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Re-Evaluating the Offshoring Decision: A Behavioural Approach to the Role of Performance Discrepancy

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ABSTRACT Firms are in a continuous process of critically re-evaluating their offshoring strategies due to performance discrepancies. While prior research has focused on the implementation of organizational responses to performance shortfalls, we examine the offline search process, a key antecedent of organizational change, during which firms simultaneously explore alternative solutions when facing either a positive or a negative discrepancy between performance and aspirations. We adopt the Behavioural Theory of the Firm (BTOF) to investigate how the search process is affected by the size and nature (as being positive or negative) of the discrepancy as well as how it is moderated by cognitive biases. By examining 441 offshoring initiatives, we study firms' search processes in a novel context that refers either to 'local' solutions that are close to the current activity (i.e., expansion in the same host country) or 'distant' solutions that are far from the current one (i.e., relocation to a third country or to the home country). Our results provide new insights into organizational search, namely that performance shortfalls lead to distant search unless this choice is moderated by a location-specific anchor bias relating to the strategic importance of host location, while positive discrepancies trigger local search with decision-makers more inclined to consider expansion in the current host country.

Keywords: aspiration-performance discrepancy, behavioural theory, cognitive biases, offshoring and reshoring, online versus offline search, problemistic search

INTRODUCTION

Since the 1990s, offshoring – the location of firm activities in foreign countries – has emerged as an important strategy implemented by companies to support their competitive advantage (Contractor et al., 2010). Manufacturing and services activities have been offshored in search of low costs and/or access to local markets. Along these lines,

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Google opened an R&D centre in Ukraine in 2020 (Rapoza, 2021), General Electric offshored its Renewable Energy unit from the US to France in 2015 due to the high demand for its products in Europe (Rulison, 2015) and, more recently, Tesla announced the offshoring of its large electric vehicle factory in Berlin to get access to the European market (Schuetze, 2019). However, the benefits of offshoring have often proven elusive (Manning, 2014) and the conditions that create the benefits of offshoring (real or perceived) in different countries have changed; thus, patterns of offshoring have also changed with companies often chasing the intended benefits of this strategy by moving activities from country to country (Albertoni et al., 2017; Baraldi et al., 2018). After decades of offshoring of both production and services, some companies have started to relocate their offshore activities either back to home countries or to other offshore locations. The relevance of the phenomenon has been acknowledged by the popular press (The Economist, 2013), consultancy companies (Sirkin et al., 2012) and policy makers and transnational institutions (UNCTAD, 2013, 2020).

There are many reasons for companies to re-evaluate offshoring decisions and consider relocation. Companies are increasingly recognizing that hidden costs, risks, and strategic impacts are often larger than expected and that performance does not always align with original aspiration levels. Behavioural theorists agree that organizations embrace strategic and operational change when they observe declining performance relative to their selected goals (Audia and Greve, 2006; Chrisman and Patel, 2012). Along the same lines, performance feedback research suggests that managers' tendencies to change their strategy are affected by the discrepancy between current performance and aspiration level (Ref et al., 2021). Specifically, when managers interpret performance as being unsuccessful or in need of improvement, they start a search process for possible alternative solutions (Cyert and March, 1963; Hu et al., 2011).

We aim to improve our understanding of the processes through which companies re-evaluate their offshoring decisions. While previous research has made good progress in understanding the determinants of organizational change, it has largely focused on the relationship between performance feedback and observed organizational changes. In fact, according to Cyert and March (1963), alternatives come from trial and error in which organizations first select an alternative that is local where the problem occurs and only later will sequentially broaden the scope of their search to consider more distant alternatives if a local solution is not found (i.e., 'online search') (Audia and Greve, 2006; Greve, 1998, 2003; Iyer and Miller, 2008).

Unlike previous contributions, as suggested in Nigam et al. (2016), we focus on a specific and critical type of search that is 'offline' (Gavetti and Levinthal, 2000; Khanna et al., 2016; Levinthal and Posen, 2007; Martignoni et al., 2016). In other words, we analyse companies' offline reaction in which they examine several alternative solutions simultaneously against each other and against inaction before implementation. Specifically, when re-evaluating the offshored initiative based on performance feedback, companies may consider alternatives that are local, i.e., increasing the commitment in the host country of the focal initiative, or distant, i.e., re-investing in a third country (which could include their home country).

Additionally, as managers make choices regarding the structure of activities with respect to their location (at home or abroad) that do not always reflect performance

shortfalls (e.g., Asmussen et al., 2016), we consider organizational search stems both from performance below an organizational goal (i.e., negative discrepancies) and above it (i.e., positive discrepancies). We argue that the former triggers problemistic search that leads the company to re-evaluate offshoring and to consider alternatives that are far from the focal initiative and that can take place either in a new host or in the home country; instead, positive discrepancies trigger an institutionalized search, that is an increase of the commitment towards the current strategy in the present host country. We also claim that the likelihood of the re-evaluation process increases with the size of performance discrepancy (see also Ref et al., 2021) and it is also moderated by a location-specific bias, i.e., it is attenuated or strengthened when the host country is perceived as strategic for the focal firm (Tversky and Kahneman, 1974).

Our empirical analysis examines 441 offshoring initiatives undertaken between 1964 and 2009, and their parent companies' intentions following market performance assessment. In fact, despite organizations have multiple goals, 'the goals that tend to trigger the most diverse forms of search, and the strongest responses, are profitability and closely related goals such as market share (Greve, 1998; Shinkle, 2012)' (see Surdu et al., 2021, p. 1051). Our econometric findings confirm most of our hypothesis, i.e., negative and positive performance discrepancies matter in triggering the process of search in distant and local contexts, respectively, and there is an interaction with the location-specific anchor bias that mitigates the effect of negative discrepancy while amplifying the impact of the positive one.

Our research contributes to the growing literature at the intersection of international business and behavioural theory (Surdu et al., 2021) by adopting a behavioural theory of the firm (BTOF) perspective to elaborate on the role of performance discrepancies in influencing offline search in the context of offshoring. The literature on internationalization and offshoring has generally analysed the observed organizational changes stemming from performance feedback (Chang, 1996; Kuusela et al., 2017; Oshri et al., 2019) while overlooking the search process, thus making it difficult to disentangle the formation and evaluation of alternatives from its behavioural consequences. The process of search is rarely examined (exceptions are MacAulay et al., 2020, Maggitti et al., 2013, Nigam et al., 2016) and, most often, within a black box in studies that examine the correlation between performance relative to aspiration and observed organizational change (as observed changes may represent the outcome of unobserved offline research and evaluation). This could explain why overall research findings on the threshold function of aspirations and organizational change are often contradictory and mixed (Posen et al., 2018). Additionally, we account for the role that cognitive bias plays in affecting the direction of the internationalization process in terms of location choices, thus contributing also to the research that has recently begun to highlight how cognitive factors and actor perceptions of the search environment, influence decision makers' preferences, and decisions concerning firms' international moves (e.g., Elia et al., 2019; MacAulay et al., 2020).

Taken together, our research responds directly to some recent calls for research in management and organization literatures on the influence of assessments of firm performance on the processes through which goals are formed and become manifest in organizations (e.g., Kotlar et al., 2018). Indeed, these literatures have emphasized the

need to understand what factors affect firms' decision to pursue a specific set of goals, and our research addresses the ways in which performance discrepancies (both positive and negative) influence offline search and the mechanism for generating alternatives and for choosing among them.

THEORETICAL UNDERPINNING

Performance Discrepancy, Search Processes and Cognitive Biases

Organizational change is defined as a variation in organization's practices over time, like routines, markets, processes, products, and technologies (Greve, 1998; Lüscher and Lewis, 2008; Tsoukas and Chia, 2002). According to the BTOF, organizational change stems from a discrepancy between aspirations and outcomes due to dynamic internal and external organizational contexts (Lüscher and Lewis, 2008). When firms experience a performance shortfall relative to their aspirational threshold, a problemistic search for solutions is triggered and an organizational change is developed to restore satisfactory performance (Greve, 1998; Iyer and Miller, 2008). Posen et al. (2018) provides a more fine-grained explanation of organizational change by describing it as a behavioural process where the triggering of problemistic search is followed by the search for alternative solutions. Searching for alternative solutions, firms may follow an online or an offline approach. Online search requires continuous revisions where firms implement a solution, evaluate its performance consequences, and adopt it in the case of positive feedback. Thus, it is a learning-by-doing process. Prior research has investigated these online search processes primarily by showing that firms implement a range of organizational changes in response to performance feedback. Namely, previous studies have analysed acquisitions (Iyer and Miller, 2008; Kuusela et al., 2017), divestments (Kuusela et al., 2017; Shimizu, 2007), product innovations (Audia and Brion, 2007; Katila and Ahuja, 2002), R&D investments (Greve, 2003), firm expansion (Audia and Greve, 2006), and entry into new markets (Ref and Shapira, 2017).

Few studies have considered offline search that requires decision makers to evaluate solutions without proceeding towards implementation. Thus, previous literature has examined the process of search as though it is in a black box by focusing only on the stage that terminates when the performance shortfall is resolved without examining search among potential different solutions. Offline search offers the opportunity to compare potential solutions and to estimate their effects on the restoration of performance to aspiration levels. Due to this shortcoming in the literature, we need to disentangle problemistic search from the outcome (i.e., the final organizational change) and to understand the cognitive processes that facilitate offline search.

In addition, most prior research has related organizational change only to performance shortfalls. Yet, when performance is at or above aspirations, firms tend to avoid any type of organizational change thereby preserving the *status quo* (Audia et al., 2000; Greve, 1998; Iyer and Miller, 2008). However, some scholars have suggested that performance above aspirations also stimulates decision makers to change their behaviour

(Chang, 1996; Hu et al., 2011; Lin, 2014; Nigam et al., 2016; Ref and Shapira, 2017). In fact, when firms are outperforming their aspirations, organizational changes are triggered by opportunities rather than by a problemistic search. Thus, firms can engage in two alternative search approaches: institutionalized search that legitimizes the current strategy (Greve, 2003) and slack search that instead pushes firms to explore novel solutions (Cyert and March, 1963).

In the first case, firms search for organizational changes that increase the commitment towards the current strategy. '*Routinization and institutionalization promote continuity in the direction and intensity of firms' search over time*' (Chen and Miller, 2007, p. 372). In contrast, slack search arises in case of excess resources leading to organizational changes that likely would not be pursued in conditions of scarcity (Greve, 2003). '*Slack search is most likely to appear in firms that have persistent positive attainment discrepancies*' (Chen and Miller, 2007, p. 371).

Additionally, we relate the locus and direction of search processes and the relevant organizational change not only to the size of the market discrepancy (i.e., how much positive or negative performance diverges from the aspiration threshold), but also to cognitive biases (Posen et al., 2018). In fact, search processes have been conceptualized as overly routinized with high degrees of automaticity in taking managerial decisions and with a limited role for cognition. As highlighted recently by BTOF scholars, decision makers suffer from bounded rationality as well as from cognitive biases that influence their perception of the discrepancy itself. More specifically, cognitive biases can constrain or amplify the range or potential alternative solutions and the direction of search trajectories for two reasons (Maggitti et al., 2013). First, the size of discrepancy makes more (or less) urgent the effort to search for a solution and it also influences the direction of organizational change. Second, we also claim that the extent to which decision makers perceive such a discrepancy is influenced by the strategic importance attributed to the host market, i.e., the location-specific anchor bias, as we elaborate below.

HYPOTHESIS DEVELOPMENT

Performance Below Aspirations and Search for Organizational Changes in Offshoring Strategies

To satisfy their market aspirations and get access to cheaper or better inputs, firms are offshoring and unbundling both their manufacturing as well as high-value added activities including R&D and product design across their national borders (Kedia and Mukherjee, 2009). However, despite growing offshoring experience, decision makers continue to face operational challenges in host locations with negative consequences on the achievement of aspirational threshold (Larsen et al., 2013; Manning, 2014). Such a situation indicates that the current offshoring initiative is not in line with the demand of the host environment, due to a multiplicity of reasons, i.e., the difficulty in getting access to skills or local stakeholders, customer related issues, or insufficient planning and lack of knowledge about the offshore location (Boffelli et al., 2021;

Kinkel, 2014). As they become aware of a performance problem, decision makers are motivated to conduct a solution search process. Namely, they start evaluating offline a broad set of alternatives to the current offshoring strategy to restore market performances.

To improve below-aspiration market performance, one option available to decision makers is to focus on the source of the problem and evaluate *local* solutions i.e., in the vicinity of the current problem. Following previous studies (e.g., Kuusela et al., 2017), local solutions can respond to performance shortfalls by expanding activities in the host country through improved resources and capabilities, a revision to the internal organizational structure (Karim, 2006), by introducing new internal innovation or new production systems (Gulati and Puranam, 2009; Karim, 2009). Those solutions can, for example, increase firm efficiency, reduce internal costs or endow the offshore initiative with additional resources and competences to satisfy customers or cope with challenges in the host location.

Alternatively, decision makers can divest the underperforming offshore units and expand their search to more *distant* solutions, i.e., in a third country or even back home. They can, for example, improve short-term profitability by transforming underperforming units into liquid resources (Duhaime and Grant, 1984; Kuusela et al., 2017) that can be reallocated to the domestic market though a 'reshoring' or 'back-shoring' strategy or to a new host market through a relocation strategy. At the same time, distant solutions can help firms to find new market opportunities or a better way to use existing resources (Surdu et al., 2021).

