

# What's in a Name? How Senior Managers use Name-Based Heuristics to Allocate Financial Resources in Multinational Corporations

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**ABSTRACT** The allocation of financial resources to entrepreneurial initiatives in subsidiaries of multinational corporations is crucial to their realization. When allocating resources to these initiatives, senior headquarters managers face uncertainty that they attempt to address using various heuristics, which may bias allocation. Name-based heuristics – cognitive shortcuts based on names associated with a decision-making situation – have been shown to influence financial decisions ranging from food purchase to stock investment. Yet little is known about name-based heuristics in the allocation of financial resources to entrepreneurial initiatives. We analyse 1308 resource allocation decisions made by 109 senior managers in an experiment in which we vary subsidiary country and subsidiary manager names. We find that psychic distance to the subsidiary country is negatively related to resource allocation when subsidiary managers' names express a potential expatriate status. In contrast, this relationship is positive when subsidiary managers' names express a potential local status. We contextualize our results by interviewing senior managers and discuss how reliance on name-based heuristics to infer the context of an initiative or the interests and competences of subsidiary managers can lead to biased decisions.

**Keywords:** corporate entrepreneurship, headquarters-subsidiary relations, heuristics in decision-making, internal resource allocation, psychic distance

## INTRODUCTION

Multinational corporations (MNCs) must leverage their exposure to many markets and institutional contexts to create competitive advantages (Rugman and Verbeke, 2001). Of special importance are the entrepreneurial activities initiated in foreign subsidiaries, which

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may create substantial value not only for the initiating subsidiaries, but also for the entire corporation (Birkinshaw et al., 1998). Such subsidiary initiatives emerge locally and may receive commitment and resources at later stages from headquarters (Birkinshaw, 1997). Thus, the allocation of financial resources by senior headquarters managers is a crucial step toward the realization of subsidiary initiatives (Birkinshaw, 1997; Bower, 1970; Strutzenberger and Ambos, 2014).

The allocation of financial resources to subsidiary initiatives is characterized by a high degree of uncertainty, which senior headquarters managers are forced to deal with (Schmid et al., 2014; Strutzenberger and Ambos, 2014). Indeed, it is difficult for senior headquarters managers to access and assess relevant contextual information (e.g., local requirements and constraints) as well as to understand the interests and competences of subsidiary managers leading the initiatives (Eisenhardt, 1989; Filatotchev and Wright, 2011; Hendry, 2002; Kostova et al., 2018). That is, while interested in funding promising initiatives, senior headquarters managers fear potential ‘agency problems’ (Arrow, 1985; Fama and Jensen, 1983) such as those in which subsidiary managers pursue initiatives in ways that are not aligned with headquarters’ interests or in which subsidiary managers are not competent enough to manage these initiatives effectively and efficiently (Hendry, 2002; Kostova et al., 2018).

Due to the uncertainty, senior managers are likely to use heuristics (i.e., cognitive shortcuts) in their decision-making (Newell and Simon, 1972; Tversky and Kahneman, 1974). In this paper we focus on *name-based* heuristics, which we define as cognitive shortcuts that managers take based on names associated with a decision-making situation (e.g., country names, manager names). Name-based heuristics have been shown to influence a range of financial decisions such as food purchase, hiring, and stock investments (e.g., Bertrand and Mullainathan, 2004; Bursell, 2014; Fryer Jr and Levitt, 2004; Irmak et al., 2011; Itzkowitz et al., 2016; McGinnity and Lunn, 2011). Despite the influence of name-based heuristics on financial decisions, to our knowledge, they have not been considered in the study of financial resources allocation to entrepreneurial initiatives in subsidiaries of multinational corporations (Guercini and Milanese, 2020).

Two particular types of name-based heuristics are important in the context of entrepreneurial initiatives in multinational corporations. First, senior headquarters managers may rely on the subsidiary country name to derive psychic distance. Psychic distance relates to perceptions of the factors (e.g., cultural, economic, and political) that constrain the flow and interpretation of information between countries (Håkanson and Ambos, 2010). High psychic distance can lead to frictions (Luo and Shenkar, 2011), likely increases agency problems (Hoenen and Kostova, 2015; Kostova et al., 2018), and often reduces investment intensity (Blomkvist and Drogendijk, 2013; Schotter and Beamish, 2013).

Second, senior headquarters managers are likely seeking heuristic cues about both the interests and the competences of subsidiary managers championing the initiatives. Subsidiary managers’ interests and competences shape agency problems and are very difficult to measure and evaluate (Hendry, 2002; Kostova et al., 2018). One important cue in that regard is whether the individual championing the initiative is a local or an expatriate manager (Fang et al., 2010; Meyer et al., 2020; Plourde et al., 2014). As Meyer et al. (2020, p. 557) note, ‘Expatriates play an essential role in the governance of subsidiaries by developing strategies, exercising social control,

facilitating the exchange of information and leading daily operations [...] They thus potentially contribute to subsidiaries in multiple ways, including accessing knowledge, gaining HQ attention, and enhancing long-term performance'. In our study we seek to understand the influence of name-based heuristics related to the subsidiary as well as the manager championing the initiatives and we ask: how do name-based heuristics influence the allocation of financial resources by senior headquarters managers to subsidiary initiatives?

We conducted an experimental vignette study on 1308 investment decisions made by 109 senior managers from 35 countries. The experimental design allows us to precisely manipulate our key variables – the subsidiary's country name (providing cues for potentially close or distant countries) and the name of the subsidiary manager seeking resources (name typical of the subsidiary's country or of the headquarters' country, providing cues for potential expatriate or local status) – while strictly controlling for other relevant aspects or even holding them constant. This would be very challenging with other methods. We complemented the experiment with interviews with senior managers who have considerable experience with international resource allocation processes. These interviews helped us contextualize our experimental results, substantiate our theoretical mechanisms, and discuss implications for practice.

Overall our study shows that, contrary to our expectations, initiatives stemming from subsidiaries in countries perceived as distant to headquarters are, on average, not allocated fewer financial resources than those stemming from subsidiaries perceived as close. Nevertheless, despite the fact that all initiatives are equal in terms of expected outcomes, increasing psychic distance to the subsidiary country leads to fewer allocated resources when subsidiary manager name-based cues allude to an expatriate status. In contrast, increasing psychic distance to the subsidiary country leads to more allocated resources when subsidiary manager name-based cues allude to a local status.

This study makes several contributions to our understanding of heuristics and biases of senior managers. We extend our comprehension of processes at play when senior managers allocate financial resources to entrepreneurial initiatives in multinational corporations (Birkinshaw, 1997; Dellestrand and Kappen, 2012; Strutzenberger and Ambos, 2014; Williams and Lee, 2009). More precisely, we show how senior managers use subsidiary country and subsidiary manager names to infer which initiatives should be allocated more resources. Interestingly, following agency theory (Hendry, 2002; Kostova et al., 2018), we may think that initiatives from countries perceived as distant are associated with more asymmetric information and a greater likelihood of agency problems, which in turn should lead to lower resources allocation. Yet our study shows that the effect of psychic distance on resource allocation is contingent upon other name-based perceptions related to the subsidiary manager championing the initiatives. Senior headquarters managers have confidence in expatriates to engage in ways aligned with the interests of headquarters. However, as psychic distance to subsidiaries increases, intimate knowledge about local markets becomes more important, which expatriates are deemed to have difficulty accessing and assessing. Increased psychic distance seems to benefit local managers because they are credited with more competences to lead and implement the initiatives, which effectively reduces the perceived likelihood of agency problems due to incompetence (Hendry, 2002).

Furthermore, we extend the literature on heuristics and biases in management (Bingham and Eisenhardt, 2011, 2014; Vuori and Vuori, 2014) by introducing important, yet neglected, heuristics to the study of managerial decision-making: name-based heuristics. We highlight that biases may emerge from name-based heuristics. Indeed, relying on manager name as surrogate for alignment with headquarters or for competences to effectively lead an initiative in a specific context is dangerous. Subsidiary managers may have names that are not typical in a given host country although they are very well aware of local constraints and requirements. Subsidiary managers may also not be aligned with the interests of headquarters despite being expatriate managers. Similarly, psychic distance derived from country name may be a poor indicator for future success of a subsidiary initiative because perceptions of distance can deviate from actual distance. Importantly, name-based heuristics and their consequent biases create the risk of a self-fulfilling prophecy in the sense that some initiatives become systematically underfunded and, therefore, less successful. In turn, this will strengthen the belief among decision-makers that such initiatives are not worth the investments.

