)	-0.003 (0.008)	-0.754*** (0.007)	0.391*** (0.036)
Year 2013	0.035*** (0.008)	-0.862*** (0.007)	0.401*** (0.036)	0.036*** (0.008)	-0.761*** (0.007)	0.456*** (0.035)
Year 2014	0.114*** (0.008)	-0.883*** (0.007)	0.459*** (0.036)	0.115*** (0.008)	-0.768*** (0.006)	0.501*** (0.035)
Year 2015	0.180*** (0.008)	-0.896*** (0.007)	0.416*** (0.035)	0.178*** (0.008)	-0.766*** (0.006)	0.431*** (0.035)
Year 2016	0.259*** (0.008)	-0.909*** (0.007)	0.291*** (0.035)	0.255*** (0.008)	-0.765*** (0.006)	0.302*** (0.034)
Year 2017	0.317*** (0.008)	-0.961*** (0.007)	0.124*** (0.035)	0.310*** (0.008)	-0.798*** (0.006)	0.114*** (0.034)
Year 2018	0.384*** (0.008)	-1.019*** (0.007)	-0.106*** (0.035)	0.391*** (0.008)	-0.830*** (0.006)	-0.144*** (0.034)
Year 2019	0.441*** (0.009)	-1.191*** (0.007)	-0.112*** (0.036)	0.451*** (0.008)	-0.963*** (0.006)	-0.160*** (0.035)
Constant				7.054*** (0.012)	0.952*** (0.009)	5.964*** (0.055)
Obs.	114,324	114,324	114,324	114,324	114,324	114,324
R ²	0.394	0.252	0.070	0.870	0.273	0.196
Hausman test						
H ₀ : RE efficient						
Alternative:FE	X ² = 3710.8	X ² = 8259.2	X ² = 916.78			
Consistent	Reject H ₀	Reject H ₀	Reject H ₀			

Note: The "CEO" is defined as the highest earner manager in the firm. A "Global firm" has a highest earner manager ("CEO") who is an expat. ISCO codes are relative to base category (1) management and represent (2) Professional, (3) Technicians, (4) Office, (5) Sales, (6) Skilled agricultural, (7) Trades, (8) Machine operators, and (9) Elementary. We are comparing to the ISCO 1, Year 2009, female worker.

for workers in all occupations compared to managerial (ISCO code 1), except for Professionals (ISCO code 2) who have a longer duration of stay. Because our data cannot differentiate between firm-assigned expatriates and self-initiated expatriates, we cannot say to what extent this finding is attributable to any differences in expatriates' aspirations.

Focusing on CD, we report two sets of results in Table 5: in the first three columns we repeat the analysis on global firms discussed in Table 3, except we also assign global firms the Hofstede cultural index based on the home country of the expatriate CEO. In the last three columns we report another set of results where instead of the Hofstede distance we use the Globe index country clusters. For reasons of space, we only present here the regression coefficients from the cultural analysis, while the full set of results, comparable to those in Table 3, are available from the authors.

The Hofstede index is interpreted on top of the global firm indicator, and it allows a direct comparison between the performance of global firms who are of different CDs. The results indicate that a larger CD is associated with increased revenues, increased labor costs and increased profit as proxied by revenue minus labor costs. In terms of the Globe index regions, global CEOs from Latin countries and Anglo countries are associated with the best performance, followed by Germanic countries, Middle Eastern and Chinese countries of the "CEO" are associated with a decreased performance compared to firms with Bulgarian CEOs.

More specifically, consistent with human capital theory we examine the relationship between Labor Cost and the Revenue after Labor Cost depending on the country of origin of the CEO and visualize it in Figure 2 for the following eight regions: Anglo, Confucian Asia, Eastern Europe, Germanic Europe, Latin Europe, Middle East, Nordic Europe and Southern Asia.

The average Anglo expatriate CEO increases the Profitability (revenue after labor cost) by 93%, however they increase the labor cost by 302%. Whereas both Latin Europe and Middle East CEOs increase the profitability even more, by 100%, but share a smaller proportion with the workers, with 163.0% and 34.0% increases in labor cost, respectively.

The average Germanic European CEO increases Profitability only by 28.8% for an increased Labor cost of 104.7%, while a Nordic European CEO increases the Labor cost by 127.0%, the third highest, but Profitability only increases by 40.3%, on average. Moreover, due to large variability measured by standard deviation, it cannot be considered as statistically different to Bulgarian CEO Profitability.

The Labor cost (-8.8%) and Profitability (34.0%) of a Southern Asian CEO is statistically the same as a Bulgarian CEO. And finally, a Confucian Asia CEO also does not have a statistically different Labor cost (-18.0%), when compared to a Bulgarian CEO, but gives an 80.8% smaller Profitability.

Summary for the level of support for the hypotheses is presented in Table 6.

6 | DISCUSSIONS

We set ourselves the aim to advance contemporary knowledge of the impact of global mobility at the individual level on both individual and organizational outcomes, including comparisons between corporate- and self-initiated-expatriation. Studying expatriation should cover the wider options of global mobility, and the way they are managed in different ways by managers and HR executives as part of international HRM. More needs to be done to understand the dynamics of cross-border mobility (Kraimer et al., 2016). Employing human capital theory (Becker, 1975) we expand our knowledge of the impact of global moves in the wider context.

Expatriation (especially long-term assignments) is reportedly decreasing, though still a dominant factor in global operation (Baruch et al., 2016), which might stifle the global circulation of talent, and thus reducing access to the needed talent at the right time. However, our findings can serve as a counter-narrative to the above representing a "new normal" as far as global mobility is concerned. Although fewer jobs are available due to an increasingly competitive job market as well as downsizing because of technological advancements and the Future of Work dynamics (Perkins et al., 2022), the importance of accumulating human capital might motivate not only global firms but also various sized international firms to relocate more of their staff as ways of building internal human capital, capabilities and practical 'know-how'. In addition, on the flip side, an increasing number of individual workers might opt for career

TABLE 5 The role of cultural distance in the performance of global firms.