The locus and direction of the search process may depend, however, on the decision maker's perception of the negative market discrepancy and whether the size of the negative discrepancy is perceived as being repairable or as something more serious (Audia and Greve, 2006). This would cause decision makers to shift their focus of attention between local and distant solutions. Larger negative discrepancies indicate a poor match between the current offshoring strategy and the host market. Firms in this situation face persistent and substantial shortcomings in the host location and difficulties in finding relevant market opportunities and in doing business with local customers and/or suppliers.

As '*success narrows down search to the neighborhood of the status quo, whereas failure promotes gradually more exploratory search*' (Billinger et al., 2014, p. 93), we argue that a large negative market discrepancy causes decision makers to perceive one or more of the dimensions of their offshoring strategy (i.e., some element of their business model, partnerships, etc.) as deficient. Thus, they are more likely to collect both local and distant information that offer insights to define solutions. However, in the case of large performance discrepancies, this would make local solutions less likely to lead to improvement. In other words, more significant performance shortcomings would shift the trajectory of search from local to distant solutions and lead to a greater propensity to search for distant solutions as reflected in the following hypothesis:

Hypothesis 1: The greater the negative market performance discrepancy of an offshoring initiative, the higher the likelihood to search for a distant solution (i.e., relocate to another offshore location or relocate back to home country) rather than a local one (i.e., expand the activities in the current offshore location or other changes in the host country).

While our first hypothesis suggests that larger negative discrepancies motivate decision makers to search for distant solutions, we also acknowledge that decision makers are limited by bounded rationality and they are not always economically rational (e.g., Hitt and Tyler, 1991; Sutcliffe, 1994). They may have different perceptions and interpretations and so take different strategic actions. It is generally agreed that these differences are caused by cognitive biases of decision makers as they perceive, interpret, and evaluate their own realities (Hodgkinson, 1997; McNamara et al., 2002; Tversky and Kahneman, 1974). The presence of cognitive biases (i.e., managerial myopia as discussed by Levinthal and March, 1993) narrows down the set of alternatives considered by decision makers in facing performance shortfalls. In our context of offshoring, decision makers may be biased by their perception of the strategic importance of the host location. More specifically, when decision makers are anchored strongly to the host location due to its strategic importance to the firm, they may perceive the negative discrepancy differently, becoming myopic in the search for solutions.

This location-specific anchor bias arises when '*different starting points yield different estimates, which are biased toward the initial values*' (Tversky and Kahneman, 1974, p. 1128). The underlying notion of this bias suggests that decision makers often overestimate the importance of the host location, i.e., the initial value. This impulse constrains how decision makers scan the environment to searching for alternative solutions to restore performance shortfalls (Ridge et al., 2014). Although the size of the negative market discrepancy suggests more explorative search, the anchor bias may influence levels of exploration in favour of exploitation, limit risk-taking, and possibly create errors in the search process (Levinthal and March, 1993).

At the same time, a strong location-specific anchor bias restricts the search range to include only the local context (Audia and Greve, 2006; Chen and Miller, 2007). Explorative search processes are, therefore, constrained and limited. Hence, we expect organizations with decision makers displaying location-specific anchor bias to be less likely to search for distant solutions, even if they are experiencing large negative discrepancy as per our second hypothesis:

Hypothesis 2: A strong location-specific anchor bias weakens the effect of the size of the negative market performance discrepancy of an offshoring initiative on the search for a distant solution (i.e., relocate to another offshore location or relocate back to home country).

Performance Above Aspirations and Search for Organizational Changes in Offshoring Strategies

Achieving the market aspiration threshold indicates that the current offshoring strategy is performing well. In this case, the motivation to trigger a problemistic search decreases (Greve, 1998; Iyer and Miller, 2008; Jiang and Holburn, 2018) and organizational changes are triggered by opportunities. In fact, a positive performance discrepancy stimulates a different type of search, i.e., institutionalized search and/or slack search (Chen and Miller, 2007; Cyert and March, 1963; Greve, 2003). Institutionalized search is for routinized strategy-specific solutions that occurs in a close locus and whose nature is more exploitative. This means that decision makers adopt behaviours confirming the existing strategy and keep investing in the focal

activity in the host location. Conversely, '*organizations with slack resources have incentives to use them fully, leading to search for new business opportunities*' (Greve, 2003, p. 1056). Thus, slack resources facilitate search routines that are more explorative in nature, enabling decision makers to include more distant solutions, i.e., divesting from the focal offshoring unit to pursue new market opportunities and relocating to other countries.

As in the case of negative discrepancy, we argue that whether decision makers turn their attention towards local or distant search depends also on how they perceive the positive discrepancy. A large positive discrepancy indicates a consistently good match between the current offshoring strategy and the host market. Success leads to organizational inertia (Ref et al., 2021), decreases the motivation for organizational change (e.g., Audia et al., 2000; Greve, 1998), increases the risk-aversion and the conservative behaviours of decision makers (Elia et al., 2022), and narrows the search to the neighbourhood of the current solution (Billinger et al., 2014). In this case, a positive discrepancy leads decision makers to persist in allocating their attention to exploit business opportunities in the current host location. It causes decision makers to believe that '*a firm with such a relatively good match will have difficulty finding relevant new opportunities (i.e., alternative markets) … any alternative resource-market position is more likely to be inferior to the existing one*' (Ref and Shapira, 2017, p. 1422). Therefore, distant solutions may ultimately hurt performance when they are above aspiration threshold. We argue that an exploitative (i.e., institutionalized) search for opportunities is triggered and decision makers are more willing to take advantage of market opportunities searching for local solutions rather than for distant solutions as suggested by the following hypothesis:

Hypothesis 3: The greater the size of the positive market performance discrepancy of an offshoring initiative, the higher the likelihood to search for a local solution (i.e., expand the activities in the current offshore location or other changes in the host country) rather than for a distant one (i.e., relocate to another offshore location or relocate back to home country).

As for performance below aspirations, we theorize that the extent to which a firm is willing to start an exploitative or explorative search is influenced by the strategic importance of the host location. In the case of a positive discrepancy, the location-specific anchor bias accentuates the focus on the current market, increasingly constraining the recognition of new business opportunities (Ridge et al., 2014). It restricts spatially the search for business opportunities only to the host location. Through this myopic viewpoint, decision makers are likely to persist in the firm's previous location strategy and to allocate any resources to exploit local business opportunities; it pushes decision makers to overlook an exploration search approach (Levinthal and March, 1993). Therefore, decision makers displaying the location-specific anchor bias will be concerned more with current and local strategic alternatives and less attracted by the potential of distant possibilities. Hence, we expect organizations with decision makers that display location-specific anchor biases and positive performance discrepancies to be more likely to search for a local solution as per our fourth hypothesis:

Hypothesis 4: A strong location-specific anchor bias strengthens the effect of the size of the positive market performance discrepancy of an offshoring initiative on the search for a local solution (i.e., expand the activities in the current offshore location or other changes in the host country).

EMPIRICAL ANALYSIS

Data

To test our hypothesis, we use business functions offshoring as main empirical context. Indeed, as mentioned above, while traditionally companies have offshored manufacturing and production activities to emerging economies to exploit cost advantages – keeping knowledge-intensive activities in their home (or in other advanced) countries (Contractor et al., 2010; Mudambi, 2008), more recently (and during the last two decades in particular) the offshoring phenomenon has also involved business functions. More specifically, by exploiting the advances in ICT and the standardization of complex tasks, firms have started to delocalize both low (e.g., call centres) and high (e.g., engineering services and R&D) value-added activities to take advantage of both cost reductions and knowledge-sourcing opportunities (Lewin et al., 2009; Manning et al., 2008). In doing so, firms offshoring business functions have faced both unexpected challenges – such as the above-mentioned hidden costs of offshoring – and additional advantages – such as the possibility to exploit low-cost high-skilled labour in emerging economies – that were responsible for (negative or positive) performances not always in line with firms' initial expectations. Given that business functions play a strategic role in the organizations due to their knowledge content, and given that they are easier to be re-organized and transferred across locations compared to manufacturing activities due to their more intangible nature, we believe that business function offshoring represents a remarkable empirical setting to investigate the impact of (negative and positive) performance discrepancies on the offline search for (distant and local) organizational changes.

Our sample is composed of 441 offshoring initiatives undertaken by 135 firms involving business functions that occurred between 1964 and 2009. Data were obtained from the Offshoring Research Network (ORN) a survey project developed by the Duke University in collaboration with thirteen academic partners, which launched a common online questionnaire in English in their respective countries[1] between 2004 and 2009. Respondents are typically top managers having an overall strategic overview of their company. The ORN database is particularly suitable for our theoretical framework that is based on an 'offline' solution search approach: indeed, it includes several variables describing the future plans that are considered for each offshoring initiative, allowing us to investigate the process that consists of the evaluation of different alternative solutions for each initiative before the implementation phase.

Table I shows the distribution of the observations of our sample across the business functions and industries while Table II summarizes home and host location. The most offshored functions are Software Development (83 observations and 37 firms) and

Table I. Distribution of the offshoring initiatives and firms across the business functions (a) and industries (b)

	Offshoring initiatives		*Offshoring firms*	
	N.	%	*N.*	%
(a) Business Functions				
Software Development	83	18.82	37	27.41
Call centre and customer contact	62	14.06	13	9.63
Design	15	3.4	6	4.44
Engineering services	39	8.84	10	7.41
Finance and accounting	54	12.24	16	11.85
Human resources	13	2.95	4	2.96
Information technology	81	18.37	23	17.04
Knowledge services	26	5.9	8	5.93
Legal services	3	0.68	1	0.74
Marketing and sales	32	7.26	8	5.93
Procurement	22	4.99	4	2.96
Research and development	11	2.49	5	3.7
Total	**441**	**100**	**135**	**100**
(b) Industries				
Aerospace and Defence	8	1.81	2	1.48
Arts, Entertainment and Recreation	7	1.59	4	2.96
Automotive	2	0.45	1	0.74
Financial Services	113	25.62	28	20.74
Government/Public Services	1	0.23	1	0.74
Healthcare	6	1.36	3	2.22
Manufacturing	87	19.73	14	10.37
Other	18	4.08	5	3.7
Pharmaceuticals and Life Sciences	6	1.36	3	2.22
Professional Services	36	8.16	16	11.85
Retail and Consumer Goods	12	2.72	3	2.22
Software and IT services	122	27.66	46	34.07
Telecommunications	18	4.08	7	5.19
Transportation and Logistics	5	1.13	2	1.48
Total	**441**	**100**	**135**	**100**

Information Technology (81 observations and 23 firms), while the main industries involved in offshoring are Software and IT services (122 observations and 46 firms) and Financial Services (113 observations and 28 firms). The main home countries are the United States and the Netherlands, which account for 276 and 91 offshoring

Table II. Home and host countries of the offshoring initiatives and firms

	Home Country of the offshoring initiatives		*Home Country of the offshoring firms*		*Offshoring initiatives per Host Country*		*Offshoring firms per Host Country*	
Countries	*N.*	*%*	*N.*	*%*	*N.*	*%*	*N.*	*%*
Argentina	–	–	–	–	8	1.81	6	2.35
Australia	4	0.91	3	2.22	3	0.68	3	1.18
Austria	–	–	–	–	1	0.23	1	0.39
Brazil	–	–	–	–	13	2.95	8	3.14
Canada	–	–	–	–	12	2.72	7	2.75
China	–	–	–	–	42	9.52	24	9.41
Colombia		–	–	–	3	0.68	3	1.18
Costa Rica	–	–	–	–	7	1.59	2	0.78
Czech Republic	–	–	–	–	6	1.36	4	1.57
Denmark	8	1.81	3	2.22	2	0.45	1	0.39
Ecuador	–	–	–	–	2	0.45	2	0.78
El Salvador	–	–	–	–	1	0.23	1	0.39
Finland	–	–	–	–	2	0.45	1	0.39
France	6	1.36	2	1.48	4	0.91	2	0.78
Germany	–	–	–	–	6	1.36	4	1.57
Greece	–	–	–	–	1	0.23	1	0.39
Hungary	–	–	–	–	5	1.13	3	1.18
India	–	–	–	–	198	44.9	91	35.69
Indonesia	–	–	–	–	3	0.68	2	0.78
Ireland	1	0.23	1	0.74	3	0.68	3	1.18
Italy	–	–	–	–	5	1.13	4	1.57
Jamaica	–	–	–	–	1	0.23	1	0.39
Japan	–	–	–	–	2	0.45	1	0.39
Luxembourg	1	0.23	1	0.74	2	0.45	1	0.39
Malaysia	–	–	–	–	6	1.36	3	1.18
Mexico	–	–	–	–	10	2.27	8	3.14
Morocco	–	–	–	–	1	0.23	1	0.39
Netherlands	91	20.63	30	22.22	–	–	–	–
Norway	4	0.91	1	0.74	4	0.91	2	0.78
Pakistan	–	–	–	–	2	0.45	2	0.78
Peru	–	–	–	–	2	0.45	2	0.78
Philippines	–	–	–	–	29	6.58	16	6.27
Poland	–	–	–	–	6	1.36	6	2.35
Portugal	–	–	–	–	2	0.45	1	0.39
Romania	–	–	–	–	6	1.36	5	1.96

(Continues)

Table II. (Continued)

	Home Country of the offshoring initiatives		*Home Country of the offshoring firms*		*Offshoring initiatives per Host Country*		*Offshoring firms per Host Country*	
Countries	*N.*	*%*	*N.*	*%*	*N.*	*%*	*N.*	*%*
Russia	–	–	–	–	5	1.13	4	1.57
Singapore	–	–	–	–	7	1.59	6	2.35
Slovakia	–	–	–	–	2	0.45	1	0.39
South Africa	–	–	–	–	2	0.45	2	0.78
Spain	14	3.17	5	3.7	1	0.23	1	0.39
Sweden	–	–	–	–	5	1.13	2	0.78
Switzerland	23	5.22	5	3.7	–	–	–	–
Taiwan	–	–	–	–	2	0.45	2	0.78
Thailand	–	–	–	–	1	0.23	1	0.39
Turkey	–	–	–	–	1	0.23	1	0.39
United Kingdom	13	2.95	7	5.19	5	1.13	4	1.57
United States	276	62.59	77	57.04	7	1.59	6	2.35
Uruguay	–	–	–	–	1	0.23	1	0.39
Vietnam	–	–	–	–	2	0.45	2	0.78
Total	**441**	**100.00**	**135**	**100**	**441**	**100**	**255***	**100**

*Please note: this value reflects the sum of the pair firm/country, therefore it is higher than 135 since several firms have more than one initiative distributed across different countries.

initiatives (undertaken by 77 and 30 firms), respectively, while the main host countries are India and China, which are the recipients of 198 and 42 initiatives (hosting 91 and 24 different firms), respectively.

