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CEO wealth and cross-border acquisitions by SMEs

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ABSTRACT

This study examines the role of chief executive officers' (CEOs) wealth in explaining the cross-border acquisition (CBA) activity of small and medium-sized enterprises (SMEs). CBAs require substantial financial resources and expose the firm to additional risks. Within a micro-foundations framework, we integrate insights from the resource-based view and the upper echelons theory and argue that CEO wealth plays a dual role in the CBA activity of SMEs by alleviating financial constraints and increasing willingness to take risks. Using Norwegian census data for the period 2000–2013, we find consistent evidence that CEO wealth has a positive effect on the number, the geographic scope, and the likelihood of engaging in CBAs in high political risk countries.

1. Introduction

Cross-border acquisitions (CBAs) have become an important strategy through which firms engage in foreign direct investments (FDI). Firms focus on CBAs to grow faster, to gain access to resources and knowledge, to enter new product markets, and to quickly expand into new country markets (Chakrabarti, Gupta-Mukherjee, & Jayaraman, 2009; Luo, Yang, & He, 2020; Nadolska & Barkema, 2007; Vermeulen & Barkema, 2001). Indeed, in 2020, 47 % of total FDIs were conducted through CBAs (UNCTAD, 2021). Given their importance and pervasiveness, much scholarly attention has been paid to the determinants of acquisitions (Devers, Wuorinen, McNamara, Halebian, Gee, & Kim, 2020).

Previous literature has mostly focused on the macro-determinants of acquisitions (Dikova, Sahib, & Van Witteloostuijn, 2010; Gaffney, Karst, & Clampitt, 2016; Zhang & He, 2014), but some researchers have recently adopted a micro-level perspective, looking at the characteristics of CEOs, the top management team (TMT), and entrepreneurs to understand the drivers of firms' foreign activities. However, most previous research has examined either the influence of managerial characteristics on the acquisition decisions made by large multinational firms (Buckley, Chen, Clegg, & Voss, 2018; Dutta, Malhotra, & Zhu, 2016; Geppert, Dörrenbächer, Gammelgaard, & Taplin, 2013; Kwok, Meschi, & Bertrand, 2020; Matta & Beamish, 2008; Piaskowska & Trojanowski, 2014) or the role of firms' founders in explaining international

entrepreneurship and born global firms (see Keupp and Gassmann (2009) for a review). In contrast, as noted by Martineau & Pastoriza (2016), research that applies a micro-foundations view on the CBA activity of SMEs remains scarce.

A focus on SMEs is valuable for several reasons. First, the vast majority of firms are small and medium-sized.¹ Furthermore, SMEs are increasingly using acquisitions to expand and grow. For instance, Deloitte recently reported a 62.5 % growth in the acquisition activity of Swiss SMEs in the first half of 2021 as compared to 2020 (Lagassé, Boudrand, & Widmer, 2021). It has also been documented that FDIs – typically through acquisitions – have a positive impact on SMEs' innovation (Mawson & Brown, 2017) and performance (Lu & Beamish, 2001). However, the vast majority of SMEs are unable to engage in FDIs (Muller, Caliendo, Peycheva, Gagliardi, Marzocchi, Ramlogan, & Cox, 2015). Given the differences in characteristics between large and small firms, the antecedents of SMEs' foreign acquisition activity are not adequately accounted for by studies that theoretically and empirically investigate large multinational firms. Consequently, understanding determinants of SMEs' capacity to engage in CBAs would provide significant contribution to the literature. Specifically, two major constraints that inhibit firms, in particular SMEs, from engaging in CBAs are the lack of financial resources (Beck, Demirgüç-Kunt, & Maksimovic, 2005; Chang & Rhee, 2011; Dutta, et al., 2016; Westhead, Wright, & Ucbasaran, 2001) and the willingness to take risks (Buckley, Chen, Clegg, &

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E-mail address: fz.egb@cbs.dk (F. Zilja).¹ For instance, as of 2020, SMEs comprised 99 % of all non-financial firms, 50 % of the GDP, and 67 % of the employment in EU28 (European Commission, 2020).<https://doi.org/10.1016/j.ibusrev.2023.102192>

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Voss, 2016; George, Wiklund, & Zahra, 2005; Lu & Beamish, 2006). In this study, we expand the understanding of the drivers of SMEs acquisition activity by adopting a micro-foundations perspective and looking at the role of CEO wealth in addressing these constraints.