	Hofsted difference index			Global index country clusters		
	(1)	(2)	(3)	(1)	(2)	(3)
	Revenue In logs	Rev. – labor cost In logs	Labor cost In logs	Revenue In logs	Rev. – labor cost In logs	Labor cost In logs
“Global” firm	-0.032 (0.049)	0.002 (0.047)	0.077** (0.031)			
Hofstede cultural distance	0.015*** (0.005)	0.012** (0.005)	0.018*** (0.003)			
Globe country cluster:						
Anglo				0.274*** (0.062)	0.286*** (0.061)	0.604*** (0.039)
Confucian Asia				-0.524*** (0.097)	-0.535*** (0.094)	-0.086 (0.061)
Eastern Europe				0.028 (0.023)	0.041* (0.023)	0.131*** (0.015)
Germanic Europe				0.112*** (0.036)	0.110*** (0.035)	0.311*** (0.023)
Latin Europe				0.299*** (0.033)	0.301*** (0.032)	0.420*** (0.021)
Middle East				-0.179*** (0.040)	-0.193*** (0.038)	-0.127*** (0.025)
Nordic Europe				0.162 (0.109)	0.147 (0.106)	0.356*** (0.068)
Other				-0.122 (0.087)	-0.075 (0.085)	0.154*** (0.055)
Southern Asia				-0.117 (0.177)	-0.127 (0.171)	-0.040 (0.111)
Constant	12.04*** (0.113)	12.025*** (0.110)	8.303*** (0.071)	12.02*** (0.113)	12.01*** (0.110)	8.297*** (0.071)
Observations	77,979	77,697	77,979	78,842	78,557	78,842
R ²	0.654	0.663	0.803	0.653	0.663	0.803

Note: “Global firms” are those where the current “CEO” (the highest earner manager) is foreigner. CD (Hofsted and Global index) based on the home country of the CEO. The same regressors as in Table 3 were also used in this analysis: presence of foreign workers in managerial and professional occupations, firm size, age of workforce, gender, worker ISCO distribution, calendar year, and two digit industries. For reason of space, and because the magnitude of coefficients is very similar to the one from Table 3, we do not repeat here those coefficients, but are available from the authors.

changes that involve a global move to acquire the said capital necessary for becoming more competitive, even in local job markets and to reap the benefits of what a global career offer in terms of wage growth. Furthermore, as we find that higher expatriate salaries are associated with global firms, if wage increase is a chief motivator for an individual, an expatriate-career could motivate more people to embark on a career entailing global moves and subsequently lead to an increased global mobility and talent circulation. Adding the cultural dimension, we were able to identify its critical role in explaining both individual and organizational outcomes. We also offer practical recommendations for the management of global talent flow.

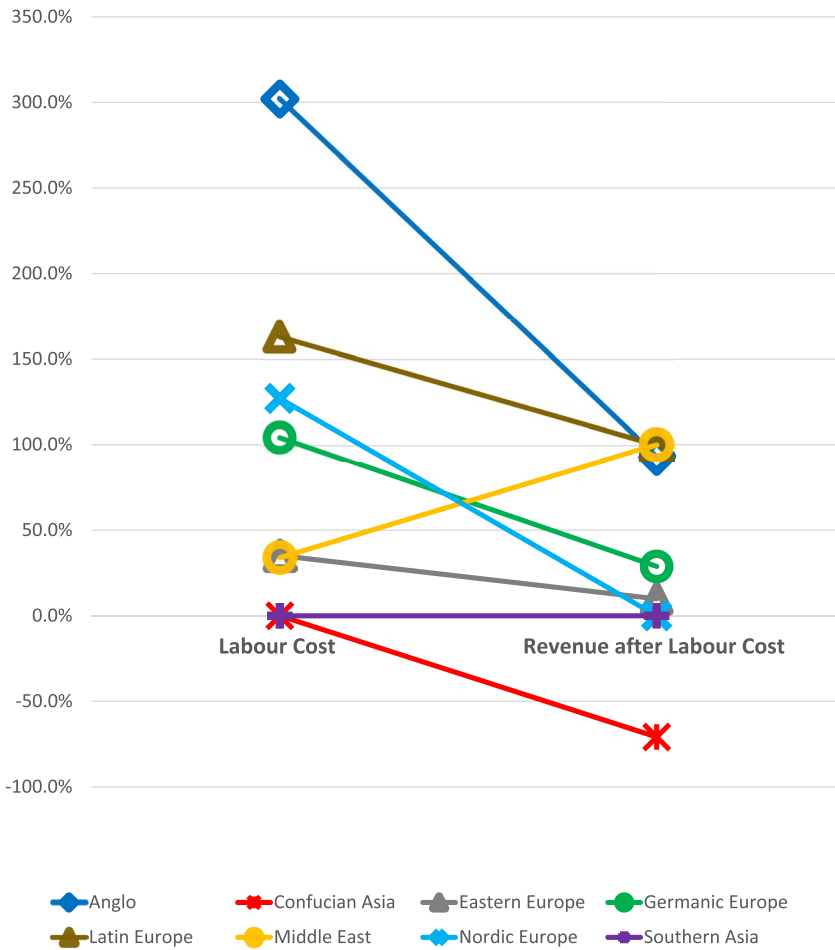


FIGURE 2 The role of cultural distance in the performance of firms: Percentage difference in labor cost and profit between international firms with and without expatriate CEO by cultural clustering.

TABLE 6 Summary of the hypotheses and their support.