Variable Description

Dependent variables. To account for the two alternative strategies that reflect the search for local versus distant organizational change, we employed two different dummy variables, i.e., *Local Solution* and *Distant Solution*, each taking value of 1 if the company is searching for a solution within or outside the host country, respectively. Both variables derive from the combination of the answers to the following survey question: 'What are the plans for this implementation for the next three years?'. The possible options were: (1) 'Relocate to another offshore location part or all offshore activities'; (2) 'Relocate back to home country part or all offshore activities'; (3) 'Expand the activities in the current offshore location'; (4) 'Other changes in the host Country'.[2] Options (1) and (2) reflect the distant solutions, i.e., the search for organizational changes in other countries, while options (3) and (4) reflect the local solutions, i.e., the search for organizational changes in the current host country. Therefore, the Distant Solution takes value of 1 if one (or both) option(s) (1) and (2) is (are) selected, while the Local Solution takes value of 1 if the company selects one (or both) option(s) (3) and (4). If the company selects two different options

across the two solutions, both dummies take value of 1. Therefore, the two dependent variables are not mutually exclusive as they are based on intentions, thus complying with our theoretical framework that emphasizes the offline search phase of an organizational change.

In our sample, the offshoring initiatives for which the respondents declare the intention to search only for local solutions are 248, while those searching only for distant solutions are 28. Another 28 respondents declare the intention to search for both local and distant solutions, meaning that the total number of local and distant searches are 276 and 56, respectively. In addition, we have also included the 'no change option' among the zeros. In other words, for each dependent variable, the zero value represents either the alternative solution or the 'no change' decision. The latter amounts to 137 (out of 441) cases, which are mutually exclusive with respect to the positive values (i.e., the 'ones') of our two dependent variables. Tables III (a) and (b) provide an overview of the distribution of the observations across the available options for the two dependent variables Local and Distant Solutions, respectively.

Explanatory variables. The two main explanatory variables are *Negative Market Discrepancy Size* and *Positive Market Discrepancy Size*. To measure discrepancies, we rely on the concept of 'hidden costs' of offshoring developed by Larsen et al. (2013), who suggest that, when a task involves a high managerial complexity, decision-makers might not be able to consider *ex ante* all factors involved in a specific decision as well as its effect on the organizational behaviour and performance, thus resulting in an *ex post* discrepancy between expected and realized costs.[3]

Table III. Distribution of the observations across the available options for the two dependent variables Local (a) and Distant (b) Solution

	No (0)		*Yes (1)*		*Totals*
(a) Local solution					
Change	(Distant solution only)	28	*Only Expand*	228	304
			Only other solutions	24	
			Both	24	
No Change	(Neither local nor distant solution)	137	0		137
Totals	**165**		**276**		**441**
(b) Distant solution					
Change	(Local solutions only)	248	Only relocate to third countries	34	304
			Only relocate to home country	14	
			Both relocate to third and to home countries	8	
No Change	(No local and no distant solution)	137	0		137
Totals	**385**		**56**		**441**

Building on this idea, we measure our two explanatory variables through the comparison between the market driver capturing the strategic importance of offshoring for accessing new markets (that reflects the expectation) and the market performance associated to offshoring (reflecting the result achieved). Market performance is measured by the answers to the following question: 'To what extent do you agree that offshoring has measurably led to the following outcomes?'. One of the possible options is 'Better access to new markets', whose evaluation is based on a Likert scale ranging from 1 (lowest satisfaction) to 5 (highest).

To capture firm's aspirations, we employ the driver of the offshoring initiative arising from the question: 'What is the importance of each of the following drivers in offshoring this function?'. One of the options is 'Access to new markets for products and services', again evaluated on a Likert scale ranging from 1 (lowest importance) to 5 (highest). Given that the outcome and the driver are evaluated on the same Likert scale, we expect that when the value of the former is below the value of the latter, the company is performing poorly as compared to the market goal, thus giving rise to a negative discrepancy. Conversely, when the value of the outcome is higher than the value of the driver, the company is outperforming with respect to its aspirations, thus giving rise to a positive discrepancy.

To measure the size of the negative discrepancy, we computed the difference between the market driver and the market performance only when the former is higher than the latter, while taking value of 0 in all other cases. Conversely, the size of the positive discrepancy is captured by the difference between the market performance and the market driver only when the former is higher than the latter, while taking value of 0 otherwise. Hence, the positive values range from 1 (which is the minimum discrepancy) to 4 (which is the maximum), while the zeros correspond to either no discrepancy or a discrepancy of an opposite sign.

Therefore, for both variables, the higher the value, the larger the size of the discrepancy (either negative or positive). These variables are used to test Hypothesis 1 and 3. When the dependent variable Local Solutions takes value of 1 (corresponding to 276 observations), the average value of the explanatory variable Negative Market Discrepancy Size is equal to 0.326, while the average value of the explanatory variable Positive Market Discrepancy Size is equal to 0.514. This seems to provide a first-hand confirmation of Hypothesis 3. Conversely, when the dependent variable Distant Solutions is equal to 1 (corresponding to 56 observations), the average value of the explanatory variable Negative Market Discrepancy Size is 0.625, while the average value of the explanatory variable Positive Market Discrepancy Size is 0.5; hence, Hypothesis 1 seems to be less strongly supported by descriptive statistics.

The second explanatory variable is *Market Location-specific Anchor Bias*, which is equal to 1 when the host location is extremely important as market destination of the offshoring initiative, and 0 otherwise.[4] The dummy arises from the question: 'Why was this particular location chosen?' with 'Access/increased speed to local market' being one possible option. The dummy takes value of 1 when the evaluation of the host location is very high, i.e., equal to 5 on a Likert scale ranging from 1 to 5.[5] The variable takes value of 1 for 56 observations, which correspond to initiatives whose host location is extremely relevant for the company.

The interaction between this and the other explanatory variables described above allows us to test Hypothesis 2 and 4. Preliminary descriptive statistics show that, when the Market Location Specific Anchor Bias is equal to 1, the mean of the explanatory variable Negative Market Discrepancy Size is equal to 0.179, while the mean of the explanatory variable Positive Market Discrepancy Size is equal to 0.857; these average values are lower and higher than the absolute means, which seems to suggest that the local anchor bias has a mitigation effect on the negative discrepancy and an amplification effect on the positive discrepancy.

Control variables. We include a set of control variables that might affect the firm's choice of confirming the current strategy or introducing an organizational change. We grouped these control variables at firm-level, function-level, industry-level, country-level and offshoring-level. As regards the former, we employ two variables. The first is *Firm Host Country Experience* which is a count of the number of previous investments undertaken by the firm in the same host location to account for its knowledge and learning about the local context. The second is the size of the firm, which has been captured through three *Firm Size* dummies – *Small*, *Medium* and *Large* – using the classification provided by ORN based on the number of employees (less than 500 employees, between 500 and 20,000 employees, and more than 20,000, respectively).

With regards to the function-level variables, we employ two dummies that account for the most offshored functions based on our descriptive statistics (see Table I), i.e., *Function – Software* and *Function – Information Technology*. Likewise, regarding the industry-level control, we employ two dummies capturing the two sectors mostly involved in offshoring initiatives based on our descriptive statistics (see Table I), i.e., *Industry – Software and IT* and *Industry – Financial Services Industries*.

Country-level controls have been added to take into account both the home and host country characteristics. Based on our descriptive statistics (see Table II), we introduced four dummies to account for the two main home and host countries involved in the offshoring initiatives, i.e., *Home Country – USA*, *Home Country – Netherlands*, *Host Country – India* and *Host Country – China*.

Regarding the offshoring-level controls, we introduced four variables. The first is a dummy accounting for the entry mode of the offshoring initiative, named *Offshoring Captive*, which is equal to 1 in case the initiative has been implemented using a captive solution, and 0 in case it has been implemented through an outsourcing solution. The second is *Offshoring Age*, which controls for the age of the initiative and is computed as the difference between the year 2011 (the most recent year when the survey has been released) and the year of the offshoring initiative. The third and the fourth variables are *Offshoring Efficiency-Seeking Driver* and *Offshoring Knowledge-Seeking Driver*, capturing on a Likert scale (from 1 to 5) the extent to which each offshoring initiative is driven by the need to reduce costs or acquire new knowledge rather than by the aim to access new markets (which is the main dimension employed to build our two main explanatory variables). These control variables result from the answer to the question: 'What is the importance of each of the following drivers in offshoring this function?'; the option considered to capture the efficiency-seeking driver is 'Enhancing efficiency through business process redesign', while the option considered

to capture the knowledge-seeking driver is 'Access to qualified personnel offshore', being knowledge embedded in people. Table IV provides a summary of the names, type, measure and source of the dependent, explanatory and control variables, by also reporting the questions (and answers) of the ORN survey that were employed to build each variable.

Methodology

Statistical approach. Given that the two dependent variables are dummies reflecting the search for two alternative, but not mutually exclusive, solutions (as companies are still facing the offline search phase and assessing several possible plans at the same time), we employed a robust *Bivariate Probit Model* as main econometric method. Given that in our sample we have 135 companies and 441 offshoring initiatives, meaning that several companies are associated to multiple organizational search processes, we decided to cluster the standard errors by firm, thus relaxing the usual assumption that the observations are independent to allow for intragroup correlation; in other words, observations are considered independent across groups but not necessarily within each group (where each group corresponds to a firm). Table V reports the correlation matrix and descriptive statistics of the dependent and explanatory variables. Given the presence of some high and significant (at 5 per cent) correlations, we computed the Variance Inflation Factors to rule out multicollinearity problems; we confirm that no factors exceed the critical threshold of 10 (Hair Jr. et al., 1995).

Results

Table VI provides the outcome of the Bivariate Probit model for the dependent variable *Distant Solution*, while Table VII shows the same results for the dependent variables *Local Solutions*. Models 1 of both tables show the coefficients for the base model (i.e., without interaction), models 2 introduce the interaction effect between *Negative Market Discrepancy Size* and *Market Location-specific Anchor Bias*, models 3 the interaction between *Positive Market Discrepancy Size* and *Market Location-specific Anchor Bias*, while models 4 include both interactions. The marginal effects are reported in Table A1 for *Distant Solution* and B for *Local Solution* in the Appendix.

Results show that the variable *Negative Market Discrepancy Size* displays a positive and significant ($p < 0.01$) coefficient in model 1 of Table VI, thus confirming Hypothesis 1. The marginal effect reported in model 1 of Table AI in the Appendix shows that for every 10 percent increase in negative discrepancy the probability to adopt a distant solution increases by 0.85 percent ($p < 0.01$). Conversely, *Positive Market Discrepancy Size* is positively and significantly ($p < 0.05$) correlated with the dependent variable in Model 1 of Table VII, thus confirming Hypothesis 3. According to the marginal effect displayed in model 1 of Table BI, for every 10 percent increase in positive discrepancy, the propensity to adopt a local solution increases by 0.95 percent ($p < 0.05$). Finally, the variable *Market Location-specific Anchor Bias* exhibits a negative and weakly significant ($p < 0.10$) coefficient in column 1 of Table VI: as expected, offshoring initiatives having a strong connection with a local market are less likely to leave the host country in case of negative discrepancy; however, the marginal effect of model1 in Table AI is not significant.

Table IV. Name, type, measure and source of the dependent, explanatory and control variables

Variables	*Type*	*Measure*	*Source*
Local Solution	Dependent variable	Dummy variable	ORN survey; answer to the question: 'What are the plans for this implementation for the next three years?'. The variable takes vale of 1 if one of the two following options was selected: 'Expand the activities in the current offshore location'; 'Other changes in the host Country'.
Distant Solution	Dependent variable	Dummy variable	ORN survey; answer to the question: 'What are the plans for this implementation for the next three years?'. The variable takes vale of 1 if one of the two following options was selected: 'Relocate to another offshore location part or all offshore activities'; 'Relocate back to home country part or all offshore activities'.
Negative Market Discrepancy Size	Explanatory variable	Scale variable (from 0 to 4)	ORN survey; answers (Likert scale from 1 to 5) to the question: 'To what extent do you agree that offshoring has measurably led to the following outcome? Better access to new markets' and to the question: 'What is the importance this driver in offshoring this function?: Access to new markets for products and services'. Computed as the difference between the market driver and the market performance only when the former is higher than the latter, while taking value of 0 otherwise.
Positive Market Discrepancy Size	Explanatory variable	Scale variable (from 0 to 4)	ORN survey; answers (Likert scale from 1 to 5) to the question: 'To what extent do you agree that offshoring has measurably led to the following outcome? Better access to new markets' and to the question: 'What is the importance this driver in offshoring this function?: Access to new markets for products and services'. Computed as the difference between the market performance and the market driver only when the former is higher than the latter, while taking value of 0 otherwise.
Market Location-specific Anchor Bias	Explanatory/ moderating variable	Dummy variable	ORN survey; answer to the question: 'Why was this particular location chosen?'. The variable takes vale of 1 when the respondent attributed a value of 5 (on a Likert scale from 1 to 5) to the option: 'Access/increased speed to local market'.