The micro-foundations framework offers a broad platform for studying the role of individuals in decision-making in the context of foreign expansion (Clark, Li, & Shepherd, 2018; Foss & Pedersen, 2019; Geppert, et al., 2013; Li, Wei, Cao, & Chen, 2022; Piaskowska & Trojanowski, 2014). Within this framework, we combine arguments from the resource-based view (Barney, 1991; Wernerfelt, 1984) and the upper echelons theory (Hambrick & Mason, 1984) to understand the role of CEO wealth. First, we posit that CEO wealth serves as an ancillary resource that improves SMEs' access to financial resources. Firms managed by wealthier CEOs face fewer financial constraints because wealth serves as a signal to credit institutions of better credit quality and higher payback likelihood (Cavalluzzo & Wolken, 2005). Second, wealthier CEOs have higher risk tolerance (Eckhoudt, Gollier, & Schlesinger, 1995; Korkeamäki, Liljeblom, & Pasternack, 2018; Pool, Stoffman, Yonker, & Zhang, 2019). So, consistent with upper echelons theory (Hambrick & Mason, 1984), we expect that CEOs' attributes, and in particular CEOs' risk taking, to be reflected in firms' strategic decision making and risky internationalization (Boustanifar, Zajac, & Zijlstra, 2022; Buckley, et al., 2018). Because of increased availability of financial resources and higher risk tolerance, we hypothesize that SMEs managed by wealthier CEOs are more likely to engage in CBAs, expand into more countries, and in countries that are more politically risky.

We test our hypotheses using a large representative sample of Norwegian SMEs and focus on the scale – the extent to which a firm's acquisition portfolio incorporates foreign acquisitions – of CBAs (Arregle, Naldi, Nordqvist, & Hitt, 2012; George, et al., 2005), as well as the scope – the spread of acquisitions across foreign countries (Békés, Benito, Castellani, & Muraközy, 2021; Hashai, 2011; Lu & Beamish, 2001) – and the likelihood of SMEs to enter high political risk locations (Brouthers, Gao, & McNicol, 2008; Slangen & Beugelsdijk, 2010). Our findings suggest that CEO wealth has a positive and significant effect on these dimensions of cross-border acquisitions, providing broad support for our theoretical arguments.

This study extends current literature on the managerial antecedents of foreign activity (Békés, et al., 2021; Boustanifar, et al., 2022; Brouthers, Nakos, & Dimitratos, 2015; Kiss, Fernhaber, & McDougall-Covin, 2018; Mohr & Batsakis, 2019; Sawant, Nachum, & Panibratov, 2021) by focusing on the role of CEO wealth on CBAs conducted by SMEs. Specifically, we propose and provide evidence that CEO wealth serves not only as a unique resource that plays a crucial role in alleviating financial constraints that characterize CBAs, but also to increase managers' willingness to take the risks associated with CBAs. The study departs from previous literature not only because of its focus on CEO wealth, but also because of the explicit focus on CBAs as a distinct form of foreign expansion. Since internationalization typically occurs as firms mature, the study also contributes more generally to research on the influence of entrepreneurial wealth (Han, Fraser, & Storey, 2009; Hvide & Møen, 2010) by documenting that wealth has implications beyond the entrepreneurial stage of firms' life.