Hypotheses	Supported or rejected
Hypothesis 1: Global firms will be positively associated with higher firm revenue and with higher ratio of labor costs per revenue compared to international firms.	Supported
Hypothesis 2: Expatriates who switch employers will improve their earnings compared to expatriates who stay with the same employer.	Rejected
Hypothesis 3: Expatriates employed in global firms will switch employer more frequently than expatriates working in international firms.	Supported
Hypothesis 4: Expatriates employed in global firms will stay in the country longer than expatriates working in international firms.	Rejected. Expatriates employed in global firms have shorter tenure in the country (truncated at 2019).
Hypothesis 5: The larger the CD, the more positive impact on firm performance.	Supported

A main strength of our study is the access to the entire universe of firms operating in Bulgaria. International firms and international workers tend to perform better than local firms and local workers (Delios & Beamish, 2001). We compare the global firms led by expatriate CEOs with other firms operating in the same country, same industry and with similar number of employees, who also have an international presence in their workforce. Likewise for the workers, we only compare wage and mobility outcomes within the expatriate workers' population. This way, we have conducted what we consider appropriate comparisons, helping to better understand the effect of a global workforce, and suggest future directions of global work (cf. Manyika et al., 2017). Our findings show that the outcomes at the individual level varies according to the type of sector and should inform a person's career strategizing and a country's anticipation for what sectors it can more successfully promote in order to increase incoming global moves. These can subsequently lead to enhancing international exposure and human capital building within international firms.

At the firm level, after controlling for other firm characteristics such as occupational and age distribution of workers and refined industry codes, firms led by international CEOs have both higher revenues and higher shares of labor costs in revenue. While we do not have an actual indicator for profitability, the proxy we constructed indicates that, despite higher labor costs, global firms are more profitable compared to international firms. These findings, especially our discovery that the presence of expatriate workers account for a stronger firm performance as opposed to cases with an expatriate CEO, are consistent with a view where workers in global firms have higher human capital: they get paid more and, due to the positive link between pay and productivity, they are also more productive. The finding regarding positive impact on firm performance in relation to the presence of expatriates could lead to increased intra-global firm talent circulation and development, for example, to enhance personal career outcome and sustaining their own career. This would benefit employees who are keen on developing a global career but currently lacking the pertinent human capital. Eventually, global firms would benefit from being able to draw upon the improved collective human capital within the firm. Furthermore, at the country level and in particularly for developing countries, nations could benefit from the increased global moves due to the potential spillover effects from the human capital possessed by global firms' employees to local citizens working for such firms as well as benefiting international firms and domestic firms.

We have already established that expatriates earn more when employed by global firms, compared to those employed by international firms. When they switch employer, although expatriates join firms paying higher than average wages, the workers take a hit on their wages right after the switch. This is not an entry into the country effect since new entrant expatriates actually earn a premium. It is possible that upon a switch workers destroy some of their firm-specific human capital and it may take some time for them to rebuild it (Autor & Handel, 2013). This means that global mobility and talent circulation are not unimpeded and that appreciating the positive effect of a switch depends on the nature of an individual's career trajectory. This could serve as a support for global firms that consider and apply a combination of global mobility *and* intra-firm mobility across departments and/or job roles, which are imperative for business expansion and firm success.

Alternative explanation is that the switch happens after the initial expatriate contract in the country expires and as the expatriates have developed connection to the country, for example, via marriage, they decide to find a job and stay, which results in 10% on average decrease in their compensation. Better workers also seem to have shorter stays in the host country. Other than managers, only professional workers are less likely to leave the host country; also, these departures are associated with global firms and with firms paying above industry average wages. This could indicate that global moves are more attainable when having accumulated more human capital, as would be the case with abovementioned professional workers. Men and younger birth cohorts (relative to those born in the 1950s and 1960s) are also more likely to leave the host country. This points out to expatriate workers in top occupations and earning top wages having shorter stays in the host country, being more mobile and moving on to presumably better job opportunities. Such trends would benefit global firms as well as international firms in countries that are looking for experienced executives and managers, who also brings a different cultural outlook to the organization.

The CD of the CEO is associated with better performance of the firm, in line with earlier predictions (Beugelsdijk et al., 2018). This can be an indication that doing things differently is rewarded and fills a market need. In the context

of our analysis the CD may also capture a difference in the level of development between the host country and the CEOs' countries of origin. Our results can be useful for firms deciding on subsidiaries' locations: not only does it look like the higher the CD, the better the performance, hence; global firms may decide counterintuitively to capture first markets in countries with a higher CD. Arguably, this reflects a benefit from an elaborate intra-firm global talent management program. For example, an HR database that couples employee' managerial readiness, career motivations, capability, and work performance as well as geographical location and cultural profile, would accommodate for firms making more informed decisions on hirings and searching broader within their multicultural diverse workforce. Also, the more developed regions (e.g., Anglo or Germanic Europe) are associated with better performance, so it seems that global firms headquartered in these regions will have natural advantage of open subsidiaries abroad. Furthermore, bringing an expatriate manager plays a significant role in the success of the subsidiary. This finding serves a prompt for such firm not to assume that a home-national manager would be required to sustain the afore-said advantages as we have demonstrated that the manager positions in the overseas subsidiaries could benefit from managers possessing cultural backgrounds associated with a larger CD. These firms could benefit from tapping into the various directions in global talent circulation, for example, to search for relevant talent within a subsidiary's geographic region. Additionally, our findings indicate that any type of firm could look to boost internal multiculturally diverse workforce by broadening searches into pools of self-initiated expatriates but also migrant streams. The above concerns relate to key strategic decision-making for HR executives, for example, in relation to the "fit" with the firm's overall strategies as well as staffing, recruitment, remuneration and development of human capital.

Overall, we advance both theory and practice regarding the effects of global mobility of individual employees as well as on their employing firms.