(Continues)

Table IV. (Continued)

Variables	*Type*	*Measure*	*Source*
Firm Host Country Experience	Control variable	Count variable	ORN survey; count of the number of previous investments undertaken by the firm in the same host location
Firm Size Dummies	Control variables	Three dummy variables (*Small*, *Medium* and *Large*)	ORN survey classification of the size based on the number of employees (less than 500 employees, between 500 and 20,000 employees, and more than 20,000, respectively) after answering to the question: 'What is the total number of employees in your company?'
Functions	Control variables	Two dummy variables (*Function – Software* and *Function – Information Technology)*.	ORN survey classification of the offshored function based on the answer to the question: 'Which of the following functions or processes has your company or organization or division/business unit offshored (including projects that have been terminated)? Please check all that apply'
Industries	Control variables	Two dummy variables (*Industry – Software and IT* and *Industry – Financial Services Industries)*.	ORN survey classification of the firms' industries based on the answer to the question: 'What is the primary industry sector of your company?'
Home Countries	Control variables	Two dummy variables (*Home Country – USA* and *Home Country – Netherlands)*	ORN survey home-country information based on the answer to the question: 'In which country is your company headquarters located?'
Host Countries	Control variables	Two dummy variables (*Home Country – USA* and *Home Country – Netherlands)*	ORN survey host-country information based on the answer to the question: 'To which country or countries has your company offshored?'
Offshoring Captive	Control variable	Dummy variable	ORN survey entry-mode classification based on the answer to the following question: 'What is the service delivery model currently used for this offshoring implementation?'; the variable is equal to 1 if the 'captive' option is selected, and 0 if the 'outsourcing' option is selected
Offshoring Age	Control variable	Count variable	ORN survey: difference between the year 2011 (the most recent year when the survey has been released) and the year of the offshoring initiative arising from the question to the answer: 'In what year was this implementation launched?'

(Continues)

Table IV. (Continued)

Variables	*Type*	*Measure*	*Source*
Offshoring Efficiency-Seeking Driver	Control variable	Likert Scale (from 1 to 5)	ORN survey; answer to the question: 'What is the importance of each of the following driver in offshoring this function?: Enhancing efficiency through business process redesign'
Offshoring Knowledge-Seeking Driver	Control variable	Likert Scale (from 1 to 5)	ORN survey; answer to the question: 'What is the importance of each of the following driver in offshoring this function?: Access to qualified personnel offshore'

Regarding the control variables, we find that distant solutions turn out to be less likely ($p < 0.01$) when the offshoring function involves Information Technology (see model 1 of Table VI). Both Dutch and US firms seem to be averse to distant solutions ($p < 0.05$ and $p < 0.01$, respectively; see Model 1 of Table VI); in addition, offshoring initiatives located in India are more likely to favour local solutions ($p < 0.01$, see Model 1 of Table VII). The lower propensity to adopt distant solution in offshoring initiatives involving Information Technology functions, combined with the lower probability to adopt distant solution by US and Dutch firms and the higher probability to adopt local solution for offshoring ventures located in India, is likely to reflect the strong host-country location advantage (arising from the combination of low cost and high skilled labour) offered by India to advanced (and US in particular) firms for ICT functions, which has been developed since the early 2000 (Ethiraj et al., 2005). Finally, results show that the probability to leave the host country is higher for older ventures, given that *Offshoring Age* displays a positive and significant coefficient ($p < 0.01$) in Column 1 of Table VI and a negative and significant coefficient ($p < 0.01$) in Model 1 of Table VII.

As regards the moderation effects, results show that the interaction between *Market Location-specific Anchor Bias* and *Negative Market Discrepancy Size* is negative and significant ($p < 0.01$) when considering the *Distant Solution* as dependent variable, thus supporting Hypothesis 2 (see Models 2 and 4 of Table VI). Conversely the interaction between *Market Location-specific Anchor Bias* and *Positive Market Discrepancy Size* is positive and significant ($p < 0.05$) for the *Local Solution* as dependent variable (see Models 3 and 4 of Table VII), thus providing support to Hypothesis 4. Following Karaca-Mandic et al. (2012), we computed the cross partial derivatives of the interactions terms by comparing the marginal effect of the (negative and positive) discrepancy when the anchor bias holds and when the anchor bias does not hold. As regards the negative discrepancy, the difference amounts to −0.132, meaning that the change in the predicted conditional probability of searching a distant solution for a unitary increase in negative discrepancy is 13.2 per cent lower in the case of a strong market location specific anchor bias. Conversely, when considering the positive discrepancy, the difference is 0.225, meaning that the change in the predicted conditional probability of

Table V. Correlation matrix and descriptive statistics (observations: 441)

	Variables	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*
1	Local Solution	1.000																			
2	Distant Solution	−0.099*	1.000																		
3	Negative Market Discrepancy Size	0.018	0.187*	1.000																	
4	Positive Market Discrepancy Size	0.040	0.005	−0.282*	1.000																
5	Market Location-Specific Anchor Bias	−0.198*	−0.125*	−0.084	0.161*	1.000															
6	Firm Host Country Experience	0.060	−0.007	0.011	0.006	−0.070	1.000														
7	Firm Size – Medium	0.051	−0.137*	0.018	−0.010	0.016	0.021	1.000													
8	Firm Size – Small	−0.037	0.068	−0.004	0.181*	0.245*	−0.096*	−0.376*	1.000												
9	Function – Software	0.025	0.025	0.025	−0.069	−0.044	−0.171*	0.019	0.210*	1.000											
10	Function – Information Technology	0.076	−0.075	0.096*	−0.050	−0.058	−0.029	−0.055	−0.148*	−0.228*	1.000										
11	Industry – Software and IT	0.101*	−0.038	−0.014	−0.038	−0.160*	−0.058	0.212*	0.117*	0.196*	−0.018	1.000									
12	Industry – Financial Services	0.046	0.041	0.051	−0.137*	−0.146*	0.220*	−0.246*	−0.250*	−0.070	0.097*	−0.363*	1.000								
13	Home Country – USA	0.177*	−0.043	0.100*	−0.239*	−0.339*	0.202*	0.100*	−0.281*	0.097*	0.137*	0.080	0.293*	1.000							
14	Home Country – Netherlands	−0.254*	−0.127*	−0.088	0.267*	0.512*	−0.113*	0.132*	0.226*	−0.059	−0.097*	−0.002	−0.274*	−0.660*	1.000						
15	Host Country India	0.293*	0.053	0.066	−0.164*	−0.276*	0.194*	0.017	−0.212*	0.079	0.019	0.043	0.191*	0.274*	−0.325*	1.000					

(Continues)

Table V. (Continued)

	Variables	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*
16	Host Country China	0.027	−0.077	−0.090	0.075	−0.008	−0.079	0.057	0.168*	0.081	−0.074	0.179*	−0.137*	0.027	−0.051	−0.293*	1.000				
17	Offshoring Captive	−0.015	0.080	0.014	0.146*	0.204*	0.066	0.176*	0.022	−0.123*	−0.079	0.230*	−0.178*	−0.148*	0.173*	−0.187*	0.166*	1.000			
18	Offshoring Age	−0.235*	0.090	−0.072	0.267*	0.252*	−0.147*	0.121*	−0.028	−0.060	−0.029	−0.063	−0.150*	−0.218*	0.379*	−0.122*	−0.120*	0.176*	1.000		
19	Offshoring Efficiency-Seeking Driver	−0.127*	−0.016	−0.040	0.066	0.171*	−0.001	0.022	−0.048	−0.117*	−0.031	−0.225*	0.106*	−0.070	0.107*	−0.094*	−0.043	0.091	0.068	1.000	
20	Offshoring Knowledge-Seeking Driver	0.061	0.055	0.108*	−0.079	0.018	−0.025	−0.174*	0.117*	0.167*	0.091	0.056	0.206*	0.151*	−0.193*	0.048	0.033	−0.066	−0.065	0.075	1.000
Mean		0.626	0.127	0.317	0.488	0.127	0.503	0.390	0.181	0.188	0.184	0.277	0.256	0.626	0.206	0.449	0.095	0.415	7.503	3.197	3.653
Std. Dev.		0.484	0.333	0.628	0.877	0.333	1.183	0.488	0.386	0.391	0.388	0.448	0.437	0.484	0.405	0.498	0.294	0.493	5.038	1.312	1.295
Min		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.000	1.000	1.000
Max		1.000	1.000	4.000	4.000	1.000	7.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	47.000	5.000	5.000

*Significant at 5 per cent.

Table VI. Results of the bivariate probit regressions, distant solution

Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Negative Market Discrepancy Size	0.519***	0.541***	0.527***	0.574***
	(0.155)	(0.156)	(0.152)	(0.156)
Positive Market Discrepancy Size	0.125	0.123	0.196	0.220
	(0.161)	(0.160)	(0.170)	(0.173)
Market Location-specific Anchor Bias	−0.965*	−0.779	−0.650	−0.270
	(0.587)	(0.631)	(0.604)	(0.656)
Firm Host Country Experience	−0.022	−0.019	−0.032	−0.031
	(0.103)	(0.103)	(0.105)	(0.106)
Firm Size – Medium	−0.409	−0.430	−0.415	−0.454
	(0.289)	(0.292)	(0.289)	(0.292)
Firm Size – Small	0.310	0.289	0.357	0.342
	(0.338)	(0.343)	(0.336)	(0.339)
Function – Software	0.106	0.120	0.079	0.088
	(0.221)	(0.224)	(0.223)	(0.226)
Function – Information Technology	−0.560***	−0.561**	−0.556***	−0.557**
	(0.217)	(0.219)	(0.216)	(0.219)
Industry – Software and IT	−0.090	−0.066	−0.108	−0.072
	(0.314)	(0.320)	(0.316)	(0.323)
Industry – Financial Services	0.238	0.236	0.227	0.220
	(0.265)	(0.266)	(0.263)	(0.264)
Home Country – USA	−0.577**	−0.582**	−0.547**	−0.544**
	(0.262)	(0.262)	(0.263)	(0.263)
Home Country – Netherlands	−1.300***	−1.292***	−1.282***	−1.273***
	(0.487)	(0.488)	(0.468)	(0.466)
Host Country India	0.061	0.062	0.076	0.085
	(0.211)	(0.216)	(0.209)	(0.214)
Host Country China	−0.598	−0.606	−0.610	−0.626
	(0.371)	(0.374)	(0.378)	(0.383)
Offshoring Captive	0.347	0.338	0.364*	0.353
	(0.218)	(0.219)	(0.216)	(0.217)
Offshoring Age	0.063***	0.062***	0.058***	0.056***
	(0.015)	(0.015)	(0.015)	(0.014)
Offshoring Efficiency-Seeking Driver	−0.023	−0.020	−0.026	−0.022
	(0.076)	(0.075)	(0.076)	(0.076)
Offshoring Knowledge-Seeking Driver	0.071	0.071	0.073	0.075
	(0.086)	(0.086)	(0.085)	(0.085)

(Continues)

Table VI. (Continued)

Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Negative Market Discrepancy Size × Market Location-specific Anchor Bias	–	−4.112*** (0.744)	-	−4.912*** (0.759)
Positive Market Discrepancy Size × Market Location-specific Anchor Bias	–	–	−3.604*** (0.600)	−3.998*** (0.609)
Constant	−1.544*** (0.433)	−1.557*** (0.432)	−1.566*** (0.431)	−1.602*** (0.430)
Number of observations	441	441	441	441
Chi-Square	174.649***	853.407***	2710.987***	2973.708***

Notes: The omitted baseline of the categorical variables *Firm Size – Small* and *Firm Size – Medium* is *Firms Size – Large*, while the omitted baselines of the other categorical variables include the other aggregated functions, industries, home and host countries of Tables I and II.
*p < 0.1; **p < 0.05; ***p < 0.01. S.E. between brackets.

searching a local solution for a unitary increase in positive discrepancy is 22.5 per cent higher in the case of a strong market location specific anchor bias.