2. Theoretical framework

Firms actively engage in acquisitions as a strategic means to access resources and capabilities that are hard to develop within the firm (Haleblian, Devers, McNamara, Carpenter, & Davison, 2009; Makadok, 2001), particularly in the case of SMEs, which typically have a limited resource base (Naldi & Davidsson, 2014). Acquisitions potentially provide synergies, scale benefits and costs savings, further accentuated in the case of CBAs by a firm's expanded international footprint (Harrison, Hitt, Hoskisson, & Ireland, 1991; Rabier, 2017). Although SMEs have become more actively engaged in internationalization and increasingly use acquisitions in their foreign expansion (Haapanen,

Hurmelinna-Laukkanen, Nikkilä, & Paakkolanvaara, 2019), the majority of CBAs are undertaken by large, multinational firms (Brouthers, et al., 2015). The limited resources of SMEs and the risks posed to the firm make it more difficult for them to engage in acquisitions.

Lack of financial resources has repeatedly been identified as an important antecedent of differences in SMEs internationalization (Martineau & Pastoriza, 2016; Paul, Parthasarathy, & Gupta, 2017). When deciding to expand into new markets, firms need to gather extensive information on which market to enter and what products or services to offer. In addition to the resultant costs of information and product adaptation, firms expanding through acquisitions also need to gather data about potential targets, to screen, and to select them. Once a target is chosen, foreign acquirers are still more likely to pay a higher premium compared to domestic acquirers (Haleblian, et al., 2009; Shimizu, Hitt, Vaidyanath, & Pisano, 2004). The difference in the premium paid is partly due to increased information asymmetry because the acquirer possesses limited knowledge of foreign markets, their regulations and accounting practices, customs and norms, and various other relevant country characteristics (Basuil & Datta, 2015; Humphery-Jenner, Sautner, & Suchard, 2017; Zaheer, 1995). These factors make CBAs a costly and resource-demanding strategy.

If firms always operated in efficient markets, the relative lack of internal financial resources would not matter. Firms would be able to borrow at the market interest rate and finance all their positive net present value investment opportunities. However, firms operate in environments of credit rationing, which implies that they are unable to obtain all necessary credit even though they can pay market interest rates (Stiglitz & Weiss, 1981). Prior studies have consistently shown that lack of liquidity and internal financial capital affect SMEs negatively, in term of lower growth (Carpenter & Petersen, 2002; Fagiolo & Luzzi, 2006; Hessels & Parker, 2013) and less innovation (Ughetto, 2008). In the context of international expansion, financial constraints defer firms from starting to export, and firms that are in a better financial position or able to obtain external financing export earlier and export more, as reported in studies of SMEs in developed countries (Bellone, Musso, Nesta, & Schiavo, 2010; Westhead, et al., 2001), as well as SMEs from emerging and developing countries (Pietrovito and Pozzolo (2021).

SMEs face greater financial constraints compared to large firms for multiple reasons (Beck, et al., 2005; Wagenvoort, 2003). To begin with, SMEs have fewer financing options. Established multinationals and listed companies have superior access to capital markets and have the possibility to obtain loans from banks in multiple locations. In contrast, SMEs are usually confined to fewer banks within their local private market. These banks might decide not to supply all the necessary credit, to increase the interest rates or collateral requirements due to higher information asymmetry as SMEs' financial reports and business prospects are not subject to the same close market scrutiny as those of large firms. Anticipating a negative response, credit-constrained SMEs may get discouraged and refrain from applying for a bank loan in the first place (Wernli & Dietrich, 2022).

In addition to requiring high resource commitment, pursuing CBAs is a bold and risky strategy. Foreign acquisitions expose the firm to the liability of foreignness (Hymer, 1976; Nachum, 2016). For instance, firms often face biased treatment from customers, due to unfamiliarity or nationalistic feelings, and from governments that might impose restrictions on foreign firms and stimulate domestic ones. In addition, the firm needs both to adjust to the host country culture and to deal with the additional challenges resulting from the organization culture of the acquiree, which has been termed double-layered acculturation (Barkema, Bell, & Pennings, 1996; Shimizu, et al., 2004). Empirical evidence suggests that foreign firms have lower performance, shorter survival spans compared to local firms, and a higher likelihood of divestments (Benito, 1997; Berger, El Ghoul, Guedhami, & Roman, 2017; Liesch, Welch, & Buckley, 2011; Mata & Freitas, 2012; Reeb, Kwok, & Baek, 1998), especially in the case of M&As (Benito, 1997).