## LITERATURE BACKGROUND

### Subsidiary Initiatives and Uncertainty

Subsidiary initiatives, i.e., entrepreneurial undertakings that advance new ways to use or expand resources, are an important feature of dispersed corporate entrepreneurship in multinational corporations, and represent important sources of strategic renewal and competitive advantage (Birkinshaw, 1999; Birkinshaw et al., 1998; Verbeke et al., 2007). Subsidiary initiatives typically follow a process that starts with the identification of an opportunity (Shane and Venkataraman, 2000). Following the identification of opportunities, subsidiary managers often have to ensure that they receive approval and resources from headquarters (Birkinshaw, 1997) because such initiatives are seldom planned or budgeted beforehand (Birkinshaw and Ridderstråle, 1999; Schmid et al., 2014). From the perspective of senior headquarters managers, however, allocating resources to entrepreneurial projects in an optimal way is far from trivial as there are many uncertainties (Busenbark et al., 2017; Dellestrand and Kappen, 2012; Schmid et al., 2014).<sup>1</sup>

The diversity in knowledge, culture, and geography that enables multinational firms to reap returns on innovation and develop innovative capabilities is indeed also what complicates the governance of entrepreneurial processes (Asmussen et al., 2019; Birkinshaw, 1997; Birkinshaw et al., 1998; Meyer et al., 2011). When deciding which initiatives to support, senior managers at headquarters face uncertainty regarding the context of the initiatives (Mahnke et al., 2007). It is challenging for senior headquarters managers to understand the local environment well enough to assess whether an initiative fits with local requirements (e.g., customer needs) and constraints (e.g., regulations).

Moreover, senior managers at headquarters face uncertainty regarding the interests and competences of the subsidiary managers leading the initiatives (Filatotchev and Wright, 2011; Kostova et al., 2018). Subsidiary manager self-interest and incompetence

have been identified as two behavioural root causes of agency problems (Hendry, 2002; Kostova et al., 2018). Because of self-interest, subsidiary managers may lead initiatives in ways that are not aligned with the interests of the headquarters (e.g., when subsidiary managers engage in ‘empire building’) (Ambos et al., 2010). Due to bounded rationality and barriers to fast upgrading, the competences of subsidiary managers may not suffice to lead a specific initiative effectively and efficiently (Hendry, 2002; Kostova et al., 2018). Yet it is challenging for senior headquarters managers to identify whether an initiative will be competently pursued and leveraged to the rest of the firm, the latter requiring substantial knowledge sharing activities (Ambos et al., 2006; Hansen, 2002; Szulanski, 1996).

### **Heuristics in the Allocation of Resources to Subsidiary Initiatives**

We emphasized from the outset that senior headquarters managers who allocate financial resources are interested in maximizing returns for their firms and in avoiding agency problems. In situations of high uncertainty such as entrepreneurial initiatives by subsidiaries, i.e., when information, time, or processing capabilities are limited, managers will search for ways to make effective decisions (Chandra, 2017; Guercini and Milanese, 2020; Zahra et al., 2005). Therefore, managers will often rely on heuristics, i.e., ‘methods for arriving at satisfactory solutions with modest amounts of computation’ (Simon, 1990, p. 11). In other words, managers may focus on what they consider important cues or pieces of information (instead of analysing all information and alternatives) to reach a decision with less effort (Shah and Oppenheimer, 2008). Cues might provide information about a situation (Volk et al., 2014) or signal an underlying trait of an interaction partner (Evans and Krueger, 2011) and eventually help decision makers arrive at a judgement.

Heuristics can be valuable tools for effective decision-making (Bingham and Eisenhardt, 2011; Gigerenzer, 2016; Katsikopoulos and Gigerenzer, 2013), especially idiosyncratic heuristics that have been developed for a specific decision-making situation and that are consciously employed (Bingham and Eisenhardt, 2014). Yet heuristics can also be a source of bias and error (Tversky and Kahneman, 1974; Vuori and Vuori, 2014), especially universal heuristics that are used automatically and unconsciously (Bingham and Eisenhardt, 2014).

An important type of universal and automatic heuristics which has received considerable attention regarding its influence on financial decisions are name-based heuristics (e.g., Bertrand and Mullainathan, 2004; Bursell, 2014; Fryer Jr and Levitt, 2004; McGinnity and Lunn, 2011). Name-based heuristics are cognitive shortcuts based on names associated with a decision-making situation. For example, Bertrand and Mullainathan (2004) studied hiring decisions and showed significant discrimination against African-American names. Green and Jame (2013) studied the fluency of company names (i.e., length, ease of pronunciation, word familiarity) and found that it influences investors’ decisions and eventually firm value. In another study on name-based heuristics, Cooper et al. (2005) found that investors are irrationally influenced by purely cosmetic mutual funds name changes. Irmak et al. (2011) also found that consumers use name-based heuristics to evaluate products and make purchasing decisions.

While name-based heuristics and their consequences for various financial decisions have received attention in fields ranging from economics to marketing, little is known about the

reliance and consequences of name-based heuristics in management in general and international business in particular (Guercini and Milanese, 2020). We know even less about name-based heuristics that senior managers use when making international resource allocation decisions. Nevertheless, we submit that in an effort to deal with uncertainty of outcomes and agency problems, senior headquarters managers do indeed respond to name-based heuristic cues regarding the subsidiaries and the individuals leading the initiatives.

First, senior managers at headquarters may rely on subsidiary country names to assess how distant the subsidiary's country is to headquarters. Although cross-country distance is one of the most important concepts in IB (Beugelsdijk et al., 2018), it has rarely been linked to resource allocation to subsidiary initiatives. In a few instances aggregated distance measures at the country-level have been used (e.g., Dellestrand and Kappen, 2012; Miao et al., 2016). However, the original individual-level concept of psychic distance – defined as ‘the subjectively perceived distance to a given foreign country’ (Håkanson and Ambos, 2010, p. 196) – has received much less research attention in general (Cerar et al., 2021) (see Baack et al., 2015; Dow et al., 2020; Safari and Chetty, 2019 for recent exceptions) and is neglected in research on subsidiary initiatives. The lack of attention on (name-based) cues from which managers derive perceptions of distance and the consequences thereof is important because individual distance perceptions may diverge substantially from aggregated measures of distance (Magnani et al., 2018; Yildiz and Fey, 2016). Aggregated measures of distance are in fact, at best, stimuli to individual distance perceptions (Dow and Karunaratna, 2006). They might also interact with other perceptions, thereby aggravating or alleviating potential biases.

Second, senior headquarters managers might also pay attention to name-based cues about the individuals championing subsidiary initiatives, which may help assess their interests and competences (Mahnke et al., 2007). One of the most important individual characteristics in that regard is whether the name of the individual championing the initiative alludes to a local or an expatriate manager status (Fang et al., 2010; Meyer et al., 2020; Plourde et al., 2014). As Meyer et al. (2020, p. 557) note, ‘Expatriates play an essential role in the governance of subsidiaries by developing strategies, exercising social control, facilitating the exchange of information and leading daily operations [...] They thus potentially contribute to subsidiaries in multiple ways, including accessing knowledge, gaining HQ attention, and enhancing long-term performance’. In our study we seek to understand the influence of name-based heuristic cues related to the subsidiary as well as the individual championing the initiatives and we ask: how do name-based heuristics influence the allocation of financial resources by senior headquarters managers to subsidiary initiatives?

## HYPOTHESIS DEVELOPMENT

### **Psychic Distance and the Allocation of Financial Resources to Subsidiary Initiatives**

In this hypothesis, we argue that senior managers at headquarters will react negatively to subsidiary country name-based cues when these give them the impression that initiatives are taking place in countries they perceive as distant from headquarters. When senior



headquarters managers perceive subsidiaries as located in countries that are distant, they also perceive information asymmetry to be greater (Belenzon et al., 2019; Håkanson and Ambos, 2010). Indeed, as psychic distance increases, it is more difficult to access and assess information on local activities (Gong, 2003). The difficulty to understand local constraints and requirements, as well as local actions and performance, increases fear of agency problems (Hoenen and Kostova, 2015; Kostova et al., 2018). Senior headquarters managers may fear self-interested actions of various local stakeholders whose actions cannot be monitored because senior headquarters managers have difficulty understanding them and how they relate to potential outcomes. Thereby, in an effort to mitigate actions that are not aligned with the interests of headquarters, senior headquarters managers are more likely to refrain from committing to initiatives in subsidiaries they perceive as distant.