Given the non-linear nature of the Bivariate Probit Model, we also plotted the marginal effects of the interaction terms to gain more insights on their signs and magnitude. Figure 1 shows that the positive relationship between *Negative Market Discrepancy Size* and *Distant Solution* becomes flat in case of strong *Market Location-specific Anchor Bias*; in addition, confidence intervals do not overlap, meaning that the location-specific anchor bias is extremely significant in weakening the relationship between negative discrepancy and distant solutions. Conversely, Figure 2 shows that the relationship between *Positive Market Discrepancy Size* and *Local Solution* is positive with and becomes flat without a strong *Market Location-specific Anchor Bias*; however, in this case the confidence intervals tend to overlap, while being separate only for large values of positive discrepancy, meaning that the location specific anchor bias does not particularly magnify the probability to search for local solution unless the positive discrepancy is very high.[6]

Robustness Checks and Additional Evidence

We performed a set of robustness checks to corroborate and extend our main results. First, we separated the four alternatives that have been employed to define distant and local solutions to create the following dependent variables: (1) *Relocation to Third Country*, a dummy taking value of 1 if the company is planning to 'Relocate to another offshore location, part or all offshore activities'; (2) *Relocation to Home Country*, a dummy equal to 1 if the company is planning to 'Relocate back to home country part or all offshore activities'; (3) *Expansion in the Host Country*, a dummy taking value of 1 if the company is planning to 'Expand the activities in the current offshore location'; (4) *Other Changes in the Host Country*, a dummy taking value of 1 if the company is considering other possible options in the host country. In our sample,

Table VII. Results of the bivariate probit regressions, local solution

Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Negative Market Discrepancy Size	0.011	0.008	−0.013	−0.043
	(0.135)	(0.145)	(0.139)	(0.147)
Positive Market Discrepancy Size	0.299**	0.299**	0.130	0.119
	(0.128)	(0.129)	(0.163)	(0.164)
Market Location-specific Anchor Bias	−0.241	−0.247	−0.595	−0.681
	(0.363)	(0.401)	(0.396)	(0.455)
Firm Host Country Experience	−0.058	−0.059	−0.037	−0.037
	(0.068)	(0.068)	(0.066)	(0.066)
Firm Size – Medium	0.340	0.342	0.353	0.363
	(0.230)	(0.231)	(0.225)	(0.227)
Firm Size – Small	0.242	0.243	0.168	0.173
	(0.331)	(0.330)	(0.329)	(0.329)
Function – Software	−0.137	−0.138	−0.083	−0.080
	(0.241)	(0.241)	(0.229)	(0.229)
Function – Information Technology	0.236	0.235	0.239	0.238
	(0.196)	(0.196)	(0.199)	(0.197)
Industry – Software and IT	0.009	0.007	0.019	0.005
	(0.270)	(0.271)	(0.261)	(0.262)
Industry – Financial Services	0.031	0.031	0.031	0.031
	(0.275)	(0.275)	(0.279)	(0.279)
Home Country – USA	0.018	0.018	−0.046	−0.048
	(0.320)	(0.320)	(0.318)	(0.318)
Home Country – Netherlands	−0.416	−0.417	−0.403	−0.405
	(0.347)	(0.347)	(0.340)	(0.340)
Host Country India	0.784***	0.784***	0.766***	0.760***
	(0.176)	(0.177)	(0.175)	(0.176)
Host Country China	0.087	0.087	0.146	0.143
	(0.346)	(0.347)	(0.341)	(0.342)
Offshoring Captive	0.220	0.221	0.199	0.213
	(0.212)	(0.214)	(0.213)	(0.214)
Offshoring Age	−0.069***	−0.068***	−0.064***	−0.063***
	(0.020)	(0.020)	(0.021)	(0.021)
Offshoring Efficiency-Seeking Driver	−0.099	−0.099	−0.088	−0.092
	(0.073)	(0.074)	(0.073)	(0.074)
Offshoring Knowledge-Seeking Driver	0.050	0.050	0.041	0.039
	(0.077)	(0.077)	(0.076)	(0.075)

(Continues)

Table VII. (Continued)

Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Negative Market Discrepancy Size × Market Location-specific Anchor Bias	–	0.023	–	0.249
		(0.360)		(0.360)
Positive Market Discrepancy Size × Market Location-specific Anchor Bias	–	–	0.448**	0.478**
			(0.195)	(0.210)
Constant	0.326	0.328	0.403	0.430
	(0.395)	(0.398)	(0.401)	(0.404)
Number of observations	441	441	441	441
Chi-Square	174.649***	853.407***	2710.987***	2973.708***

Notes: The omitted baseline of the categorical variables *Firm Size – Small* and *Firm Size – Medium* is *Firms Size – Large*, while the omitted baselines of the other categorical variables include the other aggregated functions, industries, home and host countries of Tables I and II.
*p < 0.1; **p < 0.05; ***p < 0.01. S.E. between brackets.

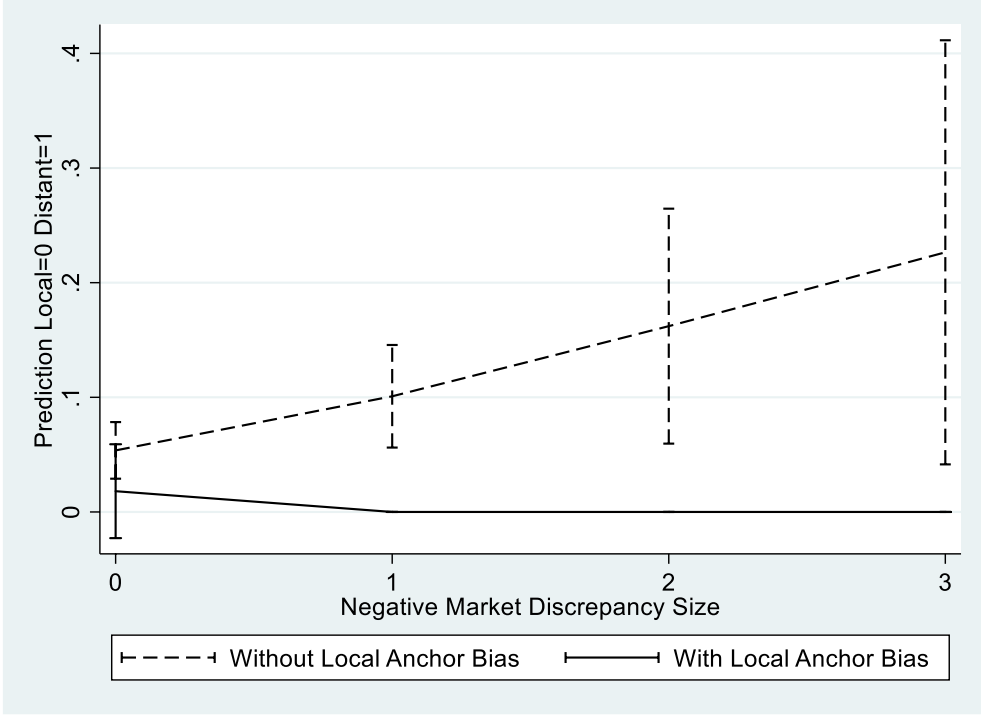

Figure 1. Plot of the marginal effects of the interaction between Negative Market Discrepancy Size and Market Location-specific Anchor Bias performed in model 2 of Table VI (with confidence intervals)[Colour figure can be viewed at wileyonlinelibrary.com]

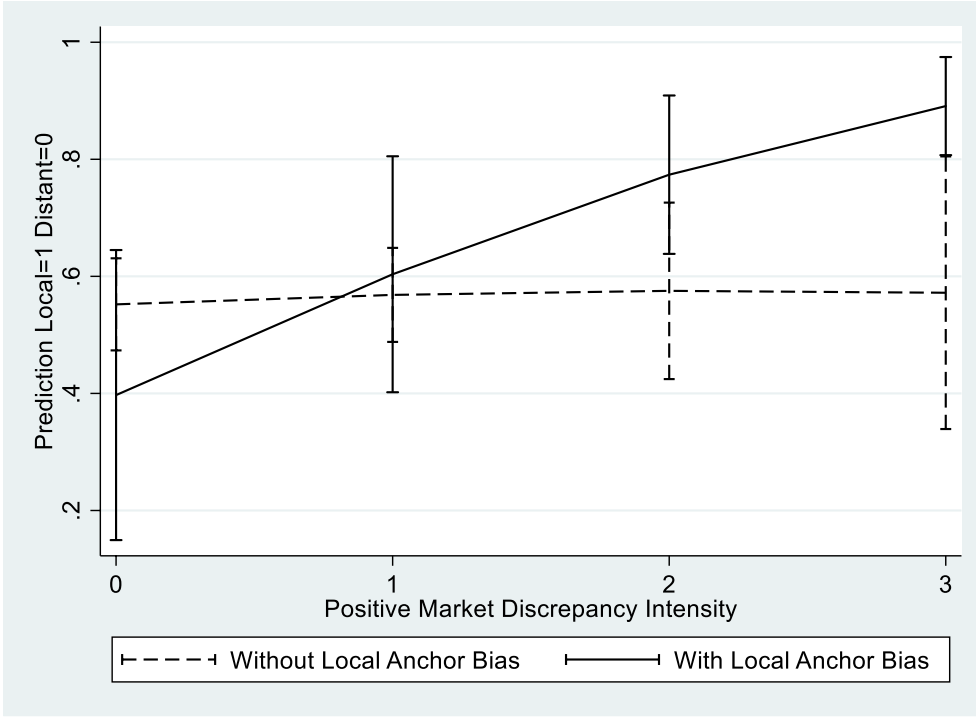

Figure 2. Plot of the marginal effects of the interaction between Positive Market Discrepancy Size and Market Location-specific Anchor Bias performed in model 3 of Table VII (with confidence intervals)[Colour figure can be viewed at wileyonlinelibrary.com]

the offshoring initiatives for which the respondents declare the intention to (1) relocate the activity in another country, (2) relocate the activity to the home country, (3) expand the activity in the current host country, and (4) implement other changes in the host country are 42, 22, 252, and 48, respectively. Given that the four variables are not mutually exclusive, we performed a Multivariate Probit regression model. Table VIII reports the results for the two options of the distant solutions, while Table IX reports the results for the two options of the local solutions.[7] Columns (a) and (b) of Table VIII, which display the base model without interactions, shows that the size of the negative market discrepancy positively and significantly affects the dependent variables *Relocation to Third Country* and *Relocation to Home Country*, which are both distant solutions, thus confirming Hypothesis 1. However, results show that the positive market discrepancy can also trigger the search for the *Relocation to Third Country* option (see column (a) of Table VIII). The interaction model with negative discrepancy (Columns (c) and (d) of Table VIII) shows that the search for *Relocation to Third Country* and *Relocation to Home Country* triggered by the negative market discrepancy is less likely in case of *Market Location-specific Anchor Bias*, thus fully confirming Hypothesis 2. Conversely, Columns (a) and (b) of Table IX show that the size of the positive market discrepancy is positively and significantly related to only the dependent variables *Expansion in the Host Country*, meaning that firms experiencing market performance above expectations take into account mainly the possibility to expand in the host country rather than to introduce other types of change,

Table VIII. Results of the multivariate probit regressions, distant solutions

	Base model		*Inter. model Negative Disc.*		*Inter. model Positive Disc.*	
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
Variables	*Relocation to third country (1)*	*Relocation to home country (2)*	*Relocation to third country (1)*	*Relocation to home country (2)*	*Relocation to third country (1)*	*Relocation to home country (2)*
Negative Market Discrepancy Size	0.475***	0.434**	0.486***	0.453**	0.487***	0.452**
	(0.153)	(0.210)	(0.152)	(0.214)	(0.148)	(0.213)
Positive Market Discrepancy Size	0.264*	0.084	0.265*	0.092	0.366**	0.108
	(0.152)	(0.257)	(0.154)	(0.273)	(0.163)	(0.276)
Market Location-specific Anchor Bias	−0.779	−4.841***	−0.714	−3.440***	−0.270	−4.734***
	(0.603)	(0.746)	(0.643)	(0.587)	(0.614)	(0.753)
Firm Host Country Experience	−0.048	−0.016	−0.047	−0.020	−0.064	−0.022
	(0.112)	(0.140)	(0.112)	(0.141)	(0.116)	(0.141)
Firm Size – Medium	−0.107	−5.203***	−0.116	−4.831***	−0.104	−5.112***
	(0.306)	(0.442)	(0.309)	(0.440)	(0.311)	(0.438)
Firm Size – Small	0.067	0.180	0.059	0.178	0.150	0.184
	(0.358)	(0.370)	(0.363)	(0.371)	(0.351)	(0.372)
Function – Software	0.089	−0.320	0.094	−0.316	0.065	−0.315
	(0.225)	(0.366)	(0.227)	(0.369)	(0.228)	(0.368)
Function – Information Technology	−0.843***	−0.531*	−0.842***	−0.527*	−0.818***	−0.519*
	(0.216)	(0.274)	(0.216)	(0.275)	(0.211)	(0.274)
Industry – Software and IT	−0.831**	1.270***	−0.820**	1.280***	−0.855**	1.275***
	(0.385)	(0.384)	(0.390)	(0.387)	(0.389)	(0.388)

(Continues)

Table VIII. (Continued)

	Base model		*Inter. model Negative Disc.*		*Inter. model Positive Disc.*	
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
Variables	*Relocation to third country (1)*	*Relocation to home country (2)*	*Relocation to third country (1)*	*Relocation to home country (2)*	*Relocation to third country (1)*	*Relocation to home country (2)*
Industry – Financial Services	0.224	−0.127	0.224	−0.132	0.211	−0.136
	(0.267)	(0.426)	(0.267)	(0.428)	(0.267)	(0.428)
Home Country – USA	−0.310	−1.022***	−0.312	−1.027***	−0.274	−1.023***
	(0.268)	(0.372)	(0.268)	(0.372)	(0.265)	(0.370)
Home Country – Netherlands	−1.405**	−1.425**	−1.395**	−1.448**	−1.420***	−1.451**
	(0.587)	(0.692)	(0.600)	(0.701)	(0.546)	(0.702)
Host Country India	0.094	0.463*	0.094	0.465*	0.110	0.469*
	(0.228)	(0.270)	(0.230)	(0.271)	(0.224)	(0.271)
Host Country China	−0.157	−0.626*	−0.160	−0.629*	−0.180	−0.626*
	(0.416)	(0.358)	(0.416)	(0.360)	(0.426)	(0.355)
Offshoring Captive	0.339	0.247	0.334	0.253	0.365	0.261
	(0.240)	(0.270)	(0.241)	(0.272)	(0.238)	(0.271)
Offshoring Age	0.068***	0.052*	0.068***	0.052*	0.061***	0.051*
	(0.017)	(0.030)	(0.017)	(0.030)	(0.017)	(0.030)
Offshoring Efficiency-Seeking Driver	−0.081	0.093	−0.080	0.101	−0.084	0.100
	(0.080)	(0.113)	(0.080)	(0.114)	(0.079)	(0.114)
Offshoring Knowledge-Seeking Driver	0.186*	−0.007	0.187*	−0.008	0.183*	−0.008
	(0.104)	(0.117)	(0.105)	(0.117)	(0.103)	(0.117)

(Continues)

Table VIII. (Continued)

	Base model		*Inter. model Negative Disc.*		*Inter. model Positive Disc.*	
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
Variables	*Relocation to third country (1)*	*Relocation to home country (2)*	*Relocation to third country (1)*	*Relocation to home country (2)*	*Relocation to third country (1)*	*Relocation to home country (2)*
Negative Market Discrepancy Size × Market Location-specific Anchor Bias	–	–	−3.026***	−0.760**	–	–
			(0.673)	(0.314)		
Positive Market Discrepancy Size × Market Location-specific Anchor Bias	–	–	–	–	−3.433***	0.229
					(0.733)	(0.290)
Constant	−2.163***	−2.118***	−2.170***	−2.149***	−2.169***	−2.159***
	(0.478)	(0.550)	(0.479)	(0.554)	(0.475)	(0.554)
Number of observations	441	441	441	441	441	441
chi2	3582.048***	3582.048***	5485.255***	5485.255***	9137.658***	9137.658***

Notes: The omitted baseline of the categorical variables *Firm Size – Small* and *Firm Size – Medium* is *Firms Size – Large*, while the omitted baselines of the other categorical variables include the other aggregated functions, industries, home and host countries of Tables I and II.
*p < 0.1; **p < 0.05; ***p < 0.01. S.E. between brackets.