International business literature has long focused on the factors that

explain firm's internationalization based on the trade-offs that firms face with respect to the amount of resources they are able to commit and their risk exposure. For instance, the internationalization process of the firm (Johanson & Vahlne, 1977; Johanson & Vahlne, 2009) emphasizes that firms start their international journey allocating resources to countries similar to their home market, typically with a low resource entry mode such as exporting. As a firm gains experiential knowledge by operating in the host country, it increases its resource commitment in a given country or it expands into other countries. This evolutionary pattern of internationalization helps firms overcome resource constraints and risks related to operating in foreign markets.

Increasingly, international business literature has adopted a micro-foundation framework (Felin, Foss, & Ployhart, 2015; Foss & Pedersen, 2019) to analyze the determinants of foreign expansion. The key defining feature of the micro-foundation framework is to explain a phenomenon by looking at mechanisms at a lower level of analysis. Practically, this has resulted in many studies looking at individual level characteristics to understand and unpack outcomes at the firm level. For instance, Coviello, Kano, and Liesch (2017) conceptually revisit the internationalization process model to incorporate the role of the individual decision-makers as core micro-foundation element. They point at several individual characteristics such as openness to new experiences, personality, social skills, and ability to deal with uncertainty, amongst others, as important in firms' decision to expand internationally, and their choices of entry mode and location. Empirically, subsequent studies (Békés, et al., 2021; Chittoor, Aulakh, & Ray, 2019; Sarabi, Froese, Chng, & Meyer, 2020; Zucchella, 2021), adopting micro-foundations as an overarching lens, have expanded on the process and the role of the characteristics of decision-makers. It is important to note that the micro-foundation lens is consistent with several classical theories that have already been adopted in an international context such as the behavioral theory of the firm (Cyert & March, 1963), the resource dependency theory (Pfeffer & Salancik, 1978), the resource-based view (Barney, 1991; Wernerfelt, 1984) and the upper echelons theory (Hambrick & Mason, 1984). In this study, within a micro-foundations framework, we integrate insights from the resource-based view and the upper echelons theory to understand the role of CEO wealth in the cross-border acquisition activity of the SMEs.

3. Hypotheses development

3.1. CEO wealth, financial constraints and cross-border acquisitions

In its classical form, the resource-based view portrays the firm as a collection of rare, valuable, inimitable, and non-substitutable resources that result in sustainable competitive advantage (Barney, 1991; Wernerfelt, 1984). Subsequent studies have focused on the entrepreneur (McDougall, Shane, & Oviatt, 1994; Westhead, et al., 2001) or the manager (Caligiuri & Santo, 2001; Tihanyi, Ellstrand, Daily, & Dalton, 2000) as a key resource and identified those managerial characteristics that enable the firm to internationalize. Ventures managed by entrepreneurs with higher human capital and management know-how are more likely to export early (Westhead, et al., 2001). In the international business literature, managers' international experience (Tihanyi, et al., 2000) and international networks (Musteen, Francis, & Datta, 2010) serve as valuable resources that enable firms to successfully compete in international markets.

Given that CBAs pose high demands on firms' internal financial resources and the difficulty for SMEs to obtain external funding, CEO wealth can serve as a valuable resource that helps addressing SMEs' need for capital. Due to information asymmetry, which may arise from lack of audited financial statements as well as less professionally prepared business prospects, banks are reluctant to provide loans based only on firms' prospects (Berger & Udell, 1995; Berger & Udell, 2002). Under such circumstances, they base the decision to lend not only on firms' financial situation, but also and most importantly on the

characteristics and personal wealth of the managers and owners (Duarte, Matias Gama, & Esperança, 2016). Relying on management and owner characteristics that are relatively easy to identify and assess is consistent with recent literature that emphasizes the use of heuristics, i. e. simpler rule-based decision-making, in complex situations (Bettis, 2017; Loock & Hinnen, 2015). Analyzing interviews with multiple loan agents in several banks, Cavalluzzo and Wolken (2005) observe that it is easier for banks to process information on the financial situation of an individual as compared to the business prospects and assets of a smaller business. Wealth signals creditworthiness and higher likelihood of payback (Cavalluzzo & Wolken, 2005), which could help SMEs obtain bank financing (Avery, Bostic, & Samolyk, 1998; Ono & Uesugi, 2009). For instance, Han, et al. (2009) report that an increase in entrepreneurs' personal wealth significantly reduces the probability of a loan request being declined.