In addition, information asymmetry also increases uncertainty regarding whether subsidiary initiatives will be pursued competently. Yet we know that decision-makers tend to focus on adverse scenarios when they assess unfamiliar situations (Cao et al., 2011; Williams and Grégoire, 2015). In other words, senior headquarters managers will focus their attention on things that could go wrong regarding a particular initiative instead of objectively balancing positive and negative aspects. For example, senior headquarters managers will be more likely to think that the subsidiaries do not have the competencies to address potential risks related to the initiative. This should also reduce the allocation of financial resources to initiatives emerging from subsidiaries located in countries perceived as further away. More formally, our baseline hypothesis reads as follows:

*Hypothesis 1:* Subsidiary initiatives stemming from countries perceived as distant by senior headquarters managers will be allocated fewer resources than initiatives stemming from countries perceived as close.

### **Expatriate or Local Status of Subsidiary Manager Championing Initiatives and the Allocation of Financial Resources to Subsidiary Initiatives**

MNCs assign expatriates to foreign subsidiaries in order to manage knowledge transfer, as well as to coordinate and control, and eventually reduce concerns about agency problems (Belderbos and Heijltjes, 2005; Boyacigiller, 1990; Edström and Galbraith, 1977; Tan and Mahoney, 2006). Given their experience with corporate routines, expatriates appear trusted by headquarters to create a necessary common frame of reference between headquarters and subsidiaries. This common frame of reference helps build absorptive capacity and facilitates the transfer, recombination, and creation of knowledge in foreign subsidiaries (Belderbos and Heijltjes, 2005). In addition, expatriates are used by MNCs 'to promote and uphold strategic objectives, preserve consistency of norms, implement headquarters policies, reduce risk, and prevent costly duplication and misalignment' (Brock et al., 2008, p. 1294). In sum, managers at headquarters appear to count on expatriates to conduct activities effectively as well as ensure that consistency is maintained across the company.

The arguments explaining expatriate staffing help us hypothesize on the relationship between a name-based cue that signals expatriate or local status of the subsidiary manager championing initiatives and the related allocation of financial resources by senior headquarters managers. Indeed, there is evidence that growth opportunities such as subsidiary initiatives receive more attention from headquarters if these opportunities are championed by expatriates (Plourde et al., 2014). Not only should these opportunities attract more attention, we argue that headquarters will also favour such opportunities compared to other ones championed by local managers. First, senior managers at headquarters are more inclined to think that opportunities championed by expatriates will be aligned with the corporate interests. Expatriates combine a perceived stronger commitment to corporate strategy (Black and Gregersen, 1992; Kobrin, 1988) with strong ties to headquarters through personal connections and cultural identification (Manev and Stevenson, 2001). Expatriates should thereby be less feared to engage in self-interested actions when they pursue subsidiary initiatives.

Second, senior headquarters managers should also have greater confidence in the competences of expatriates. A review of extensive expatriation research shows that ‘technical competence is perhaps the most critical expatriate selection criterion’ (Ott and Michailova, 2016, p. 10). Along the same lines, analyses of personality traits show that conscientiousness is the most important factor in expatriate selection decisions (Ones and Viswesvaran, 1999). Therefore, we expect fear of incompetence (e.g., strategic errors) (Kostova et al., 2018) to be reduced when name-based cues express a potential expatriate status of the subsidiary manager championing the initiative.

Overall, expatriates will be perceived as championing initiatives that will be managed in ways aligned with the interests of headquarters as well as managed competently. As a result, the assessment of their initiatives by senior managers at headquarters should be more favourable compared to initiatives championed by local managers. More formally:

*Hypothesis 2:* Subsidiary initiatives championed by managers who appear to be expatriates will be allocated more financial resources by senior headquarters managers than initiatives championed by managers who appear to be local managers.

### **Psychic Distance, Expatriate or Local Status of Subsidiary Manager Championing Initiatives and the Allocation of Financial Resources to Subsidiary Initiatives**

As psychic distance increases it becomes more difficult for senior headquarters managers to obtain complete and accurate information about the subsidiary’s environment, actions, and consequences thereof (Beugelsdijk et al., 2017; Gong, 2003). Such information asymmetry increases fear of agency problems (i.e., self-interested behaviours and incompetence) (Hendry, 2002; Hoenen and Kostova, 2015; Kostova et al., 2018) and therefore the need for senior managers at headquarters to control and coordinate subsidiary activities (Boyacigiller, 1990). Because they have internalized the company’s values (Kobrin, 1988), expatriates are an appropriate social control mechanism, especially when uncertainty about subsidiary activities is high (Moore, 2006). As Gong (2003) explains, in distant environments



where uncertainty is high, senior managers at headquarters can hardly rely on output or behavioural control mechanisms, because these either shift risks entirely to the subsidiary (in case of output control) or constrains subsidiary discretion in responding to local conditions (in case of behavioural control). Thereby, in subsidiaries perceived as distant, senior headquarters managers rely on expatriates to reduce uncertainty related to the alignment of subsidiary activities with the interests of headquarters as well as to reduce uncertainty related to the potential of subsidiary activities to be conducted competently (Gaur et al., 2007; Gong, 2003).

Senior headquarters managers engaged in allocating financial resources to subsidiary initiatives taking place in countries they perceive as distant should be less knowledgeable about the potential and limitations of these initiatives. Thereby, senior headquarters managers may employ heuristics that help them reduce distance-related uncertainty, such as trying to identify whether the subsidiary manager championing the focal initiative is an expatriate or a local manager. By reducing concerns for senior headquarters managers regarding agency problems, expatriate managers can modify perceptions of opportunities in a local market (Plourde et al., 2014). In other words, the uncertainty-increasing effect of psychic distance to a subsidiary country should be less salient when name-based cues express that the initiatives are championed by a subsidiary manager who is an expatriate.

*Hypothesis 3:* The relationship between psychic distance to the subsidiary country where initiatives emerge and the allocation of financial resources to these initiatives will be less negative when initiatives are championed by managers who appear to be expatriates.

## METHODS

We conducted a vignette experiment with senior managers. As Sengul and colleagues note, 'Experimental studies are another promising methodological approach to flesh out different causal mechanisms in capital allocation' (Sengul et al., 2019, p. 70). In fact, experiments remain the gold standard for establishing cause and effect relationships because randomization accounts for unmeasured variables and alternative explanations (Bolinger et al., 2021; Hill et al., 2021). In our case, such an experiment help isolate the effects of interest (i.e., name-based heuristics relating to the subsidiary country and the championing subsidiary managers), while keeping other characteristics constant, which is very challenging to do with other methods. Moreover, an experiment allows the collection of data on resource allocation to initiatives regardless of the final decisions to allocate resources and pursue the focal initiatives, thereby overcoming survival bias.

### Vignette Experiment

*Design of the experiment.* We conducted a vignette experiment with 109 senior managers (40 women, 69 men) recruited from executive education programs in Vienna, Austria and Rotterdam, the Netherlands. The average participant was 34 years old ( $SD_{age} = 4.7$ ) with slightly more than 10 years of full-time work experience ( $SD_{FTexp} = 5.0$ ) and 3 years of experience abroad ( $SD_{IntExp} = 4.5$ ). The majority of participants had spent at least one year working abroad (58 per cent). These descriptive statistics are in line

with the number of years of work experience required for senior manager positions on the most visited Austrian and Dutch job search websites (e.g., on the StepStone website the requirements are either five or several years of previous business experience). Most participants held job titles such as *CEO*, *COO*, *Chief Marketing Officer*, *Director of Investment*, *Head of Controlling*, *Head of Strategy*, *Head of R&D*, *Head of Finance*, *Investment Manager*, *Group Head*, *General Manager*, *Managing Director*, *Commercial Director*, *Director*, *Regional Manager*, *Country Director*, *Business Development Executive*, *Business Development Manager*, *Department Head*, *Plant Manager*, and *Senior Manager*. Participants of 35 different nationalities took part in this experiment. Our sampling approach follows best practice recommendations for experimental vignette studies to ‘match the sample to the larger population of interest’ (Aguinis and Bradley, 2014, p. 363). Selecting participants with this profile was important to ensure that participants could reasonably comprehend the decision-making role assigned in the experiment. Moreover, the sample characteristics compare favourably to current best practices for studies about decision making or heuristics with experimental subjects.<sup>2</sup> The experiment was computerized, and we used the program jtree, a JavaScript toolbox, to develop it.