Table IX. Results of the multivariate probit regressions, local solutions

	Base model		*Inter. model Negative Disc.*		*Inter. model Positive Disc.*	
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
Variables	*Expansion in the host country (3)*	*Other changes in the host country (4)*	*Expansion in the host country (3)*	*Other changes in the host country (4)*	*Expansion in the host country (3)*	*Other changes in the host country (4)*
Negative Market Discrepancy Size	0.046	−0.424	0.054	−0.180	0.015	−0.190
	(0.136)	(0.299)	(0.146)	(0.198)	(0.138)	(0.200)
Positive Market Discrepancy Size	0.229*	0.274	0.228*	0.214	0.033	0.207
	(0.128)	(0.293)	(0.128)	(0.186)	(0.153)	(0.202)
Market Location-specific Anchor Bias	−0.211	−0.252	−0.186	−0.221	−0.635	−0.593
	(0.355)	(0.394)	(0.389)	(0.405)	(0.388)	(0.420)
Firm Host Country Experience	−0.058	−0.192*	−0.057	−0.180	−0.033	−0.177
	(0.064)	(0.116)	(0.065)	(0.117)	(0.063)	(0.117)
Firm Size – Medium	0.227	−0.438	0.225	−0.481	0.243	−0.477
	(0.268)	(0.379)	(0.270)	(0.382)	(0.266)	(0.384)
Firm Size – Small	0.255	−0.177	0.251	−0.264	0.166	−0.277
	(0.327)	(0.438)	(0.326)	(0.438)	(0.322)	(0.448)
Function – Software	−0.087	0.027	−0.088	0.058	−0.031	0.066
	(0.244)	(0.308)	(0.243)	(0.311)	(0.235)	(0.318)
Function – Information Technology	0.240	0.004	0.241	0.016	0.246	0.027
	(0.205)	(0.267)	(0.206)	(0.260)	(0.209)	(0.263)
Industry – Software and IT	−0.013	0.608*	−0.009	0.659*	−0.004	0.655*
	(0.291)	(0.348)	(0.290)	(0.345)	(0.281)	(0.347)

(Continues)

Table IX. (Continued)

	Base model		*Inter. model Negative Disc.*		*Inter. model Positive Disc.*	
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
Variables	*Expansion in the host country (3)*	*Other changes in the host country (4)*	*Expansion in the host country (3)*	*Other changes in the host country (4)*	*Expansion in the host country (3)*	*Other changes in the host country (4)*
Industry – Financial Services	0.257	−1.267***	0.258	−1.247***	0.249	−1.249***
	(0.278)	(0.456)	(0.277)	(0.443)	(0.282)	(0.445)
Home Country – USA	0.009	−0.415	0.007	−0.388	−0.066	−0.394
	(0.306)	(0.352)	(0.306)	(0.343)	(0.307)	(0.343)
Home Country – Netherlands	−0.130	−1.683**	−0.131	−1.693**	−0.122	−1.708**
	(0.342)	(0.685)	(0.341)	(0.697)	(0.339)	(0.713)
Host Country India	0.732***	0.484*	0.734***	0.474*	0.714***	0.479*
	(0.173)	(0.250)	(0.174)	(0.249)	(0.173)	(0.250)
Host Country China	0.155	−0.347	0.158	−0.340	0.226	−0.322
	(0.334)	(0.373)	(0.333)	(0.385)	(0.324)	(0.379)
Offshoring Captive	0.391**	−0.298	0.385**	−0.329	0.368**	−0.327
	(0.186)	(0.305)	(0.187)	(0.306)	(0.187)	(0.305)
Offshoring Age	−0.096***	0.059**	−0.096***	0.053**	−0.092***	0.054**
	(0.024)	(0.023)	(0.024)	(0.023)	(0.025)	(0.023)
Offshoring Efficiency-Seeking Driver	−0.049	−0.103	−0.047	−0.104	−0.036	−0.103
	(0.090)	(0.093)	(0.091)	(0.095)	(0.090)	(0.095)
Offshoring Knowledge-Seeking Driver	0.035	−0.068	0.036	−0.066	0.028	−0.066
	(0.091)	(0.106)	(0.090)	(0.108)	(0.090)	(0.108)

(Continues)

Table IX. (Continued)

	Base model		*Inter. model Negative Disc.*		*Inter. model Positive Disc.*	
	(a)	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*
Variables	*Expansion in the host country (3)*	*Other changes in the host country (4)*	*Expansion in the host country (3)*	*Other changes in the host country (4)*	*Expansion in the host country (3)*	*Other changes in the host country (4)*
Negative Market Discrepancy Size × Market Location-specific Anchor Bias	–	–	−0.100	−4.125***	–	–
			(0.353)	(0.615)		
Positive Market Discrepancy Size × Market Location-specific Anchor Bias	–	–	–	–	0.515***	0.168
					(0.173)	(0.264)
Constant	0.154	−0.570	0.147	−0.584	0.246	−0.582
	(0.469)	(0.524)	(0.472)	(0.513)	(0.473)	(0.515)
Number of observations	441	441	441	441	441	441
chi2	3582.048***	3582.048***	5485.255***	5485.255***	9137.658***	9137.658***

Notes: The omitted baseline of the categorical variables *Firm Size – Small* and *Firm Size – Medium* is *Firms Size – Large*, while the omitted baselines of the other categorical variables include the other aggregated functions, industries, home and host countries of Tables I and II.
*p < 0.1; **p < 0.05; ***p < 0.01. S.E. between brackets.

although the result is significant only at ten per cent. Hence, Hypothesis 3 turns out to be weakly confirmed. Finally, Column (e) of Table IX shows that, when the *Market Location-specific Anchor Bias* interacts with the positive market discrepancy, the search for *Expansion in the Host Country* is amplified, thus confirming Hypothesis 4.

Second, we tested whether absolute levels of firms' market performance (instead of the discrepancies with the aspiration level) are sufficient to trigger the search for either a local or a distant solution. Results, which are displayed in Table CI of the Appendix, show that the higher the firms' market performance, the higher the probability to search for a local solution; however, no effect arises as regards the distant solution. This confirms that it is more the discrepancy between the firm's market performance and its aspirations – rather than the absolute values of firm's market performance – that triggers the offline search for an organizational change.

Third, we interacted the size of (negative and positive) market discrepancy with the age of the offshoring initiative and with the firm's experience in the host country (by using the two variables *Offshoring Age* and *Firm Host Country Experience*), in order to detect whether the relationship between the discrepancies and the search for (local and distant) solutions is affected by path dependencies. Results show that the age of offshoring does not have a significant interaction effect (see Table DI of the appendix). Conversely, Table EI of the appendix shows that the firm's host country experience appears to encourage the distant solution in case of negative market discrepancy [Model (1)] and to discourage the distant solution in case of positive discrepancy [Model (2)], while discouraging the local solution in case of negative market discrepancy [Model (3)]. This seems to suggest that path dependence exists only in case of positive discrepancy.

Fourth, given that firms undertake offshoring not only for market-seeking reasons but also for efficiency-seeking (or cost-saving) and for knowledge-seeking reasons, we tried to understand whether a discrepancy in achieving one of these two goals might trigger the search for either a local or distant solution as in the case of market discrepancies.[8] These results, which are displayed in Table FI of the Appendix, show that the knowledge-seeking discrepancy is likely to discourage the search of local solution (regardless of whether it is positive or negative), while no effect turns out to be significant as regards the search for distant solutions.

DISCUSSION

We examine when, why, and how performance discrepancies provide a stimulus to companies to consider organizational changes in the context of offshoring and reshoring of their international operations. By using a BTOF lens to examine this important phenomenon, we conceptualize that both negative and positive discrepancies play a role in fostering the search for distant versus local solutions. Thus, our analysis adds to the literature streams on firms' internationalization processes in IB and global strategy in several ways.

First, we focus on offline search, i.e., the stage in which decision makers explore different alternatives before implementing the actual organizational change. Whereas

previous literature has focused mainly on the restoration of performance, we addressed the gap in understanding the cognitive processes that facilitate offline search. Further, extant research tends to focus mostly on negative as opposed to positive performance discrepancies as the main driver of organizational change (exceptions include Chen and Miller, 2007; Lin, 2014; Ref and Shapira, 2017). However, performance above aspirations may also stimulate decision makers to change their search behaviour when firms are outperforming their aspirations; organizational changes are triggered as well by opportunities rather than by a problemistic search (Hu et al., 2011; Lin, 2014). Our findings indicate that positive performance discrepancies do have a differential impact on firm behaviour. We show that firms that experience market performance above expectations consider the possibility to expand in the host country whereas a negative market discrepancy pushes firms towards more distant solutions (i.e., *Relocation to Third Country* and *Relocation to Home Country)*.

Another significant finding is that the direction of the organization search favours local solutions (i.e., in the host country) or distant solutions (i.e., in a third country) depending on the size of the performance discrepancy. In fact, the size of a negative discrepancy increases the likelihood of a decision to search for a distant solution to the problem even to the point of reconsidering their global footprint (i.e., *Relocation to Home Country*). Moreover, our additional evidence indicates that the size of the positive market discrepancy triggers the consideration not only of the possibility of expansion in the host country but also in other foreign markets (i.e., *Relocation to Third Country)*, thus prompting the adoption of not only an exploitation (i.e., an institutionalized) but also and exploration (i.e., a slack) approach. Our additional findings also show that absolute performance, while prompting the search for local solutions, does not trigger the search for distant solutions per se, since the latter is fostered only in case of a (large) discrepancy with respect to the original aspiration. This is in line with recent results from Ref and Shapira (2017) showing that firms significantly change their behaviour only when performances are well below or well above their aspiration levels.

As discussed within the stream of literature on BTOF, decision makers are limited by their own cognitive biases that influence the direction of their search behaviour. We shed new light on this element by identifying that the market location may be a bias that anchors firm offline deliberations. Our findings show that this bias reduces or enhances a firm's propensity to consider distant or local solutions depending on whether the performance discrepancy is positive or negative. At the same time, we also find that the local anchor bias does not really stem from the host-country path-dependence: indeed, our additional evidence shows that firms with great experience in the host country are even more likely to adopt distant solutions when performance is below aspiration. In so doing, we contribute to the literature on organizational change and internationalization strategy. Indeed, by taking into account particular cognitive biases, we explain some of those changes that cannot be predicted by the theory of organizational change and we extend this literature by associating the deviation from theoretical expectation to behavioural biases (Elia et al., 2019; Surdu et al., 2021). Specifically, our results challenge the role of host-country experience by showing its amplification effect in determining the direction of change towards a distant solution in case of a negative performance discrepancy, while previous literature

would suggest a past-dependent behaviour with companies exploiting knowledge gained in the host country through the adoption of a local solution. Therefore, our study adds to recent efforts to improve behavioural explanations of internationalization by bringing behavioural biases to centre stage in the understanding of search and learning processes of multinational companies.

As discussed by Nigam et al. (2016), selection is a critical step that links an exogenous trigger for change with larger processes of organizational adaptation. Thus, their work shows how organizations select some routines to be changed, but not others, during organizational search. Whereas Nigam et al. (2016) examine how organizational roles (with a particular focus on people who have authority to change a routine) shape selection by influencing both politics and frames in organizational search, we complement this work by considering search at the organizational level of analysis.

Similarly, Maggitti et al. (2013) examine individual search processes through an archival content analysis to find that it is inherently complex, non-linear, and disjointed. Their findings articulate the search process as a complex progression, contributing to our understanding of complexity and the complex systems view of the process. More specifically, Maggitti et al. (2013) suggest that key actors in a successful search process are open to new ideas. However, our findings extend this field of study by showing how the concept of cognitive anchoring constrains such openness to new ideas within the host country. Indeed, we indicate that in addition to the knowledge, experiences, and motivation of the searcher, the cognitive anchoring has an important impact on the search and discovery process. Additionally, our results add nuance to the literature on offshoring and, in particular, showing how decision makers respond to offshoring challenges and performance shortfalls. While previous studies (Albertoni et al., 2017; Manning, 2014) discuss 'escape' from unfavourable host environment as a relevant rationale for offshoring units, we show that decision makers are often significantly influenced by the perceived strategic importance of the host market, which serves as an anchor to the entire decision process.