6.1 | Theoretical contributions

We expand the relevance of talent management and talent flow at the global level, manifesting the interconnections across the various global players. This way we expand the human capital theory to better understand global talent flow (Kerr et al., 2016). Further, we manifest the role and relevance of different actors in the system—in the context of developing economies. We identify how cultural gaps between home- and host country play a significant role in the impact of global moves. This expands the sparse theoretical development from a macro-perspective in the field of global talent flow (Khilji et al., 2015; Vaiman et al., 2018). To better understand global flow of talent, scholars should consider 'actors' at different levels—individuals, firms and nations (Baruch, 2015). In line with human capital theory (Becker, 1975), we extend the cover of career literature and global talent management from western focused to a developing economy perspective. The CET (Baruch, 2015; Baruch & Rousseau, 2019) point out the interdependency across different players, but does not go beyond this descriptive presentation. Our study helps to identify how the process is being motivated and progressing, through the interaction between the players—individuals, employers and nations.

From cultural theory perspective, we integrated the impact of CD in terms of values as suggested by Hofstede (2001). We identified the role CD play for people who moved globally to a different culture, and how this CD influences their careers. Our observations challenge some of the current assumptions, such as the expectations of wage increase for switching jobs, which is of high relevance for HR strategies and corporate policies in global firms.

6.2 | Managerial relevance

There are various types of global movers, in particular corporate expatriates, self-initiated expatriates and immigrants. Each requires different type of attention and treatment by managers and by the HR unit. We found that more successful workers seem to be internationally mobile and more likely to leave the host country. This poses a

challenge to global firms struggling to maintain performance of their expatriates (Bader et al., 2021). Subsequently, an additional challenge for HR practitioners relates to understanding the factors making expatriates stay and factors leading to a failed international assignment or reason to have migrated to the host country (Guttormsen et al., 2018).

Internal mobility across firms, but within the country, does not seem to bring significant wage benefit to the movers, at least not immediately, allowing the possibility for retention strategies to work on average. Firms therefore need to gauge how much investment in lower domestic and inter-firm turnover and reducing employees' intention to quit can be justified in relation to the broader strategic value of expatriation. A cost-benefit analysis of individual employees could aid in determining how much experience he or she deem appropriate to acquire based on the level of wage increase being sought. Internal mobility is associated with firm size, with expatriates less likely to move to small firms; HR managers of small firms should be aware of this in recruiting strategies. Because the CD of the CEO matters, CD from the host country to the expatriate's country of origin may help to identify specific needs and inputs that will help make the transition and retention more viable.

6.3 | Limitations and future research agenda

Like any study, our investigation has some limitations. First, it was conducted in a single country, though, Bulgaria is a representative case of Eastern Europe, and in many aspects may also represent the wider developing countries. To compensate for this limitation, our data is covering all the in- and out- global movement to the country, with well validated data.

In terms of method, we had to succumb to the use of proxy for some variables. As explained, the assumptions made for the use of those proxy cases are based on logic and current knowledge ad practice.

We consider based on our findings two lines of inquiry to be particularly fruitful for future research. First, we encourage a significant increase of studying macro factors, as influencing conditions external to the firm, regarding global talent flow and other firm specific processes. Furthermore, we find it especially intriguing to see how the interplay between various players, factors and conditions in the firm's macro environment might impact, in isolation or combinations, the consequences of talent flow on firms. Moreover, it would be interesting to explore how different players, factors and conditions might affect each other at different levels and subsequently the firm. The realm of public policy would be worthwhile to investigate across levels, for example, how policy executed at the municipality, regional, national and supranational levels might affect firms differently—or perhaps moderate the effect of other factors and conditions.

Second, as we identified CD to be an influential factor, it begs the question regarding other types of distances, such as linguistic or institutional distances as possible predictors or explanatory factor for talent flow. Furthermore, we find it relevant to explore distances from different points, such as between the firm's workforce diversity or perhaps between the host country and the nationality of the firm.

Lastly, our data base does not differentiate between corporate expatriates and self-initiated expatriates. While there may be differences between them, they are still very much different from locals. Further, many corporate expatriates are in fact self-initiated expatriates—within their organizations—see for example, Altman and Baruch (2012).

7 | CONCLUSION

Most studies on global talent flow are limited to certain populations or to single or few organizations. As a result, their explanatory power and generalizability are limited. We provide a comprehensive support for a set of hypotheses at both individual and firm level, indicating the impact of global moves on individuals' careers and on firms' performance. The analysis also utilizes CD as a significant factor that helps to explain the phenomenon, and we show how being different can positively influence business outcomes, as the relationships between CD and the other outcomes are significant and meaningful.

ACKNOWLEDGMENTS

The authors wish to thank the Editors and the anonymous reviewers for their support and guidance.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from Government of Bulgaria. Restrictions apply to the availability of these data, which were used under license for this study. Data are available from the author(s) with the permission of Government of Bulgaria.

ORCID

Yehuda Baruch  <https://orcid.org/0000-0002-0678-6273>

David S. A. Guttormsen  <https://orcid.org/0000-0002-4734-624X>

ENDNOTE

¹ We use the following three definitions: > **Global firms** are firms which top manager is international, that is, not from the host country. We further define the top manager as the employee with one-digit ISCO code = 1 = "Managers" who is receiving the highest salary. > **International firms** are firms which top manager is local, but they have on their staff at least one international employee. > **Local firms** are firms without a single international employee on their staff, that is, all employees are local.