While not a resource owned by a firm as such, the CEO's personal wealth may serve as an ancillary resource to a firm by facilitating its access to external financing. As a result, firms would be able to alleviate some of the financial constraints that restrict SMEs' foreign expansion through acquisitions, and ultimately engage in more CBAs.

3.2. CEO wealth, risk propensity and cross-border acquisitions

Besides providing resources to the firm, CEOs also impact outcomes through strategic decision-making. Upper echelons theory argues that strategic outcomes are a reflection of the characteristics, values and cognition of the firms' most powerful decision-makers (Hambrick & Mason, 1984). Because strategic choices are complex and highly uncertain, managers make satisficing choices based on their judgement rather than optimal ones. Their values, knowledge, and cognitive base influence to which alternatives attention is directed, how alternatives are perceived, and the way information on the alternatives is selected and processed. Thus, strategic choices ultimately reflect differences in individual attributes. The theory also emphasizes the importance of demographic attributes (e.g., age) to capture underlying psychological attributes (e.g., risk-taking) that are not easily observable, but highly relevant for understanding strategic choices. Research consistent with the upper echelons theory has investigated the importance of a broad range of CEO and TMT attributes ranging from easy observable demographics such as international experience (Herrmann & Datta, 2006; Le & Kroll, 2017) and age (Békés, et al., 2021; Herrmann & Datta, 2002), tenure (Hou, Li, & Priem, 2013) to underlying traits such as narcissism (Oesterle, Elosge, & Elosge, 2016) and cognition (Maitland & Sammartino, 2015) for multiple dimensions of a firm's international activities.

Given the risks associated with entry into foreign markets, a series of studies building on upper echelons theory suggests that CEO's attitudes towards risk play an important role in explaining observed FDIs patterns and choice of equity-based entry modes (Boustanifar, et al., 2022; Brouthers & Hennart, 2007; Buckley, et al., 2016; Buckley, et al., 2018; Buckley, Devinney, & Louviere, 2007). First, the riskiness involving risky firm investments is subjective to individual interpretations, and managers with higher risk propensity perceive FDIs and operations in certain locations as less risky (Acedo & Jones, 2007; Buckley, et al., 2016; Forlani, Parthasarathy, & Keaveney, 2008). Second, managers with high risk propensity are more comfortable making riskier decisions (Boustanifar, et al., 2022; Sitkin & Pablo, 1992). Consistent with these theoretical arguments, empirical studies have found that managers' risk taking is positively related to international exports (Cavusgil & Naor, 1987), speed of internationalization (Acedo & Jones, 2007), entry into emerging markets (Buckley, et al., 2007), cross-border M&As and greenfield investments (Boustanifar, et al., 2022).

In the same spirit as several previous studies based on upper echelons theory that rely on observable demographic characteristics to derive underlying tendencies, and in particular risk-taking (Faccio, Marchica, & Mura, 2016; Sunder, Sunder, & Zhang, 2017), we posit that an important factor determining individuals' risk taking is wealth. Finance