We believe our paper adds also to the stream of research recently extended by MacAulay et al. (2020) that reassess the influence of the surrounding circumstances on organizational search processes. MacAulay et al. (2020) find that perceptions lead decision makers to prefer distant solutions in problemistic search. Whereas these authors provide a new way to understanding the phenomena of non-local search related to the type of the search environment (between benign and non-benign), we complement this study by showing how the perception of market discrepancy can lead actors to search for solutions (locally and non-locally) in problemistic, institutionalized and slack search. Additionally, we extend this stream of work in the context of offshoring decision by highlighting the role of cognitive biases. Indeed, in line with MacAulay et al. (2020), we find that negative performance discrepancies increase managers' perceptions about the non-benign local search environment leading decision makers to search for distant (non-locally) solutions; that is, in the field of offshoring, to relocate to another offshore location or back to home. However, cognitive bias (in our case, the strategic importance of the host location) can shape myopically this search behaviour by reducing the appeal of distant solutions, thus making the search process more complex than indicated in prior study.

Limitations and Future Research

Our work is not exempt from limitations that may, however, pave the way to a rich future research agenda. In particular, we enrich the framework on the relationship between performance discrepancies in foreign countries and organizational changes by providing evidence on the moderating role of location-specific anchor bias on the direct relationship between discrepancies and the organizational change considered. However, we have focused only on a single bias, while the literature on heuristics and biases is rich and provides suggestions for including various other affective biases (i.e., the representativeness and salience bias have been already shown to play a role in the companies' entry strategies, see, e.g., Elia et al., 2019) that are likely to have a significant influence on restructuring and relocation strategies (Fairchild, 2014; Livet, 2010).

Given that our focus is on the offline search stage that precedes the implementation of organizational changes, future studies should explore the relationship between the search and the implementation phases. That would be crucial to elucidate the relationship between the offline search and the implementation of organizational change strategies and to assess their effectiveness in reducing (in case of negative) or increasing (in case of positive) the discrepancies that were responsible for the whole organizational change and, therefore, to draw the relevant managerial implications.

We believe that our perspective (based on the BTOF and adopted in the context of international offshoring decisions and corporate restructuring) could be generalized to other contexts in which performance feedback and organizational behaviour are relevant such as strategic alliances, innovation, etc. Primary data on decision makers' intentions are difficult to obtain and not frequently used. Therefore, while they represent a significant strength of our study, the validity of our methodology would benefit from further data gathering and replication studies.

Our study focuses on the effect of firm performance relative to aspiration level on the decision to enter new markets. Although it represents a strength and a novelty of this study, future research could examine the effect of firm performance relative to the social aspiration, i.e., the performance of peers, on the decision to enter new markets. In this case, researchers are required to determine the particular reference group to which the focal firm compares itself (see Ref and Shapira, 2017).

Finally, our study investigates how positive and negative performance discrepancies and cognitive biases influence offshoring decisions. However, recent events, like the COVID-19 pandemic or the war between Ukraine and Russia that brought home the urgent reality of shortages and bottlenecks in global value chains, as well as sustainability, technological transformations, and the need to reduce complexity of firms' operations have raised a number of questions regarding the re-evaluation of offshoring decisions (Ambos et al., 2021; Gereffi, 2020; Pananond et al., 2020). Any of these disruptions is bringing about pressures for strategy changes in the geographical reconfiguration of companies that are likely to push firms to reconsider their goals and aspirations, thus giving birth to performance discrepancies that might trigger several new searches for alternative solutions by those companies that were involved in offshoring initiatives in the pre-pandemic period. In addition, given that one of the possible future scenarios stemming from the geopolitical tensions is the regionalization of some value chains

(UNCTAD, 2020), the choice between local and distant solutions (as well as the geographic scope of these two concepts) might be affected by the need of the companies to accommodate this trend in the future. At the same time, geopolitical risks are likely to also affect the cognitive biases towards some specific locations, thus amplifying the moderating role of the local anchor bias. Hence, future research could investigate how all these disruptions may directly or indirectly shape the offline search behaviour of companies and the consequent implementation of an organizational change.

CONCLUSION

Restructuring and relocation strategies of offshored activities are driven not only by objective changes in host country conditions but also by relative changes in decision-makers' expectations. Thus, our study contributes to the literature on the relationship between performance feedback and reconfiguration of firms' international activities including redeploying, recombining, or divesting resources or business units to improve their profitability (e.g., Helfat and Eisenhardt, 2004; Karim, 2006). In particular, our results contribute to the current literature on reshoring where the focus has been mainly centred on the relative changes in terms of labour costs (e.g., China versus Vietnam) and on the firm's performance – especially more recently after the Covid-related economic disruption – without, however, adopting a managerial and behavioural perspective based on the discrepancy between performance and aspiration levels and on cognitive biases. Thus, we join the ongoing conversation on the importance of considering firms' internationalization as involving various waves of activity that may include either an increase or reduction in the intensity or scope of international activities, or a divestment from foreign markets that may be followed by exit, or relocation to a third country or back home.

We believe our findings allow us also to suggest some managerial implications. Firms should not wait for a negative discrepancy to overcome the organizational inertia and to introduce organizational changes as result of a problemistic search approach. Indeed, decision makers should consider the possibility to introduce organizational changes also in case of performance above expectations as result of an opportunity-search approach, i.e., by exploring new opportunities. However, firms should also be aware of the risk of a 'threat-rigidity trap' in case of a negative discrepancy, meaning that they should elaborate a protocol and define *ex-ante* the strategic priorities in order to react quickly in case of a trade-off arising from negative performance discrepancy and strong location-specific anchor bias.

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NOTES

[1] Australia, Belgium, Denmark, France, Germany, Italy, the Netherlands, Spain, the United Kingdom, and the US

[2] The other on-site options were either a change of the entry mode (i.e., "Spin off part or all offshore activities from a wholly owned subsidiary to a third-party service provider" or "transfer part or all outsourced offshore activities to a wholly owned subsidiary offshore") or other generic changes ("other changes").

[3] Larsen et al., (2013) make use of the same ORN survey to account for the discrepancy between expected and achieved cost-saving.

[4] When explaining the anchor bias, Tversky and Kahneman (1974) provide evidence of an experiment that was conducted to show how the estimation given by a group of individuals can be affected by a random number that is assigned to them before making the estimation. For instance, when asking to estimate the percentage of African countries in the United Nations, the estimation of the group assigned a low number was lower than the estimation of the group assigned a high number. Therefore, we believe that our variable, capturing those offshoring initiatives in which the decision makers have assigned the maximum value (i.e. 5 on the Likert scale) to a location, is able to reflect the anchor bias, i.e. the influence that the offline search process is subject to when the decision makers give a very high importance to a specific host country.

[5] We also used alternative dummies to consider lower levels of host location importance as a market destination (e.g., 4 and 5, or 3, 4 and 5); however, our results are confirmed only when the host market is assessed as very important, i.e., when the value of the Likert scale is equal to 5.

[6] The marginal effects of the interaction terms have been computed and plotted for the probability that *Distant Solution* = 1 and *Local Solution* = *0* when considering the interaction term with negative market discrepancy and for the probability that *Distant Solution* = 0 and *Local Solution* = 1 when considering the interaction term with positive market discrepancy.

[7] The coefficients displayed in the first two columns (a) and (b) of Tables VIII and IX result from the same Multinomial model, as well the coefficient displayed in the columns of the interaction models with negative discrepancy ((c) and (d) of Tables VIII and IX) and in the columns of the interaction models with positive discrepancy ((e) and (f) of Tables VIII and IX).

[8] In doing so, we introduced (in two separate regressions) the (negative and positive) efficiency-seeking discrepancy and the (negative and positive) knowledge-seeking discrepancy, by comparing the (Likert) values of the outcome and of the drivers for each of these two dimensions and by building a (positive and negative) size measure as in the case of market discrepancy. Given that the efficiency-seeking and knowledge-seeking drivers have been used as control variables, they have been removed and substituted by the market-seeking driver in each regression in which they have been employed to build the discrepancy size measure. Finally, we also substituted the Market Location-specific Anchor Bias with the Efficiency-seeking Location-Specific Anchor bias and with the Knowledge-Seeking Location Specific Anchor Bias in each regression in which we substituted the market with the efficiency and knowledge discrepancy, respectively.

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APPENDIX A

Table AI. Marginal effects of the bivariate probit regressions, distant solution

Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Negative Market Discrepancy Size	0.085***	0.089***	0.086***	0.093***
	(0.026)	(0.026)	(0.025)	(0.026)
Positive Market Discrepancy Size	0.021	0.020	0.032	0.036
	(0.027)	(0.026)	(0.028)	(0.028)
Market Location-specific Anchor Bias	−0.159	−0.128	−0.106	−0.044
	(0.098)	(0.104)	(0.100)	(0.107)
Firm Host Country Experience	−0.004	−0.003	−0.005	−0.005
	(0.017)	(0.017)	(0.017)	(0.017)
Firm Size – Medium	−0.067	−0.070	−0.068	−0.073
	(0.048)	(0.048)	(0.048)	(0.048)
Firm Size – Small	0.051	0.047	0.058	0.055
	(0.055)	(0.056)	(0.054)	(0.054)
Function – Software	0.017	0.020	0.013	0.014
	(0.037)	(0.037)	(0.037)	(0.037)
Function – Information Technology	−0.092**	−0.092**	−0.091**	−0.090**
	(0.036)	(0.037)	(0.036)	(0.036)
Industry – Software and IT	−0.015	−0.011	−0.018	−0.012
	(0.052)	(0.052)	(0.052)	(0.052)
Industry – Financial Services	0.039	0.039	0.037	0.036
	(0.044)	(0.044)	(0.043)	(0.043)
Home Country – USA	−0.095**	−0.095**	−0.089**	−0.088**
	(0.043)	(0.043)	(0.043)	(0.043)

(Continues)

Table AI. (Continued)

Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Home Country – Netherlands	−0.214***	−0.212***	−0.209***	−0.206***
	(0.078)	(0.078)	(0.074)	(0.073)
Host Country India	0.010	0.010	0.012	0.014
	(0.035)	(0.035)	(0.034)	(0.035)
Host Country China	−0.098	−0.099	−0.099	−0.101
	(0.061)	(0.062)	(0.062)	(0.062)
Offshoring Captive	0.057	0.055	0.059*	0.057
	(0.036)	(0.036)	(0.035)	(0.035)
Offshoring Age	0.010***	0.010***	0.009***	0.009***
	(0.002)	(0.002)	(0.002)	(0.002)
Offshoring Efficiency-Seeking Driver	−0.004	−0.003	−0.004	−0.003
	(0.012)	(0.012)	(0.012)	(0.012)
Offshoring Knowledge-Seeking Driver	0.012	0.012	0.012	0.012
	(0.014)	(0.014)	(0.014)	(0.014)
Negative Market Discrepancy Size × Market Location-specific Anchor Bias	–	−0.673***	–	−0.795***
		(0.146)		(0.148)
Positive Market Discrepancy Size × Market Location-specific Anchor Bias	–	–	−0.588***	−0.647***
			(0.116)	(0.119)
Number of observations	441	441	441	441
Chi-Square	174.649***	853.407***	2710.987***	2973.708***

Notes: The omitted baseline of the categorical variables *Firm Size – Small* and *Firm Size – Medium* is *Firms Size – Large*, while the omitted baselines of the other categorical variables include the other aggregated functions, industries, home and host countries of Tables I and II. The table reports the average marginal (partial) effects, which means effects are calculated for each observation in the data and then averaged.
*p < 0.1; **p < 0.05; ***p < 0.01. S.E. between brackets.

Table BI. Marginal effects of the bivariate probit regressions, local solution

Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Negative Market Discrepancy Size	0.003	0.002	−0.004	−0.013
	(0.043)	(0.046)	(0.043)	(0.046)
Positive Market Discrepancy Size	0.095**	0.095**	0.040	0.037
	(0.039)	(0.039)	(0.051)	(0.051)
Market Location-specific Anchor Bias	−0.076	−0.078	−0.185	−0.212
	(0.114)	(0.126)	(0.121)	(0.138)
Firm Host Country Experience	−0.018	−0.019	−0.012	−0.012
	(0.022)	(0.022)	(0.021)	(0.021)
Firm Size – Medium	0.108	0.108	0.110	0.113
	(0.072)	(0.072)	(0.069)	(0.069)
Firm Size – Small	0.076	0.077	0.052	0.054
	(0.105)	(0.104)	(0.103)	(0.103)
Function – Software	−0.044	−0.044	−0.026	−0.025
	(0.077)	(0.077)	(0.072)	(0.072)
Function – Information Technology	0.075	0.074	0.074	0.074
	(0.061)	(0.061)	(0.061)	(0.060)
Industry – Software and IT	0.003	0.002	0.006	0.001
	(0.085)	(0.086)	(0.081)	(0.082)
Industry – Financial Services	0.010	0.010	0.010	0.010
	(0.087)	(0.087)	(0.087)	(0.087)
Home Country – USA	0.006	0.006	−0.014	−0.015
	(0.101)	(0.101)	(0.099)	(0.099)

(Continues)

Table BI. (Continued)

Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Home Country – Netherlands	−0.132	−0.132	−0.126	−0.126
	(0.107)	(0.107)	(0.104)	(0.104)
Host Country India	0.248***	0.248***	0.239***	0.237***
	(0.051)	(0.051)	(0.050)	(0.050)
Host Country China	0.028	0.028	0.046	0.045
	(0.109)	(0.109)	(0.106)	(0.106)
Offshoring Captive	0.070	0.070	0.062	0.066
	(0.067)	(0.068)	(0.066)	(0.067)
Offshoring Age	−0.022***	−0.022***	−0.020***	−0.020***
	(0.006)	(0.006)	(0.006)	(0.006)
Offshoring Efficiency-Seeking Driver	−0.031	−0.031	−0.028	−0.029
	(0.023)	(0.024)	(0.023)	(0.023)
Offshoring Knowledge-Seeking Driver	0.016	0.016	0.013	0.012
	(0.024)	(0.024)	(0.024)	(0.023)
Negative Market Discrepancy Size × Market Location-specific Anchor Bias	–	0.007	–	0.078
		(0.114)		(0.111)
Positive Market Discrepancy Size × Market Location-specific Anchor Bias	–	–	0.140**	0.149**
			(0.059)	(0.064)
Number of observations	441	441	441	441
Chi-Square	174.649***	853.407***	2710.987***	2973.708***

Notes: The omitted baseline of the categorical variables *Firm Size – Small* and *Firm Size – Medium* is *Firms Size – Large*, while the omitted baselines of the other categorical variables include the other aggregated functions, industries, home and host countries of Tables I and II. The table reports the average marginal (partial) effects, which means effects are calculated for each observation in the data and then averaged.
*p < 0.1; **p < 0.05; ***p < 0.01. S.E. between brackets.