Participants were told that they would assume the role of a Business Development Manager in the headquarters of a fictitious aerospace company. The headquarters manager’s role was to allocate financial resources to proposals of entrepreneurial initiatives emanating from their subsidiaries. Experiment sessions were conducted in November 2018 in Vienna and in January 2019 in Rotterdam. In line with these two locations, it was made clear to the participants that the company’s headquarters was located in Vienna or Rotterdam, respectively. We presented 12 different project proposals to the participants in the form of consecutive emails from the company’s subsidiaries. This design is in line with best practice recommendations regarding the minimum number of vignettes to use (Aguinis and Bradley, 2014). Moreover, the use of an actual Outlook email presentation for the vignettes enhanced the participants’ subjective experience of being immersed in the situation described in the vignette (Aguinis and Bradley, 2014). Importantly, we asked academics as well as practitioners to assess the experimental setup (e.g., using an email format) and the experimental vignettes (e.g., description of entrepreneurial initiatives). The assessments make us confident that face validity is not a major source of concern.

The company’s subsidiaries were located in six different countries. These six countries were selected with the idea of having three pairs – France and Qatar; Czech Republic and UAE; Moldova and Burkina Faso. The countries making up a pair have extremely similar levels of country risk within pairs, while being different across pairs. Country risk was measured using the ICRG composite scores and the pair characteristics were validated for using the scores of the three subcategories (political, financial, and economic risk). This risk measure is widely used by both practitioners and academics (Doh et al., 2009). At the same time these countries were culturally very different, making it very likely that these cues would generate substantial psychic distance differences between them. In fact, the pairs showed substantial cross-country cultural distance according to common measures of culture.<sup>3</sup>

We set up the rest of the experiment to mimic corporate processes of financial resources allocation, obviously with some simplifications. The emails that participants received contained information about the risk and return probabilities of the proposal, which were presented as having been assessed by a risk evaluation team at headquarters. Two proposals from each subsidiary were presented to the participants – one framed as a ‘low risk’ proposal and the other as a ‘high risk’ one (Tversky and Kahneman, 1981). Six chosen texts were always assigned as ‘high risk’ and six other texts always as ‘low risk’, but they were randomly assigned to different subsidiaries. In high risk proposals, participants had a 75 per cent chance of losing their investment and a 25 per cent chance of realizing five times their investment. In low risk proposals participants had a 25 per cent chance of losing their investment and a 75 per cent chance of earning 1.66 times their investment. This means that the expected return was the same across both high risk and low risk proposals.

Participants were divided randomly into two groups. One group always received proposals from a subsidiary manager with a local last name typical for the country of the subsidiary (‘Dubois’ for France, ‘Mohammed’ for Qatar, ‘Novotný’ for Czech Republic, ‘Hussain’ for UAE, ‘Rusu’ for Moldova, and ‘Ouedraogo’ for Burkina Faso). The other group always received the proposal email signed by a manager with a last name typical for the country of headquarters (Pichler, Huber, Gruber, Hofer, Bauer, and Wagner for Austria; De Jong, Jansen, De Vries, Van den Berg, Van Dijk, and Bakker for the Netherlands). These last names were chosen based on data from Forebears.io, a geographically indexed and cross-referenced directory of sources for family history research. Instead of first names, initials (A-F alphabetically in the order of the appearance of the proposals) were used in order to avoid a potential gender bias. Similar approaches have commonly been used in experimental studies (e.g., Bertrand and Mullainathan, 2004; Edelman et al., 2017).

For each of the proposals, participants had to decide within 60 seconds how much money they wanted to invest in each project. We chose this time frame because we wished to trigger the use of managers’ intuition, which participants are more likely to rely on under time pressure (Dijker and Koomen, 1996). As a way of ensuring that participants respected this time frame, if they did not make their investment decision within 60 seconds their investment was automatically registered as 0. Participants were made clearly aware of this in advance. They also could not go back to reconsider their investment after they moved to another project proposal, thereby keeping the investment decisions independent of each other.

The maximum investment per project was 100,000 electronic currency units (ECU) and participants could keep the money that they had not invested. This means that a decision to save the money effectively does not generate any returns or losses, maintaining a risk-free status quo. Participants could not spend more than 100,000 ECU on any one project even if they ‘saved’ money from previous project proposals. To incentivize participants to invest in the most effective way, participants could win up to EUR 400 in cash. They were informed very transparently about this potential personal gain upfront. In addition, all participants received a voucher of EUR 5 as a show-up fee.

The return of each project was randomly generated, taking the risk profile of the project into account. Participants were not informed about their payoffs for individual

projects during the experiment to avoid learning effects or certain expectations that may bias the results. After the final proposal decision, the researcher team informed the participants about the final total payoff. The final payoff was calculated as the sum of the 12 project payoffs plus the money saved. At the end, nine participants were randomly chosen to receive the amount of real money, corresponding to their total returns in the experiment (1 EUR = 10,000 ECU). This approach was chosen in order to sustain the motivation of all participants until the end, as they all had a chance to win the money using the strategy that they deemed to be the most appropriate, and not necessarily the most aggressive one. The number of winners was decided based on the funds available for the award. The average pay-off among participants randomly chosen was 135 EUR (minimum 112 EUR and maximum 160 EUR).

After the decision-making for 12 initiative proposals, participants were asked to fill in a questionnaire. The questionnaire consisted of three parts: assessments of the individual risk propensity, psychic distance perceptions, and demographics (see the Measures section below).

*Measures.* We measured our dependent variable ‘*Investment into subsidiary initiatives*’ as the amount that participants invested in the initiatives. The amount invested per initiative ranged between 0 and 100,000 electronic currency units (ECU). We chose this currency because participants came from different countries, where they were used to using different currencies. The average investment per proposal was 47,971 ECU (minimum 0; maximum 100,000; standard deviation 38,885).

In terms of independent variables, we used established measures. *Investor’s psychic distance to subsidiary country.* Following Håkanson and Ambos (2010), we measured psychic distance to the subsidiary country as the extent to which participants perceived countries from which proposals came to be close or distant from their country of origin. The scale ranged from 0 (least distant) to 100 (most distant). Psychic distance was defined as the sum of factors (such as culture, language, political system, education, colonial ties, current and historical political rivalry, etc.) that affected flow and interpretation of information to and from a foreign country (Håkanson and Ambos, 2010). After the experiment, participants were asked to first reveal their country of origin and then to give a score of up to 100 for the other countries on a slider-button (100 being the score of the furthest country in terms of psychic distance). When their home country was already on the list, they were asked to choose the value ‘0’. For countries judged to be of equal distance, participants were asked to assign the same score. Additionally, in case participants perceived themselves to belong equally to two different cultures (e.g., born and grew up in one country but raised with a family and values from another country), participants were asked to also indicate their second country of origin.

*Expatriate cue.* This dummy variable takes the value of 1 if the subsidiary manager sending a proposal had a name typical for the headquarters location (Austria or the Netherlands) and therefore is likely to be perceived as being an expatriate.

We controlled for many additional factors that might influence our dependent variable. *Investor’s psychic distance to HQ country* presents the extent to which the participant perceived the country of headquarters to be close or distant, in terms of psychic

distance, from their country of origin. The scales and definition were the same as in the case with psychic distance to a subsidiary country (Håkanson and Ambos, 2010). To measure *Investor's risk aversion*, we used a scale adapted from Meertens and Lion (2008). Items included 'I prefer to avoid risk', 'I take risk regularly', and 'I view myself as a risk taker'. Cronbach's alpha was 0.72 and we used the factor score in our analyses. Other control variables for investors include the natural logarithms of the investor's number of years of *business experience* and the natural logarithm of the investor's *number of years spent abroad*. Furthermore, we include dummies for investor's *gender* (1 = male), for investor being *CEOs* (15 of our participants), and being *Heads of Unit* (25 participants), indicating the current position of the participants. The binary variable *high risk proposal* takes the value 1 for high risk and value 0 for low risk proposals (Tversky and Kahneman, 1981). We additionally included other proposal controls, such as its *order of appearance* and two proposal type dummies. The dummy variable '*proposals type: new product*' was rated as 1 when the proposal's texts related to the developments of new products. The dummy variable '*proposal type: product improvement*' was rated as 1 when the proposal's text related to the improvement of current products. Each participant received one of each proposal texts in a random order and with a random choice of subsidiary country from which the proposal emerged. The data for the variable *Geographic distance from HQ to subsidiary country (log)* was gathered from the website <http://www.mapcrow.info> and is measured as log-transformed geographic distance measure as compiled by Berry et al. (2010). *Country risk difference between investor's country of origin and subsidiary country* (Elango et al., 2013) was measured using the International Country Risk Guide (ICRG) rating composite country score, ranging from 0 to 100. It comprises 22 variables in three subcategories of risk: political, financial, and economic. A separate index is created for each of the subcategories and the correlation among them and the country score was above 0.8 for each of them (the highest for political risk of 0.98). The Political Risk index is based on 100 points, Financial Risk on 50 points, and Economic Risk on 50 points. The total points from the three indices are divided by two to produce the weights for inclusion in the composite country risk score. *Country risk difference between HQ country and subsidiary country* is also based on the ICRG scores and the same methodology was followed as for the previous variable. Finally, we include a dummy for the *experiment location*, taking the value of 1 if the experiment was conducted in Vienna (Rotterdam = 0).