REFERENCES

- Altman, Y., & Baruch, Y. (2012). Global self-initiated corporate expatriate careers: A new era in international assignments? *Personnel Review*, 41(2), 233–255. <https://doi.org/10.1108/00483481211200051>
- Andresen, M., Bergdolt, F., & Margenfeld, J. (2013). What distinguishes self-initiated expatriates from assigned expatriates and migrants. In M. Andresen, A. Al Ariss, M. Walther, & K. Wolff (Eds.), *Self-initiated expatriation: Individual, organizational, and national perspectives* (pp. 11–41). Routledge.
- Andresen, M., Biemann, T., & Pattie, M. W. (2015). What makes them move abroad? Reviewing and exploring differences between self-initiated and assigned expatriation. *International Journal of Human Resource Management*, 26(7), 932–947. <https://doi.org/10.1080/09585192.2012.669780>
- Andresen, M., Lazarova, M., Apospori, E., Cotton, R., Bosak, J., Dickmann, M., & Smale, A. (2022). Does international work experience pay off? The relationship between international work experience, employability and career success: A 30-country, multi-industry study. *Human Resource Management Journal*, 32(3), 698–721. <https://doi.org/10.1111/1748-8583.12423>
- Arthur, M. B., & Rousseau, D. M. (1996). The boundaryless career as a new employment principle. In M. B. Arthur & D. M. Rousseau (Eds.), *The boundaryless career* (pp. 3–20). Oxford University Press.
- Autor, D. H., & Handel, M. J. (2013). Putting tasks to the test: Human capital, job tasks, and wages. *Journal of Labor Economics*, 31(S1), S59–S96. <https://doi.org/10.1086/669332>
- Bader, A. K., Bader, B., Froese, F. J., & Sekiguchi, T. (2021). One way or another? An international comparison of expatriate performance management in multinational companies. *Human Resource Management*, 60(5), 737–752. <https://doi.org/10.1002/hrm.22065>
- Baruch, Y. (2015). Organizational and labor market as career eco-system. In A. De Vos & B. Van der Heijden (Eds.), *Handbook of research on sustainable careers* (pp. 164–180). Edward Elgar.
- Baruch, Y., Altman, Y., & Tung, R. L. (2016). Career mobility in a global era – Advances in managing expatriation and repatriation. *The Academy of Management Annals*, 13(1), 841–889. <https://doi.org/10.5465/19416520.2016.1162013>
- Baruch, Y., & Rousseau, D. M. (2019). Integrating psychological contracts and ecosystems in career studies and management. *The Academy of Management Annals*, 13(1), 84–111. <https://doi.org/10.5465/annals.2016.0103>
- Becker, G. S. (1975). *Human capital*. Chicago University Press.
- Bender, M., Contacos-Sawyer, J., & Thomas, B. (2013). Benefits strategies for attracting and retaining employees. *Competition Forum*, 11(2), 165–169.
- Beugelsdijk, S., Kostova, T., Kunst, V. E., Spadafora, E., & van Essen, M. (2018). Cultural distance and firm internationalization: A meta-analytical review and theoretical implications. *Journal of Management*, 44(1), 89–130. <https://doi.org/10.1177/0149206317729027>
- Bonache, J., & Brewster, C. (2001). Knowledge transfer and the management of expatriation. *Thunderbird International Business Review*, 43(1), 145–168. [https://doi.org/10.1002/1520-6874\(200101/02\)43:1<145::aid-tie9>3.0.co;2-7](https://doi.org/10.1002/1520-6874(200101/02)43:1<145::aid-tie9>3.0.co;2-7)
- Braconier, H., Norbäck, P. J., & Urban, D. (2005). Multinational enterprises and wage costs: Vertical FDI revisited. *Journal of International Economics*, 67(2), 446–470. <https://doi.org/10.1016/j.jinteco.2004.08.011>