Table CI. Results of the bivariate probit regressions, absolute value of market outcome

Variables	*Distant Solution*	*Local Solution*
Market outcome	−0.153	0.250**
	(0.147)	(0.111)
Market Location-specific Anchor Bias	−1.143*	−0.373
	(0.664)	(0.406)
Firm Host Country Experience	0.005	−0.053
	(0.096)	(0.068)
Firm Size – Medium	−0.304	0.346
	(0.302)	(0.232)
Firm Size – Small	0.360	0.272
	(0.350)	(0.355)
Function – Software	0.143	−0.128
	(0.224)	(0.243)
Function – Information Technology	−0.456**	0.286
	(0.211)	(0.206)
Industry – Software and IT	−0.187	−0.011
	(0.317)	(0.267)
Industry – Financial Services	0.216	0.024
	(0.273)	(0.277)
Home Country – USA	−0.632**	−0.047
	(0.266)	(0.324)
Home Country – Netherlands	−1.154**	−0.474
	(0.456)	(0.350)
Host Country India	0.048	0.815***
	(0.209)	(0.174)
Host Country China	−0.539	0.022
	(0.356)	(0.350)
Offshoring Captive	0.393*	0.236
	(0.213)	(0.210)
Offshoring Age	0.068***	−0.070***
	(0.017)	(0.020)
Offshoring Efficiency-Seeking Driver	−0.035	−0.126
	(0.077)	(0.081)
Offshoring Knowledge-Seeking Driver	0.058	0.048
	(0.081)	(0.076)
Constant	0.195*	−0.147
	(0.116)	(0.090)

(Continues)

Table CI. (Continued)

Variables	*Distant Solution*	*Local Solution*
Number of observations	−1.355***	0.332
Chi-Square	(0.395)	(0.403)

Notes: The omitted baseline of the categorical variables *Firm Size – Small* and *Firm Size – Medium* is *Firms Size – Large*, while the omitted baselines of the other categorical variables include the other aggregated functions, industries, home and host countries of Tables I and II.
*p < 0.1; **p < 0.05; ***p < 0.01. S.E. between brackets.

Table DI. Results of the bivariate probit regressions, interaction with offshoring age

	Distant Solution		*Local Solution*	
Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Negative Market Discrepancy Size	0.647**	0.501***	0.432	−0.003
	(0.301)	(0.157)	(0.386)	(0.137)
Positive Market Discrepancy Size	0.109	−0.125	0.278**	0.145
	(0.163)	(0.325)	(0.128)	(0.162)
Market Location-specific Anchor Bias	−0.967*	−0.838	−0.277	−0.213
	(0.582)	(0.598)	(0.365)	(0.355)
Firm Host Country Experience	−0.018	−0.017	−0.052	−0.058
	(0.103)	(0.100)	(0.068)	(0.068)
Firm Size – Medium	−0.422	−0.437	0.342	0.331
	(0.286)	(0.294)	(0.230)	(0.229)
Firm Size – Small	0.315	0.338	0.247	0.237
	(0.333)	(0.333)	(0.327)	(0.323)
Function – Software	0.110	0.108	−0.126	−0.129
	(0.219)	(0.216)	(0.242)	(0.238)
Function – Information Technology	−0.561***	−0.552***	0.247	0.244
	(0.213)	(0.214)	(0.189)	(0.195)
Industry – Software and IT	−0.081	−0.058	0.004	0.026
	(0.313)	(0.314)	(0.270)	(0.266)
Industry – Financial Services	0.244	0.233	0.046	0.019
	(0.265)	(0.263)	(0.272)	(0.277)
Home Country – USA	−0.578**	−0.552**	0.004	0.029
	(0.261)	(0.258)	(0.319)	(0.321)
Home Country – Netherlands	−1.286***	−1.381**	−0.410	−0.406
	(0.480)	(0.545)	(0.347)	(0.344)

(Continues)

Table DI. (Continued)

	Distant Solution		*Local Solution*	
Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Host Country India	0.060	0.053	0.773***	0.782***
	(0.211)	(0.208)	(0.178)	(0.179)
Host Country China	−0.603	−0.615*	0.081	0.081
	(0.371)	(0.347)	(0.348)	(0.347)
Offshoring Captive	0.367*	0.363	0.252	0.228
	(0.218)	(0.221)	(0.217)	(0.216)
Offshoring Age	0.066***	0.038*	−0.058***	−0.089***
	(0.015)	(0.021)	(0.018)	(0.031)
Offshoring Efficiency-Seeking Driver	−0.028	−0.022	−0.104	−0.095
	(0.075)	(0.077)	(0.074)	(0.073)
Offshoring Knowledge-Seeking Driver	0.076	0.094	0.059	0.055
	(0.087)	(0.090)	(0.077)	(0.077)
Negative Market Discrepancy Size × Offshoring Age	−0.019	–	−0.066	–
	(0.037)		(0.052)	
Positive Market Discrepancy Size × Offshoring Age	–	0.019	–	0.014
		(0.016)		(0.013)
Constant	−1.579***	−1.457***	0.240	0.437
	(0.439)	(0.431)	(0.383)	(0.411)
Number of observations	441	441	441	441
Chi-Square	212.750***	202.550***	212.750***	202.550***

Notes: The omitted baseline of the categorical variables *Firm Size – Small* and *Firm Size – Medium* is *Firms Size – Large*, while the omitted baselines of the other categorical variables include the other aggregated functions, industries, home and host countries of Tables I and II.
*p < 0.1; **p < 0.05; ***p < 0.01. S.E. between brackets.

Table EI. Results of the bivariate probit regressions, interaction with country experience

	Distant Solution		*Local Solution*	
Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Negative Market Discrepancy Size	0.306	0.508***	0.131	0.016
	(0.201)	(0.160)	(0.140)	(0.134)
Positive Market Discrepancy Size	0.134	0.217	0.301**	0.272**
	(0.159)	(0.159)	(0.128)	(0.128)
Market Location-specific Anchor Bias	−0.981*	−0.985	−0.229	−0.222
	(0.572)	(0.627)	(0.361)	(0.359)
Firm Host Country Experience	−0.235**	0.090	−0.015	−0.100
	(0.117)	(0.108)	(0.070)	(0.080)
Firm Size – Medium	−0.498*	−0.504*	0.352	0.355
	(0.285)	(0.288)	(0.233)	(0.235)
Firm Size – Small	0.186	0.206	0.304	0.272
	(0.341)	(0.347)	(0.331)	(0.329)
Function – Software	0.098	0.128	−0.142	−0.146
	(0.217)	(0.220)	(0.241)	(0.240)
Function – Information Technology	−0.631***	−0.634***	0.251	0.249
	(0.221)	(0.214)	(0.195)	(0.195)
Industry – Software and IT	−0.088	−0.102	0.025	0.020
	(0.317)	(0.313)	(0.272)	(0.269)
Industry – Financial Services	0.154	0.205	0.059	0.039
	(0.254)	(0.263)	(0.279)	(0.278)
Home Country – USA	−0.550**	−0.564**	0.024	0.019
	(0.254)	(0.260)	(0.318)	(0.320)
Home Country – Netherlands	−1.209**	−1.328**	−0.443	−0.432
	(0.473)	(0.516)	(0.341)	(0.344)
Host Country India	0.070	0.074	0.793***	0.787***
	(0.220)	(0.219)	(0.177)	(0.175)
Host Country China	−0.601	−0.607	0.089	0.082
	(0.374)	(0.382)	(0.347)	(0.348)
Offshoring Captive	0.366	0.387*	0.222	0.219
	(0.227)	(0.228)	(0.210)	(0.211)
Offshoring Age	0.056***	0.059***	−0.066***	−0.067***
	(0.014)	(0.015)	(0.020)	(0.020)
Offshoring Efficiency-Seeking Driver	−0.036	−0.027	−0.093	−0.099
	(0.077)	(0.078)	(0.073)	(0.074)

(Continues)

Table EI. (Continued)

	Distant Solution		*Local Solution*	
Variables	*Model (1)*	*Model (2)*	*Model (3)*	*Model (4)*
Offshoring Knowledge-Seeking Driver	0.072	0.078	0.038	0.051
	(0.084)	(0.087)	(0.076)	(0.078)
Negative Market Discrepancy Size × Firm Host Country Experience	0.451**		−0.164*	
	(0.182)		(0.091)	
Positive Market Discrepancy Size × Firm Host Country Experience		−0.433**		0.083
		(0.179)		(0.092)
Constant	−1.336***	−1.534***	0.267	0.307
	(0.420)	(0.438)	(0.400)	(0.394)
Number of observations	441	441	441	441
Chi-Square	192.198***	186.692***	192.198***	186.692***

Notes: The omitted baseline of the categorical variables *Firm Size – Small* and *Firm Size – Medium* is *Firms Size – Large*, while the omitted baselines of the other categorical variables include the other aggregated functions, industries, home and host countries of Tables I and II.
*p < 0.1; **p < 0.05; ***p < 0.01. S.E. between brackets.

Table FI. Results of the bivariate probit regressions, other performances

	Efficiency-seeking performance		*Knowledge-seeking performance*	
Variables	*Distant Solution*	*Local Solution*	*Distant Solution*	*Local Solution*
Negative Discrepancy Size	−0.137	−0.195	0.061	−0.234*
	(0.201)	(0.148)	(0.140)	(0.141)
Positive Discrepancy Size	0.063	−0.011	0.130	−0.214*
	(0.097)	(0.093)	(0.110)	(0.110)
Anchor Bias	0.005	0.233	−0.031	0.008
	(0.230)	(0.192)	(0.219)	(0.214)
Firm Host Country Experience	−0.005	−0.037	−0.007	−0.028
	(0.098)	(0.065)	(0.098)	(0.069)
Firm Size – Medium	−0.285	0.365*	−0.277	0.394*
	(0.319)	(0.218)	(0.331)	(0.227)
Firm Size – Small	0.246	0.287	0.329	0.281
	(0.346)	(0.364)	(0.345)	(0.348)
Function – Software	0.187	−0.145	0.272	−0.258
	(0.230)	(0.240)	(0.235)	(0.227)
Function – Information Technology	−0.396*	0.186	−0.338	0.202
	(0.229)	(0.204)	(0.213)	(0.184)
Industry – Software and IT	−0.073	0.067	−0.119	0.042
	(0.315)	(0.254)	(0.309)	(0.259)
Industry – Financial Services	0.262	0.045	0.237	0.076
	(0.279)	(0.279)	(0.282)	(0.266)
Home Country – USA	−0.656**	−0.046	−0.640**	−0.100
	(0.264)	(0.333)	(0.271)	(0.310)
Home Country – Netherlands	−1.611***	−0.396	−1.716***	−0.449
	(0.450)	(0.378)	(0.469)	(0.362)
Host Country India	0.079	0.676***	0.103	0.737***
	(0.222)	(0.192)	(0.218)	(0.190)
Host Country China	−0.728*	0.137	−0.731*	0.176
	(0.386)	(0.330)	(0.418)	(0.339)
Offshoring Captive	0.369*	0.214	0.356*	0.257
	(0.211)	(0.230)	(0.209)	(0.224)
Offshoring Age	0.062***	−0.049**	0.059***	−0.050**
	(0.016)	(0.020)	(0.017)	(0.020)
Offshoring Market-Seeking Driver	0.098	−0.048	0.098	−0.039
	(0.081)	(0.081)	(0.078)	(0.075)

(Continues)

Table FI. (Continued)

	Efficiency-seeking performance		*Knowledge-seeking performance*	
Variables	*Distant Solution*	*Local Solution*	*Distant Solution*	*Local Solution*
Offshoring Efficiency-Seeking Driver	–	–	−0.051	−0.066
			(0.081)	(0.075)
Offshoring Knowledge-Seeking Driver	0.023	0.016	–	–
	(0.080)	(0.078)		
Constant	−1.480***	0.240	−1.282***	0.740**
	(0.426)	(0.437)	(0.352)	(0.371)
Number of observations	441	441	436.000	436.000
Chi-Square	178.680***	178.680***	154.554***	154.554***

Notes: The omitted baseline of the categorical variables *Firm Size – Small* and *Firm Size – Medium* is *Firms Size – Large*, while the omitted baselines of the other categorical variables include the other aggregated functions, industries, home and host countries of Tables I and II. The discrepancies and the anchor bias refer to the efficiency seeking performance in the first two columns, and to the knowledge-seeking performance in the last two columns.
*p < 0.1; **p < 0.05; ***p < 0.01. S.E. between brackets.