**Results.** Table I presents the descriptive statistics (mean and standard deviation) and the correlation matrix is presented in Table II. The moderate to low correlation values across most independent variables and all variance inflation factors being below 5 in all specifications (mean VIF = 1.50) suggest that multicollinearity was not an issue.

We treat investment decisions as independent observations nested within each participant. Therefore, we run our analyses at the investment decision level, i.e., we operate with 1308 observations nested within 109 managers. We ran a likelihood ratio (LR) test for the null hypothesis that there is no cross-participant variation in the investment into subsidiary proposals in order to check whether we need a multilevel analysis. The LR test compares the fit of the random effect ANOVA to the model of an OLS regression with a constant only. The p-value is 0.000, which is evidence of cross-participant

Table I. Mean and standard deviation (SD)

<i>Variable</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>SD</i>
1. Investment into subsidiary initiatives	0	100,000	48087.94	38974.67
2. Investor's psychic distance to subsidiary country	0	100	58.91	30.78
3. Expatriate cue (0 = Name typical of subsidiary country, 1 = Name typical of HQ country)	0	1	0.51	0.50
4. Investor's psychic distance to HQ country	0	100	52.78	31.20
5. Investor's risk aversion	-1.99	2.36	-0.05	0.79
6. Investor's business experience (log of #years)	1.39	3.22	2.33	0.44
7. Investor's international experience (log #years spent abroad)	0	3.14	0.89	0.94
8. Investor is male (0 = Female, 1 = Male)	0	1	0.63	0.48
9. Investor is CEO (0 = Other position, 1 = CEO)	0	1	0.13	0.33
10. Investor is Head of Unit (0 = Other position, 1 = Head of Unit)	0	1	0.21	0.41
11. High risk proposal (0 = Low risk, 1 = High risk)	0	1	0.5	0.5
12. Proposal order of appearance	1	12	6.5	3.45
13. Proposal type: new product (0 = Other type, 1 = New product)	0	1	0.25	0.43
14. Proposal type: product improvement (0 = Other type, 1 = Product improvement)	0	1	0.25	0.43
15. Geographic distance from HQ to subsidiary country (log of #km)	0	9.58	8.16	1.07
16. Country risk difference between investor's country of origin and subsidiary country	-21.42	21.08	0.35	8.55
17. Country risk difference between HQ country and subsidiary country	0.54	19.56	9.26	6.61
18. Experiment location (0 = Rotterdam, 1 = Vienna)	0	1	0.60	0.49

variation and suggests the use of multilevel analysis with random intercepts (Aguinis and Bradley, 2014).

We ran three models and a series of robustness checks. Our regression results are presented in Table III. Model 1 includes only the control variables. Model 2 includes the direct effects of psychic distance to subsidiary countries and the expatriate cue. Finally, our full model (Model 3) includes the interaction between psychic distance and the expatriate cue.

First, regarding the relationship between psychic distance to subsidiary country and investment into proposals coming from these subsidiaries, we found that psychic distance was not significantly related to the amount invested (see Model 3 in Table III;  $\beta = 175.28$ ;  $p = 0.13$ ). Second, related to our second hypothesis, the *simple effect* of 'expatriate cue' is positive and significant (see the coefficient of expatriate cue in Model 3 in Table III;  $\beta = 19,006.08$ ;  $p = 0.01$ ), which suggests that proposals with an expatriate



Table II. Correlation table

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Investment into subsidiary initiatives	1																	
2. Investor's psychic distance to subsidiary country	-0.04	1																
3. Expatriate cue	0.06*	-0.07*	1															
4. Investor's psychic distance to HQ country	-0.07*	0.59***	-0.26***	1														
5. Investor's risk aversion	0.07*	0.03	0.04	0.02	1													
6. Investor's business experience (log of #years)	0.06*	-0.03	-0.03	-0.13***	0.11***	1												
7. Investor's international experience (log #years spent abroad)	-0.06*	-0.06*	0.08**	-0.11***	-0.09**	0.11***	1											
8. Investor is male (dummy)	0.12***	0.04	0.10***	-0.01	-0.09**	0.01	-0.01	1										
9. Investor is CEO (dummy)	0.03	-0.01	-0.07*	0.10***	-0.03	0.07**	-0.16***	0.01	1									
10. Investor is Head of Unit (dummy)	0.03	0.07*	-0.04	0.03	0.04	0.10***	-0.05	-0.02	-0.20***	1								
11. High risk proposal (dummy)	-0.15***	0.03	0.00	0.03	0	0	0	0	0	-0	1							
12. Proposal order of appearance	0.13***	0.02	0.00	0.03	0	0	0	0	0	-0	-0.01	1						
13. Proposal type: new product (dummy)	-0.04	0.03	0.00	0.04	0	0	0	0	0	0	0.46***	0.01	1					
14. Proposal type: product improvement (dummy)	0.05	0.03	0.00	0.02	0	0	0	0	0	0	0.13***	0.01	0.11***	1				

(Continues)

Table II. (Continued)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
15. Geographic distance from HQ to subsidiary country (log)	-0.04	0.41***	-0.03	0.34***	-0.06*	-0.28***	-0.10***	-0.04	-0.04	-0.09***	0.00	0.03	0.01	0.03	1			
16. Country risk difference between investor's country of origin and subsidiary country	0.04	0.08**	0.11***	-0.03	0.09***	-0.12***	0.02	-0.01	-0.06*	-0.03	-0.01	0.02	0.03	0.04	-0.02	1		
17. Country risk difference between HQ country and subsidiary country	0.04	0.07*	0.00	0.05	-0.01	-0.13***	-0.02	0.00	-0.03	-0.03	-0.01	0.03	0.04	0.05	0.13***	0.74***	1	
18. Experiment location (1 = Vienna)	0.07*	-0.05	-0.01	-0.20***	0.05	0.60***	0.10***	-0.00	0.15***	0.15***	0	0	0	0	-0.40***	-0.00	-0.21***	1

\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001.

Table III. Results of multilevel random intercept regressions (Dependent variable: investment into subsidiary initiatives)

Variables	Model 1		Model 2		Model 3	
	$\beta$ (SE)	<i>p</i> -value	$\beta$ (SE)	<i>p</i> -value	$\beta$ (SE)	<i>p</i> -value
H1: Investor's psychic distance to subsidiary country			-79.53 (47.29)	0.09	175.28 (115.88)	0.13
H2: Expatriate cue			4916.76 (4352.62)	0.26	19006.08** (7270.26)	0.01
H3: Expatriate cue $\times$ Psychic distance to subsidiary country					-287.08* (119.77)	0.02
Investor's psychic distance to HQ country	-21.20 (44.24)	0.63	42.53 (55.88)	0.45	-173.07 (105)	0.10
Investor's risk aversion	3375.12 (271.39)	0.21	3279.76 (2719.84)	0.23	3053.02 (2664.54)	0.25
Investor's business experience (log of #years)	1779.89 (6143.99)	0.77	2126.35 (6165.01)	0.73	1128.83 (6050.05)	0.85
Investor's international experience (log #years spent abroad)	-2495.11 (2298.48)	0.28	-2642.37 (2310.6)	0.25	-2827.46 (2263.46)	0.21
Investor is male (dummy)	10036.39* (4343.79)	0.02	9860.64* (4384.86)	0.03	9767.75* (4293.21)	0.02
Investor is a CEO (dummy)	1936.55 (6662.84)	0.77	1479.05 (6694.43)	0.83	4702.57 (6689.46)	0.48
Investor is a Head of Unit (dummy)	2118.99 (5361.35)	0.69	2437.95 (5378.73)	0.65	4250.09 (5319.91)	0.42
High risk proposal (dummy)	-12958.42*** (1991.86)	0.00	-12903.90*** (1988.49)	0.00	-12915.07*** (1987.64)	0.00

(Continues)

Table III. (Continued)