literature has developed the concept of risk aversion to capture the underlying tendency for risk taking (Wiseman & Gomez-Mejia, 1998). Conventionally, risk aversion is measured through the Arrow-Pratt absolute risk aversion measure² (Arrow, 1971; Pratt, 1964), according to which absolute risk aversion is inversely related to wealth. In simple terms, risk aversion declines as wealth increases (Eeckhoudt, et al., 1995) because wealthier individuals experience a smaller loss in utility than less wealthy individuals for the same drop in wealth. That makes them better able to sustain losses and therefore more likely to engage in more risky firm strategies (MacCrimmon & Wehrung, 1990; Morin & Suarez, 1983; Riley Jr & Chow, 1992). Individuals become particularly risk averse when faced with the potential to lose income or liquidity constraints (Guiso & Paiella, 2008). Recent empirical investigations re-affirm the role of personal wealth on risk taking and consequently firms' risky strategic decisions. For instance, firms managed by wealthier CEOs tend to be riskier in terms of systematic and idiosyncratic risk (Korkeamäki, et al., 2018) and managers who exhibit substantial losses in their personal wealth reduce the risk in the portfolios that they manage (Pool, et al., 2019).

As CEOs' wealth increases their risk-taking propensity and because cross-border M&As are risky strategies highly influenced by CEOs, we expect wealthier CEOs to engage more in cross-border M&As since they (i) perceive cross-border acquisitions as less risky, and/or (ii) are more willing to take the risks associated with them.

Combining arguments from the financial constraints' perspective and those of the risk-taking perspective, we hypothesize CEO personal wealth to be positively related to a firm's number of CBAs as wealthier CEOs can help SMEs secure financial resources in addition to having higher risk tolerance towards the risks foreign acquisitions expose the firm to. Hence,

Hypothesis 1. CEO personal wealth is positively related to the scale of SME cross-border acquisitions.

3.3. CEO wealth and the geographic scope of cross-border acquisitions

In addition to the number of CBAs (i.e., scale), the international acquisition portfolios of SMEs are also characterized by their scope. The geographic scope dimension captures the spread of acquisitions across foreign countries (Békés, et al., 2021; Hashai, 2011; Lu & Beamish, 2001). A broad geographic scope enables SMEs to be competitive by building capabilities and gain experiential learning on how to operate in different markets, obtain resources and capabilities that are not available in the home market, diversify risk, and increase market share.

Engaging in foreign acquisitions – even within the same host country – entails risk-taking and requires significant resources, which will be even more pronounced when an SME makes acquisitions in multiple countries. First, expanding the geographic scope increases the (often) irreversible financial commitment that already resource-constrained SMEs need to make both at entry and post-entry. As a firm makes more acquisitions and expands its geographic scope, transaction costs increase (Hitt, Hoskisson, & Kim, 1997) and managing such a (widely dispersed) firm requires additional resources (Goerzen & Beamish, 2003). As a result, more resource-constrained firms may prefer to focus on scale, while maintaining a narrow scope of internationalization (Lin, 2012). Second, expanding to multiple geographic locations is more challenging, and hence riskier, as both (i) the complexity of managing operations increases, and (ii) the exposure to liability of foreignness increases. Consistent with an increased risk argument, previous studies find that the presence of stakeholders with a tolerance for risk-taking i.e., such as institutional investors (George, et al., 2005), or certain

attributes of CEOs that result in more risk-taking such as young age (Békés, et al., 2021) or international experience (Mohr & Batsakis, 2019; Tihanyi, et al., 2000), are positively associated with firm's geographic scope.

Extending our arguments on the role of CEO wealth to the scope of cross-border acquisitions, we posit that CEO wealth positively influences the scope of SME cross-border acquisitions as it provides the firms with the necessary capital and because it increases the willingness to take risks. Therefore, we hypothesize:

Hypothesis 2. CEO personal wealth is positively related to the scope of SME cross-border acquisitions.