- Caligiuri, P., & Bonache, J. (2016). Evolving and enduring challenges in global mobility. *Journal of World Business*, 51(1), 127–141. <https://doi.org/10.1016/j.jwb.2015.10.001>
- Caligiuri, P., De Cieri, H., Minbaeva, D., Verbeke, A., & Zimmermann, A. (2020). International HRM insights for navigating the COVID-19 pandemic: Implications for future research and practice. *Journal of International Business Studies*, 51(5), 697–713. <https://doi.org/10.1057/s41267-020-00335-9>
- Canestrino, R., & Magliocca, P. (2010). Managing expatriation, repatriation and organisational learning in MNCs: An integrative framework. *Review of International Comparative Management*, 11(2), 186–200.
- Carr, S. C., Inkson, K., & Thorn, K. (2005). From global careers to talent flow: Reinterpreting brain drain. *Journal of World Business*, 40(4), 386–398. <https://doi.org/10.1016/j.jwb.2005.08.006>
- Cascio, W. F., & Boudreau, J. W. (2016). The search for global competence: From international HR to talent management. *Journal of World Business*, 51(1), 103–114. <https://doi.org/10.1016/j.jwb.2015.10.002>
- Cassidy, H., DeVaro, J., & Kauhanen, A. (2016). Promotion signaling, gender, and turnover: New theory and evidence. *Journal of Economic Behavior and Organization*, 126, 140–166. <https://doi.org/10.1016/j.jebo.2016.03.016>
- Castellani, D., Perri, A., & Scalera, V. G. (2022). Knowledge integration in multinational enterprises: The role of inventors crossing national and organizational boundaries. *Journal of World Business*, 57(3), 101290. <https://doi.org/10.1016/j.jwb.2021.101290>
- Cheng, K. Y., & Lin, W. T. (2014). Slack resource effect on multinational firm global strategic posture. *Strategic Management Journal*, 8(12), 65–83.
- Cohen, J. M. (1992). Foreign advisors and capacity building: The case of Kenya. *Public Administration and Development*, 12(5), 493–510. <https://doi.org/10.1002/pad.4230120506>
- Colakoglu, S., & Caligiuri, P. (2008). Cultural distance, expatriate staffing and subsidiary performance: The case of US subsidiaries of multinational corporations. *International Journal of Human Resource Management*, 19(2), 223–239. <https://doi.org/10.1080/09585190701799804>
- Collings, D., & Isichei, M. (2018). The shifting boundaries of global staffing: Integrating global talent management, alternative forms of international assignments and non-employees into the discussion. *International Journal of Human Resource Management*, 29(1), 165–187. <https://doi.org/10.1080/09585192.2017.1380064>
- Crook, T. R., Todd, S. Y., Combs, J. G., Woehr, D. J., & Ketchen, D. J., Jr. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, 96(3), 443–456. <https://doi.org/10.1037/a0022147>
- Da Rocha, A., Simões, V. C., de Mello, R. C., & Carneiro, J. (2017). From global start-ups to the borderless firm: Why and how to build a worldwide value system. *Journal of International Entrepreneurship*, 15(2), 121–144. <https://doi.org/10.1007/s10843-017-0200-9>
- Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39(4), 949–969. <https://doi.org/10.5465/256718>
- Delery, J. E., & Roumpi, D. (2017). Strategic human resource management, human capital and competitive advantage: Is the field going in circles? *Human Resource Management Journal*, 27(1), 1–21. <https://doi.org/10.1111/1748-8583.12137>
- Delios, A., & Beamish, P. W. (2001). Survival and profitability: The roles of experience and intangible assets in foreign subsidiary performance. *Academy of Management Journal*, 44(5), 1028–1038. <https://doi.org/10.5465/3069446>
- Deloitte. (2021). Retrieved from <https://www2.deloitte.com/ch/en/pages/challenges/global%20mobility.html>
- Dickmann, M., Suutari, V., Brewster, C., Mäkelä, L., Tanskanen, J., & Tornikoski, C. (2018). The career competencies of self-initiated and assigned expatriates: Assessing the development of career capital over time. *International Journal of Human Resource Management*, 29(16), 2353–2371. <https://doi.org/10.1080/09585192.2016.1172657>
- Doherty, N., Dickmann, M., & Mills, T. (2011). Exploring the motives of company-backed and self-initiated expatriates. *International Journal of Human Resource Management*, 22(3), 595–611. <https://doi.org/10.1080/09585192.2011.543637>
- Dow, D., & Ferencikova, S. (2010). More than just national cultural distance: Testing new distance scales on FDI in Slovakia. *International Business Review*, 19(1), 46–58. <https://doi.org/10.1016/j.ibusrev.2009.11.001>
- Fan, D., Zhu, C. J., Huang, X., & Kumar, V. (2021). Mapping the terrain of international human resource management research over the past fifty years: A bibliographic analysis. *Journal of World Business*, 56(2), 101185. <https://doi.org/10.1016/j.jwb.2020.101185>
- Fan, X., & DeVaro, J. (2020). Job hopping and adverse selection in the labor market. *Journal of Law, Economics, and Organization*, 36(1), 84–138. <https://doi.org/10.1093/jleo/ewz021>
- Farndale, E., Horak, S., Phillips, J., & Beamond, M. (2019). Facing complexity, crisis, and risk: Opportunities and challenges in international human resource management. *Thunderbird International Business Review*, 61(3), 465–470. <https://doi.org/10.1002/tie.22037>
- Farndale, E., Thite, M., Budhwar, P., & Kwon, B. (2021). Deglobalization and talent sourcing: Cross-national evidence from high-tech firms. *Human Resource Management*, 60(2), 259–272. <https://doi.org/10.1002/hrm.22038>
- Fee, A., & Gray, S. J. (2020). Expatriates as catalysts: What and how Vietnamese locals learn from self-initiated expatriates. *Cross Cultural and Strategic Management*, 27(3), 389–416. <https://doi.org/10.1108/ccsm-08-2019-0145>