Variables	Model 1		Model 2		Model 3	
	$\beta$ (SE)	p-value	$\beta$ (SE)	p-value	$\beta$ (SE)	p-value
Proposal order of appearance (1 to 12)	1451.54*** (255.39)	0.00	1442.19*** (254.97)	0.00	1431.05*** (254.9)	0.00
Proposal type: new product (dummy)	2361.95 (2299.40)	0.30	2293.94 (2295.39)	0.32	2154.11 (2295.17)	0.35
Proposal type: product improvement (dummy)	5719.09** (2056.06)	0.01	5762.14** (2052.42)	0.01	5767.18** (2051.54)	0.01
Geographic distance from HQ to subsidiary country (log)	-467.64 (1182.95)	0.69	375.46 (1301.66)	0.77	365.33 (1297.21)	0.78
Country risk difference between investor's country of origin and subsidiary country	-30.81 (390.34)	0.94	-44.35 (397.51)	0.91	-39.65 (389.23)	0.92
Country risk difference between HQ country and subsidiary country	284.05 (413.94)	0.49	310.68 (420.19)	0.46	312.57 (412.34)	0.45
Experiment location (1 = Vienna)	4181.96 (5818.15)	0.47	5455.85 (5869.8)	0.35	2843.52 (5850.22)	0.63
Constant	34108.57* (16284.51)	0.04	24485.22 (17025.23)	0.15	25473.14 (16797.3)	0.13
Observations	1308		1308		1308	
Number of groups	109		109		109	
R <sup>2</sup>	0.08		0.08		0.09	

Note: Unstandardized coefficients ( $\beta$ ) with standard errors (SE), multilevel model. \*\*\*p < 0.001; \*\*p < 0.01; \*p < 0.05.

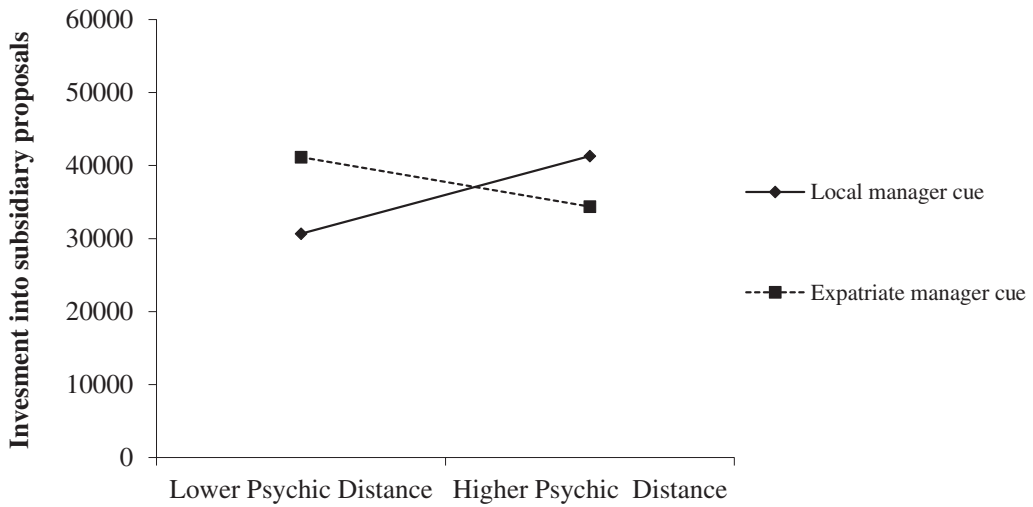


Figure 1. Moderating effect of an expatriate/local manager cue on the relationship between psychic distance to a subsidiary country and investment into subsidiary initiatives

cue receive ~20,000 ECU more than those with a local cue, at psychic distance = 0. We further probed the strength of this effect at all levels of psychic distance with analyses of marginal effects. These analyses show that this effect holds only for psychic distance levels that are low (approximately Mean - 1SD).

Finally, our third hypothesis suggested that the effect of psychic distance on investment is less negative when the submitting manager seems to be an expatriate. The type of subsidiary manager (1 = expatriate cue) was indeed found to be a significant moderator (see Model 3 in Table III;  $\beta = -287.08$ ;  $p = 0.02$ ). To further interpret this effect, we plotted the results of the interaction for two psychic distance values (one standard deviation below and above the mean; see Figure 1) and analysed the slope (Aiken and West, 1991). Contrasting with our Hypothesis 3, when proposals were sent by a manager who seemed to be an expatriate, the relationship between psychic distance and investments was on average negative and significant ( $\beta = -11.80$ ,  $p = 0.02$ ). This same relationship was not significant when managers with local names sent the proposals ( $\beta = 175.28$ ,  $p = 0.13$ ). Yet a robustness test showed that this relationship is significant when countries that were rated as very high in psychic distance (i.e., the top 10 per cent of the distribution) are excluded. For these observations, participants may be less able to differentiate local names from third-country national names and this name-confusion may bring noise into the data. More details on this robustness test are included below.

Overall, these results show that proposals submitted by subsidiary managers who appear to be expatriates (versus locals) receive significantly more financial resources when subsidiaries are located in countries perceived to be close to headquarters. Proposals submitted by subsidiary managers who appear to be expatriates received fewer financial resources as psychic distance between the subsidiary and headquarters increases.

*Robustness tests.* We tested a variety of additional models as robustness checks (results available upon request). First, we ran our analyses on a subsample of managers from Europe or with experience working there, because other participants may have difficulties recognizing Austrian/German and Dutch names (i.e., detecting the expatriate cue). This sub-sample included 86 participants or 79 per cent of our original sample. The results of the regression, average marginal effect, and slope analyses were stable.

We also checked that our results were not driven by senior managers who had little experience with the issues at hand in the experiment. For this, we excluded participants who had comparatively little (international) work experience. Our results are stable to the selection of a sub-sample of participants who had at least a year of work experience abroad (43 participants; 39 per cent of our original sample). Along the same lines, our results are stable when run on a sub-sample that excludes participants with comparatively low business experience (i.e., bottom 10 per cent of the distribution).

We investigated the possibility that at high levels of psychic distance participants could not identify that the subsidiary managers' names were *local* names and not *third-country national* names. This could be a source of noise that influences our results. If name confusion were a factor, then a robustness test with a subsample in which the most distant countries are omitted would not change the results for subsidiary managers that seem to be expatriates (because participants would still recognize home-country names that signal expatriate status of the subsidiary managers). However, such a robustness test may change the results regarding proposals submitted by subsidiary managers with a local name who would be recognized as *local* names. Indeed, when excluding subsidiaries in countries that are perceived as extremely distant (i.e., the top 10 per cent of the distribution, 158 observations), the relationship between psychic distance and investment is very similar to our main model when managers appear to be expatriates ( $\beta = -106.71$ ;  $p = 0.045$ ), while the relationship is stronger when subsidiary managers championing the initiatives seem to be locals ( $\beta = +224.79$ ;  $p = 0.067$ ). This result suggests that when distance is very high and investors cannot recognize that names are indeed host-country names, resource allocation decisions become less prone to the use of name-based heuristics.

Each participant made 12 subsequent and independent investment decisions. The control variable 'proposal order of appearance' was positive and predictive margins analyses show that participants invested less in the first rounds than in the final ones. Participants may underinvest at the beginning because they are getting used to the procedures and overinvest at the end because they want to use the last chances they have to earn additional compensation. We wanted to check that our results were not influenced by this sequence effect. All our analyses are stable when we exclude the first two or three decisions, the very first and last decisions, the first two and last two decisions, as well as the last two decisions.

Our model includes psychic distance perceptions, geographic distance, and country risk differences, which partly overlap conceptually. Although correlations between these variables were not high (max  $r = 0.39$ ), we checked that our results were not influenced



by the inclusion/exclusion of these variables. In fact, all our analyses are stable to the exclusion of geographic distance between the country of origin of participants and subsidiary country, to the exclusion of country risk differences between countries, and to the exclusion of both variables.

Even though our LR test showed that multilevel linear regression is an appropriate estimation model for analysing our data, we varied our specifications. Our results were all stable when we ran an OLS regression with robust standard errors as well as with standard errors clustered at the participant level. Additionally, we conducted DFBETA tests and found no undue influential cases.

### Additional Analyses

In order to elaborate on the theoretical arguments explaining our experimental results as well as to contextualize these results, we conducted semi-structured interviews with senior managers who had considerable experience with international resource allocation. We interviewed 14 senior managers working for different companies. Some interviewees had experience working in subsidiaries, while others had experience at headquarters, or both. All interviewees were very senior managers (on average 43 years old) with significant work experience (18 years on average) managing or working for subsidiaries in 19 countries across the globe. Some interviewees participated in the experiment and others did not. We granted anonymity to our interviewees to avoid social-desirability bias. The interviews lasted between 25 and 60 minutes and were recorded, transcribed, and thoroughly analysed with several rounds of coding. In some interviews we presented our hypotheses and asked our interviewees what they thought the results were as well as justifications. In other interviews we presented our experimental results and then asked our interviewees to suggest explanations for the behaviours observed (see [Appendix 1](#) for more details on the interviews).

We gained the following complementary insights from our interviews. First, our interviews reveal that compared to local managers, expatriate managers do indeed benefit from greater confidence that they will manage initiatives in ways that are aligned with the interests of headquarters. This greater confidence gives them an advantage over local managers when trying to attract financial resources for initiatives they champion. When asked about what could explain our results, overall, managers responded that expatriate managers are perceived as more transparent, honest, and aligned with corporate values than local managers, as the following quotes illustrate.

*General [subsidiary] managers who are expatriates, coming from the home country, have an advantage over local general managers because they [expatriates] are considered as better fitting with the corporate mold, having better integrated the values of the group while locals benefit from lower trust in that regard. (...) Investment projects must fit into a specific frame, there is an evaluation system and a minimum profitability threshold. So, if projects are in [i.e., presented to the assessment committee] it means they fit the criteria. So, the assessment is not really done with this information [about the project] but rather depending on the trust we have in the general manager presenting the project... is he or she reliable? Will he or she twist the numbers to ensure his projects go through? Etc. – Interviewee #13, 61 years old French manager with experience as manager at headquarters.*

*Expatriates are coming from the same stable [as headquarters managers] and can bring more transparency and more alignment with headquarter' ideas and logic – Interviewee #14, 55 years old German manager with experience as manager at headquarters and as an expatriate in three subsidiaries of different multinationals.*

Our interviews also support the idea that the positive effect of confidence in expatriates to act in ways aligned with the interests of headquarters on resource allocation fades as psychic distance to the subsidiary country increases. Interviewees suggest that as psychic distance increases, 'intimate knowledge' about the subsidiary's local context becomes more difficult for expatriate managers to access and assess. In other words, as distance increases expatriate managers are considered less likely to have the knowledge and capabilities to lead initiatives successfully, which makes the trust that interests are aligned virtually worthless. This point appears more salient as distance increases because senior headquarters managers reckon that they too suffer from lack of intimate market knowledge when they perceive subsidiaries as distant. Thus, as psychic distance increases, local managers are increasingly trusted to have competences that neither expatriates nor senior headquarters managers themselves possess. In essence, this finding highlights a certain tradeoff between safeguarding against self-interest or competence. This finding extends our experimental results because it suggests a positive relationship between psychic distance and resource allocation to subsidiary initiatives when proposals are submitted by a manager who appears to be local, such that seeming locals would have an advantage over seeming expatriates when subsidiaries are perceived as distant to headquarters. Our experimental results pointed toward this direction, but the effect was not significant under all specifications. The following quotes illustrate this finding:

*Because China is very, very different and I don't know a lot of people who can speak Chinese or Japanese, it's much more complicated there. It's much more important to know the local culture, to know the local regulations and to know with whom to talk to. So I would trust more the local guy... I mean, if somebody is Austrian sitting in China and asking for investment or starting a startup or a business I would not be that confident [to invest] because the culture is so different, and the local guy would have these possibilities to access better. – Interviewee #7, 40 years old Austrian manager with experience as an expatriate in Chile and Turkey.*

*If the country is distant the HQ manager has difficulty to assess the situation in a country, so they have to believe the local manager... if a distant country, if I don't have enough information about the distant country, who should I believe? So I would believe more somebody who comes from that country – Interviewee #5, 60 years old Austrian manager with experience as expatriate manager in Russia, Germany, Benelux, and Czech Republic.*

## DISCUSSION

Our study makes several contributions to our understanding of heuristics and biases in managerial decision-making. First, our focus on name-based heuristics allows for a further

understanding of processes at play when senior managers allocate financial resources to entrepreneurial initiatives in multinational corporations (Birkinshaw, 1997; Dellestrand and Kappen, 2012; Strutzenberger and Ambos, 2014; Williams and Lee, 2009). More precisely, we show how senior managers use subsidiary country names and subsidiary manager names to infer which initiatives should be allocated more resources. Studying these heuristics helps us to extend predictions of agency theory (Hendry, 2002; Kostova et al., 2018). Following agency theory, we may think that initiatives from countries perceived as distant are associated with more asymmetric information and a greater likelihood of agency problems, which in turn should lead to lower resources allocation. However, the effect of psychic distance to subsidiary country is actually highly contingent upon name-based perceptions related to the subsidiary manager championing the initiatives. Senior headquarters managers have confidence in expatriates to engage in ways aligned with the interests of headquarters, because expatriates are perceived as more transparent and honest when communicating with senior headquarters managers, and more aligned with corporate values. However, as psychic distance to subsidiaries increases, intimate knowledge about local markets becomes more important, which expatriates are deemed to have difficulty accessing and assessing. Increased psychic distance seems to benefit local managers because they are credited with more competencies to lead and implement the initiatives, which effectively reduces the perceived likelihood of agency problems due to incompetence (Hendry, 2002). To that end, our study highlights an interesting trade-off between safeguarding against self-interest and safeguarding against incompetence (Kostova et al., 2018). When subsidiaries are located in countries perceived as distant, it may not be possible for senior headquarters managers to safeguard against both types of agency problems, and it appears that safeguarding against self-interest is deemed less important in these situations for initiatives to be allocated resources.

Second, we extend the literature on heuristics and biases in management (Bingham and Eisenhardt, 2011, 2014; Vuori and Vuori, 2014) by introducing name-based heuristics to the study of managerial decision-making. Name-based heuristics are universal heuristics that are used automatically and unconsciously (Bingham and Eisenhardt, 2014). As previous research suggests, this type of heuristics can be a source of bias (Tversky and Kahneman, 1974; Vuori and Vuori, 2014). Indeed, relying on manager name as a surrogate for alignment with headquarters' interests or for competencies to effectively lead an initiative in a specific context is troubling. Mistakes might appear, for instance, when managers have unusual names in a given host country because they are (descendants of) immigrants or when there is misunderstanding of which names represent which country. Risks including excessive stereotyping and even racism (Edelman et al., 2017), which if occurring more frequently, can be very detrimental for the firm's culture, legitimacy, and possibly success. Similarly, psychic distance derived from country name can deviate strongly from actual distance and from the very specific important institutional characteristics in host markets that matter for a particular business idea (Ghemawat, 2018). Importantly, name-based heuristics and their consequent biases create the risk of a self-fulfilling prophecy in the sense that some initiatives become systematically underfunded and, therefore, less successful. In turn, this will strengthen the belief among decision-makers that such initiatives are not worth the investments. In this scenario the core of how multinational

corporations achieve competitive advantage, by tapping into all the contexts and markets it is exposed to (Rugman and Verbeke, 2001), is reduced *ad absurdum*.

### Practical Implications

Our research has several practical implications. Most importantly, we show that senior headquarters managers making investment decisions do take subsidiary country names and manager names into account. Subsidiary managers interested in maximizing resource acquisition may thus need to adapt their communication content and style when communicating with headquarters and emphasize familiarity with the host country or interests aligned with those of headquarters. For example, emphasizing their expatriate status might prove beneficial in low distance contexts whereas emphasizing their status as an expatriate may yield poorer results if the subsidiary country is perceived as very distant. Instead, in the latter case more information about the familiarity or knowledge about the host market and its conditions might prove valuable. Senior headquarters managers should be more aware of the fact that they are influenced by name-based cues in addition to hard facts such as project risk profiles. In order to avoid biased decision-making, an additional round of reflection might help. For example, more information might be sought about the expatriate manager (e.g., how competent is the manager *actually* given the local context?) or the country (e.g., are my assumptions regarding how different the country is to the home market reasonable? What are the implications for such initiatives?). Finally, multinationals may rethink some elements of their staffing decisions. Staffing expatriates to very distant countries might not be the best solution when the subsidiary's mandate or the firm's strategy are focused on entrepreneurial activities.