- Felício, J. A., Couto, E., & Caiado, J. (2014). Human capital, social capital and organizational performance. *Management Decision*, 52(2), 350–364. <https://doi.org/10.1108/md-04-2013-0260>
- Gleason, K. C., Madura, J., & Wiggenshorn, J. (2006). Operating characteristics, risk, and performance of born-global firms. *International Journal of Managerial Finance*, 2(2), 96–120. <https://doi.org/10.1108/17439130610657331>
- Gong, Y. (2003). Subsidiary staffing in international enterprises, agency, resources, and performance. *Academy of Management Journal*, 46(6), 728–739. <https://doi.org/10.5465/30040664>
- Gooderham, P., Fenton-O'Creevy, M., Croucher, R., & Brookes, M. (2018). A multilevel analysis of the use of individual pay-for-performance systems. *Journal of Management*, 44(4), 1479–1504. <https://doi.org/10.1177/0149206315610634>
- Gunz, H., Lazarova, M., & Mayrhofer, W. (Eds.) (2020). *The Routledge companion to career studies*. Routledge.
- Guttormsen, D. S. A., Francesco, A. M., & Chapman, M. (2018). Revisiting the expatriate failure concept: A qualitative study of Scandinavian expatriates in Hong Kong. *Scandinavian Journal of Management*, 34(2), 117–128. <https://doi.org/10.1016/j.scaman.2018.03.005>
- Hall, D. T. (2004). The protean career: A quarter-century journey. *Journal of Vocational Behavior*, 65(1), 1–13. <https://doi.org/10.1016/j.jvb.2003.10.006>
- Harzing, A. W. (1996). About the paucity of empirical research in IHRM, A test of the downes framework of staffing foreign subsidiaries. *Journal of International Management*, 3, 153–167.
- Harzing, A. W. (2001). Of bears, bumble-bees and spiders: The role of expatriates in controlling foreign subsidiaries. *Journal of World Business*, 36(4), 366–379. [https://doi.org/10.1016/s1090-9516\(01\)00061-x](https://doi.org/10.1016/s1090-9516(01)00061-x)
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Sage.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage.
- Horak, E., Farndale, E., Brannen, M. Y., & Collings, D. G. (2019). International human resource management in an era of political nationalism. *Thunderbird International Business Review*, 61(3), 471–480. <https://doi.org/10.1002/tie.21959>
- Jones, G., & Gálvez-Muñoz, L. (2001). *Foreign multinationals in the United States*. Taylor and Francis.
- Kano, L., Tsang, E. W., & Yeung, H. W. C. (2020). Global value chains: A review of the multi-disciplinary literature. *Journal of International Business Studies*, 51(4), 577–622. <https://doi.org/10.1057/s41267-020-00304-2>
- Kerr, S. P., Kerr, W., Özden, Ç., & Parsons, C. (2016). Global talent flows. *The Journal of Economic Perspectives*, 30(4), 83–106. <https://doi.org/10.1257/jep.30.4.83>
- Khilji, S. E., Tarique, I., & Schuler, R. S. (2015). Incorporating the macro view in global talent management. *Human Resource Management Review*, 25(3), 236–248. <https://doi.org/10.1016/j.hrmr.2015.04.001>
- Kim, H., Reiche, B. S., & Harzing, A. W. (2022). How does successive inpatriation contribute to subsidiary capability building and subsidiary evolution? An organizational knowledge creation perspective. *Journal of International Business Studies*, 53(7), 1394–1419. <https://doi.org/10.1057/s41267-021-00494-3>
- Kim, K., Halliday, C. S., Zhao, Y., Wang, C., & Von Glinow, M. A. (2018). Rewarding self-initiated expatriates: A skills-based approach. *Thunderbird International Business Review*, 60(1), 89–104. <https://doi.org/10.1002/tie.21832>
- Kitchin, R., & McArdle, G. (2016). What makes big data, big data? Exploring the ontological characteristics of 26 datasets. *Big Data & Society*, 3(1), 1–10. <https://doi.org/10.1177/2053951716631130>
- Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, 19(3), 411–432. <https://doi.org/10.1057/palgrave.jibs.8490394>
- Konara, P., & Mohr, A. (2019). Why we should stop using the kogut and Singh index. *Management International Review*, 59(3), 335–354. <https://doi.org/10.1007/s11575-019-00378-7>
- Kostova, T., Marano, V., & Tallman, S. (2016). Headquarters-subsidiary relationships in MNCs: Fifty years of evolving research. *Journal of World Business*, 51(1), 176–184. <https://doi.org/10.1016/j.jwb.2015.09.003>
- KPMG. (2013). Retrieved from <https://assets.kpmg/content/dam/kpmg/pdf/2013/09/your-assignment-abroad.pdf>
- Kraimer, M., Bolino, M., & Mead, B. (2016). Themes in expatriate and repatriate research over four decades: What do we know and what do we still need to learn? *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), 83–109. <https://doi.org/10.1146/annurev-orgpsych-041015-062437>
- Latukha, M., Shagalkina, M., Mitskevich, E., & Strogetskaia, E. (2021). From brain drain to brain gain: The agenda for talent management in overcoming talent migration from emerging markets. *International Journal of Human Resource Management*, 33(11), 2226–2255. <https://doi.org/10.1080/09585192.2021.1949374>
- Lazarova, M., Caligiuri, P., Collings, D. G., & De Cieri, H. (2023). Global work in a rapidly changing world: Implications for MNEs and individuals. *Journal of World Business*, 58(1), 101365. <https://doi.org/10.1016/j.jwb.2022.101365>
- Li, C. S., Goering, D. D., Montanye, M. R., & Su, R. (2022). Understanding the career and job outcomes of contemporary career attitudes within the context of career environments: An integrative meta-analysis. *Journal of Organizational Behavior*, 43(2), 286–309. <https://doi.org/10.1002/job.2510>
- Malhotra, S., Sivakumar, K., & Zhu, P. (2011). A comparative analysis of the role of national culture on foreign market acquisitions by U.S. firms and firms from emerging countries. *Journal of Business Research*, 64(7), 714–722. <https://doi.org/10.1016/j.jbusres.2010.08.003>