### Limitations and Future Research

Our study has a number of limitations that offer promising avenues for future research. First, all proposals were grouped into only two risk groups with the same expected returns. Future research could consider a wider selection of risks and returns to assess the behaviours we studied here. Second, in our experimental study we analysed decisions taken by single individuals. We did clarify that the initiatives to be assessed had already been analysed by other individuals and our interviewees suggested that in some cases single individuals have 'the final word' in these types of decisions. Still, it would be worthwhile to investigate how resource allocation decisions play out when taken by teams. Of particular interest are characteristics that attenuate potential biases in decision-making such as groupthink or focusing on information that is already shared (Janis, 1972; Postmes et al., 2001; Wittenbaum et al., 2004). Team diversity and organizational culture could help overcome these biases. Third, the decisions in our experiment were independent from each other (while nested in the individual decision makers), with the same limit of investment for each decision. In reality, senior managers at headquarters may analyse several investment opportunities at the same time. This would make decisions interdependent, as investment would come from the same (limited) pool of resources. While we were able to show that our results are very robust when several subsamples of the data are analysed,

more work on such interdependencies and constrained resources for all initiatives would be very valuable. For example, perceptions of distance related to a focal investment decision may be contingent on characteristics of other proposals. Fourth, while our experimental design does capture how *some* situations truly are, we acknowledge that our experimental design is not able to capture how *all* situations truly are. For example, in some instances, senior decision-makers may seek additional data to inform their decision-making. In general, as much as our experimental design follows current best practice recommendations for this method, we encourage future researchers to further investigate issues of name-based heuristics in resource allocation to increase external validity. For example, future research could complement our study in considering other methodologies such as multiple case analysis and intra-firm archival data. Finally, our data were collected in two European capitals in relatively small but very open economies. Our results could look different had managers from other, potentially less outward-looking, places invested in subsidiary proposals. For example, not only might the distribution of psychic distance be affected in such cases, but managers might also react to perceptions of distance more strongly. While we believe that the mechanisms we uncovered are generalizable, more work is needed to precisely capture the joint effects of psychic distance and manager name-based cues and their boundary conditions.

## CONCLUSION

In this paper we investigated how senior headquarters managers use name-based heuristics when allocating financial resources to subsidiary initiatives. We conducted an experiment in which we randomly varied subsidiary country and subsidiary manager names. Our study indicates that the effects of psychic distance to subsidiary country are highly contingent upon name-based cues regarding the subsidiary manager championing the initiatives. Psychic distance appears to be negatively (positively) related to the allocation of financial resources to subsidiary initiatives when the championing managers appear to be expatriates (locals). While expatriates are trusted to act in ways aligned with the interests of headquarters, this specific trust becomes virtually worthless when initiatives take place in countries that senior headquarters managers perceive as distant. There, locals are deemed more competent than expatriates to manage initiatives successfully, given their understanding of the local conditions. Overall, we contribute to a better comprehension of heuristics and biases of senior managers as well as of agency theory in financial resource allocation.

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## NOTES

- [1] We assume that in most cases senior headquarters managers are motivated to allocate financial resources in an optimal way. This assumption is also in line with our experimental setup, which clearly incentivized the investing managers to maximize returns. We acknowledge that this assumption is not *always* true given that such managers might also act opportunistically.
- [2] While the average participant in our study was 34 years old and had slightly more than 10 years of full-time work experience, participants in Mount et al. (2021) were 33 years old and had 5 years of tenure on average. Similarly, the average participant in Fisher and colleagues' study (2020) was 31 years old and had 9 years of work experience, and in Laureiro-Martínez and Brusoni (2018), participants were 35 years old and had at least 4 years of work experience. Souitaris et al. (2020) conducted two experiments in which the average participant was 29 and 31 years old, respectively.
- [3] We could not compare the two countries in the third pair, because there were no available scores for Moldova in any of the commonly used indices. Still, we additionally pre-tested our pairs with 10 academics of 5 different nationalities based in Austria and the results showed very different psychic distance scores within pairs for each of our participants.

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## APPENDIX 1

### DETAILS ON DATA COLLECTION AND ANALYSIS

We interviewed 14 senior managers working for different companies and with the following job titles: Chief Executive Officer (1), Chief Financial Officer (2), General Manager (1), Director of Development (1), Head of Regional Sales (2), Head of Marketing (1), Global Mobility Expert (1), Project Manager (3), Senior Advisor (1), and Innovation Manager (1). Some interviewees had experience working in subsidiaries (10 interviewees), while others had experience at headquarters (2 interviewees) or both (2 interviewees). All interviewees were *senior* managers (on average 43 years old) with significant work experience (18 years on average). Our interviewees came from Austria, France, Germany, Japan, Macedonia, and Serbia. Collectively, they had experience managing or working for subsidiaries in Belgium, Brazil, Chile, China, Croatia, Czech Republic, Germany, Hungary, Japan, Poland, Russia, Saudi Arabia, South Korea, Spain, Switzerland, The Netherlands, the UK, Turkey, and Uganda. Our interviewees included individuals who participated in the experiment (4 interviewees) as well as individuals who did not (10 interviewees). We granted anonymity to our interviewees to avoid social-desirability bias. The interviews lasted between 25 and 60 minutes. All but three interviews were recorded and transcribed. The interviews were transcribed using Konch.ai, the transcriptions were revised manually by the authors and translated by the authors in the four instances where the language was not English. Copious notes were taken when recording was not possible.

We prepared an interview protocol focusing on two areas. The first area included questions regarding explanations for our experimental results. In some interviews, we presented our experimental results and then asked our interviewees to suggest explanations for the behaviours we observed. Questions asked included 'How would you explain that managers who appear to be expatriates are allocated less capital as distance increases?', 'Why do you think managers who appear to be expatriates are allocated more capital than the ones who appear to be locals when subsidiaries are in countries perceived to be close to headquarters?', 'Do our results surprise you? Why?', 'Why do you think that senior managers at headquarters would favour managers who appear to be expatriates in countries that are perceived to be close to headquarters?'. In the other interviews, we presented our hypotheses and asked our interviewees what they thought the results were as well as justifications. Questions asked to our interviewees included 'Do you think we found that perceptions of distance were negatively influencing capital allocation? Why?', 'Do you think managers who appear to be expatriates are favoured over managers who appear to be locals in financial resource allocation decisions? Why?', 'Do you think that managers who appear to be expatriates would be treated differently depending on the country where they are working in? Why?'

The second area included questions regarding the implications and generalizability of our experimental results. Questions asked to our interviewees included 'Does your experience with such decisions reflect our experimental setting and results? Why? Why not?', 'According to you, what are the implications of our study for companies in which such decisions are taken by a committee?', 'Can you describe how international financial capital allocation decisions are made in your current company and how it differs from our experimental setup?', 'For whom do you think our results are most relevant?'

Following good practice, the data analysis process consisted of three parts (Grodal et al., 2020). First, one of the authors went through the transcripts and notes to identify initial categories of mechanisms related to our hypotheses as well as categories of implications that our experiment results have. This first part was facilitated by asking questions, namely 'What could possibly explain our results?' and 'What could be

counter-arguments to our results?'. Then, these categories were refined (e.g., merging some, splitting others). Categories were also refined in identifying some that were important (e.g., representing stable patterns across interviewees). Finally, categories were stabilized by re-analysing existing categories and integrating the mechanisms identified. This part helped create a theoretical scaffold that explains our experimental results as well as another explaining the implications that these results have.

### **DETAILS ON FACE VALIDITY OF EXPERIMENTAL DESIGN**

We assessed the face validity of our experimental setting by conducting interviews aiming to compare our setting with actual financial capital allocation processes. In our experimental setting, a subsidiary manager, representing its subsidiary, was championing a project to headquarters. Participants were allocating financial capital individually although the vignettes included a note stating that a team at headquarters had evaluated the risks of the initiative, showing that our participants were not the unique decision makers in the overall process. With our interviews, we wanted to understand potential differences between this setting and actual ones as well as the implications of such differences for our results.

Our interviews suggest that, in practice, decisions such as the ones that our participants had to take can be taken by a single individual who has 'the final word' and comes after other managers had conducted an initial selection (such as in our experiment) as well as by a committee. Still, our interviews revealed that our experimental results have similar implications whether decisions are taken by an individual or a group of individuals, as following quotes illustrate.

*'It is not unrealistic that this kind of investment might be finally decided by one guy in the HQ. Of course only in the frame of the total budget that this guy can decide upon'* – Interviewee #14, 55 years old German manager with experience at manager at headquarters and as an expatriate in three subsidiaries of different multinationals.

*'For us, business unit managers are the ones who champion investment projects even if these projects were built by different people in the business units [...]. In the investment committee [at headquarters], there is the general manager, the head of finance, the head of legal affairs, the head of development and also someone from the IT department. [...] If it's a group or an individual, I think it will be the same. I think the trust issues will be the same'* – Interviewee #13, 61 years old French manager with experience as manager at headquarters.