- Manyika, J., Lund, S., Chui, M., Bughin, J., Woetzel, J., Batra, P., & Sanghvi, S. (2017). *What the future of work will mean for jobs, skills, and wages*. McKinsey Global Institute.
- Martin, S. L., Javalgi, R. G., & Cavusgil, E. (2017). Marketing capabilities, positional advantage, and performance of born global firms: Contingent effect of ambidextrous innovation. *International Business Review*, 26(3), 527–543. <https://doi.org/10.1016/j.ibusrev.2016.11.006>
- Maseland, R., & Van Hoorn, A. (2009). Explaining the negative correlation between values and practices: A note on the hofstede-GLOBE debate. *Journal of International Business Studies*, 40(3), 527–532. <https://doi.org/10.1057/jibs.2008.68>
- Mayrhofer, W., Smale, A., Briscoe, J., Dickmann, M., & Parry, E. (2020). Laying the foundations of international careers research. *Human Resource Management Journal*, 30(3), 327–342. <https://doi.org/10.1111/1748-8583.12295>
- McKinsey (2021). <https://www.mckinsey.com/business-functions/people-and-organizational-performance/our-insights/the-key-role-of-dynamic-talent-allocation-in-shaping-the-future-of-work>
- Meyer, K. E., Mudambi, R., & Narula, R. (2011). Multinational enterprises and local contexts: The opportunities and challenges of multiple embeddedness. *Journal of Management Studies*, 48(2), 235–252. <https://doi.org/10.1111/j.1467-6486.2010.00968.x>
- Morosini, P., Shane, S., & Singh, H. (1998). National cultural distance and cross-border acquisition performance. *Journal of International Business Studies*, 29(1), 137–158. <https://doi.org/10.1057/palgrave.jibs.8490029>
- Moulaï, K., Manning, S., & Guttormsen, D. S. A. (2021). Heeding the call from the promised land: Identity work of self-initiated expatriates before leaving home. *International Journal of Human Resource Management*, 33(20), 4080–4112. <https://doi.org/10.1080/09585192.2021.1948889>
- Narula, R. (2019). Enforcing higher labor standards within developing country value chains: Consequences for MNEs and informal actors in a dual economy. *Journal of International Business Studies*, 50(9), 1622–1635. <https://doi.org/10.1057/s41267-019-00265-1>
- Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2017). *Human resource management: Gaining a competitive advantage*. McGraw-Hill Education.
- Ogbari, M. E., Onasanya, Y. A., Ogunnaike, O. O., & Kehinde, O. J. (2018). Talent management as a determinant of firm performance: A conceptual approach. *Business & Social Sciences Journal*, 3(1), 21–32.
- Perkins, G., Gilmore, S., Guttormsen, D. S. A., & Taylor, S. (2022). Analysing the impacts of Universal Basic Income in the changing world of work: Challenges to the psychological contract and a future research agenda. *Human Resource Management Journal*, 32(1), 1–18. <https://doi.org/10.1111/1748-8583.12348>
- Przytuła, S. (2015). Migrants, assigned expatriates (AE) and self-initiated expatriates (SIE)-Differentiation of terms and literature-based research review. *Journal of Intercultural Management*, 7(2), 89–111. <https://doi.org/10.1515/joim-2015-0012>
- Reiche, B. S., Bird, A., Mendenhall, M. E., & Osland, J. S. (2017). Contextualizing leadership: A typology of global leadership roles. *Journal of International Business Studies*, 48(5), 552–572. <https://doi.org/10.1057/s41267-016-0030-3>
- Reichelt, M., & Abraham, M. (2017). Occupational and regional mobility as substitutes: A new approach to understanding job changes and wage inequality. *Social Forces*, 95(4), 1399–1426. <https://doi.org/10.1093/sf/sow105>
- Schmutzler, J., Andonova, V., & Perez-Lopez, J. (2021). The role of diaspora in opportunity-driven entrepreneurial ecosystems: A mixed-methods study of balkan economies. *The International Entrepreneurship and Management Journal*, 17(2), 693–729. <https://doi.org/10.1007/s11365-020-00708-4>
- Shenkar, O. (2012). Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies*, 43(1), 1–11. <https://doi.org/10.1057/jibs.2011.40>
- Shin, D., Hasse, V. C., & Schotter, A. P. (2017). Multinational enterprises within cultural space and place: Integrating cultural distance and tightness-looseness. *Academy of Management Journal*, 60(3), 904–921. <https://doi.org/10.5465/amj.2015.0423>
- Stoermer, S., Davies, S., & Froese, F. J. (2021). The influence of expatriate cultural intelligence on organizational embeddedness and knowledge sharing: The moderating effects of host country context. *Journal of International Business Studies*, 52(3), 432–453. <https://doi.org/10.1057/s41267-020-00349-3>
- Sullivan, S. E., & Al Ariss, A. (2021). Making sense of different perspectives on career transitions: A review and agenda for future research. *Human Resource Management Review*, 31(1), 100727. <https://doi.org/10.1016/j.hmr.2019.100727>
- Tang, L. (2012). The direction of cultural distance on FDI: Attractiveness or incongruity? *Cross Cultural Management: International Journal*, 19(2), 233–256. <https://doi.org/10.1108/13527601211219919>
- Tihanyi, L., Griffith, D. A., & Russell, C. J. (2005). The effect of cultural distance on entry mode choice, international diversification, and MNE performance: A meta-analysis. *Journal of International Business Studies*, 36(3), 270–283. <https://doi.org/10.1057/palgrave.jibs.8400136>
- Tung, R. L., & Verbeke, A. (2010). Beyond Hofstede and GLOBE: Improving the quality of cross cultural research. *Journal of International Business Studies*, 41(8), 1259–1274. <https://doi.org/10.1057/jibs.2010.41>
- Vaiman, V., Scullion, H., & Collings, D. G. (2012). Talent management decision making. *Management Decision*, 50(5), 925–941. <https://doi.org/10.1108/00251741211227663>

- Vaiman, V., Sparrow, P., Schuler, R., & Collings, D. G. (Eds.) (2018). *Macro talent management in emerging and emergent markets: A global perspective*. Routledge.
- Vaiman, V., Wayne, F., Cascio, W. F., Collings, D. G., & Swider, B. W. (2021). The shifting boundaries of talent management. *Human Resource Management*, 60(2), 253–257. <https://doi.org/10.1002/hrm.22050>
- van der Heijden, J. A., van Engen, M. L., & Paauwe, J. (2009). Expatriate career support: Predicting expatriate turnover and performance. *International Journal of Human Resource Management*, 20(4), 831–845. <https://doi.org/10.1080/09585190902770745>
- Weerawardena, J., & Mavondo, F. T. (2011). Capabilities, innovation and competitive advantage. *Industrial Marketing Management*, 40(8), 1220–1223. <https://doi.org/10.1016/j.indmarman.2011.10.012>
- Yankow, J. J. (2003). Migration, job change, and wage growth: A new perspective on the pecuniary return to geographic mobility. *Journal of Regional Science*, 43(3), 483–516. <https://doi.org/10.1111/1467-9787.00308>

How to cite this article: Baruch, Y., Guttormsen, D. S. A., Gyoshev, S. B., Pavkov, T., & Plesca, M. (2023). Developing new understanding of how global talent flow impact individual and firm performance by using big data. *Human Resource Management Journal*, 1–25. <https://doi.org/10.1111/1748-8583.12535>