3.4. CEO wealth and CBAs in politically risky locations

So far, we have argued that engaging in cross-border acquisitions is generally a risky strategic decision. However, risks vary across countries. A strong indicator of the riskiness embedded in a host country is political risk. Political risk can take several forms. One source of political risk stems from undeveloped institutions as reflected in countries' regulatory quality, rule of law, and corruption (Brouthers, et al., 2008; Slangen & Beugelsdijk, 2010). Another source of political risk arises from political instability and violent conflicts (Li & Vashchilko, 2010; Witte, Burger, Ianchovichina, & Pennings, 2017). Finally, political risk is also due to political institutions' ability to constrain policy makers from arbitrarily changing the legal framework for firms to do business, hence disrupting investment behavior (Delios & Henisz, 2003; García-Canal & Guillén, 2008). Taken together, these factors contribute to a higher asset exposure and potential expropriation from the host government (Brouthers, 2002; Duanmu, 2014), the altering of policies in favor of domestic firms (Li & Vashchilko, 2010), increased cost of doing business (Cuervo-Cazurra, 2006), and even destruction of physical and human capital (Witte, et al., 2017) for the firm. Overall, because of the above negative consequences of political risk, on average firms are less willing to enter and expand their foreign operations in a particular country, and consequently, resulting in less investment and fewer acquisitions in that country (Busse & Hefeker, 2007; Cuervo-Cazurra, 2006; Duanmu, 2014; King, Loncan, & Khan, 2021).

However, despite the high political risks associated with certain locations, not all foreign firms refrain from investment. On the contrary, in the past years there has been an increase in FDI in countries characterized by weak institutions and political hazards (Buckley, et al., 2016). While we know a lot about drivers of MNEs' investment in countries with high risk, particularly institutional risk from the perspective of developed (Buckley, et al., 2007; Delios & Henisz, 2003) and emerging countries (Cuervo-Cazurra & Genc, 2008; Duanmu, 2012; Holburn & Zelner, 2010), there is a paucity of studies focusing on SMEs. We expect high political risk to be particularly detrimental to SMEs' ability to operate in certain locations. Large multinationals can partially offset their exposure to political risk through (i) accumulated experience in high political risk countries (Delios & Henisz, 2003), (ii) various institutional-based tools such as insurance and guarantees (Adarkwah & Benito, 2023), (iii) non-market capabilities such as political activity or strategic corporate social responsibility (Sun, Doh, Rajwani, & Siegel, 2021), and (iv) bargaining power over the host country government as a result of their technology or ability to generate rent for the host country economy (Fagre & Wells, 1982). Conversely, SMEs neither have the resources (financial, experience, technological), nor the connections that MNEs tend to have. Thus, the potential adverse impact of political risk is likely more pronounced for SMEs, hence dissuading them from engaging in M&As in high political risk countries.

We extend our arguments on the links between wealth, risk-taking and foreign acquisitions to SMEs' choice of location. We posit that CEO wealth would be an important firm level determinant to understand differences in SMEs' choice of whether to invest in a high political risk country. Specifically, because higher wealth reduces CEO risk aversion,

² Absolute risk aversion is defined as $ARA = -U''(W)/U'(W)$ where $U(W) = \ln(W)$, and W refers to wealth. Taking the derivatives of $U(W)$ leads to the simplified expression of $ARA = 1/W$.

acquisitions in locations with higher political risk are more likely for firms with wealthier CEOs. Therefore, we hypothesize:

Hypothesis 3. CEO personal wealth is positively related to SMEs' likelihood of engaging in cross-border acquisitions in politically risky locations.

4. Data and methods

4.1. Data

Our empirical context is based on the population of SMEs in Norway that have made either domestic or international M&As in the period from 2000 to 2013. The context is well suited for investigating the role of CEO wealth in understanding firms' foreign acquisition activity as Norway is an open economy with a small domestic market due to the country's limited population. Thus, expanding beyond the Norwegian market plays an important role for firms' growth. However, the extent to which firms engage in CBAs varies significantly.

We use the SDC Platinum M&A database to track CBA activity by Norwegian firms for the period 2000–2013. The database contains information about parent companies, the location of subsidiaries, industry classification, and status of the acquisitions transaction. We include only completed acquisitions in which the acquiring firm has a majority stake in the target company as this requires higher resource commitment and increases firms' risk exposure (Anderson & Gatignon, 1986). We supplement these data with financial, accounting and ownership structure data from the Center for Corporate Governance Research (CCGR). The database contains extensive firm-level information submitted to the state agency (The Brønnøysund Register) for all registered firms in Norway. Data on CEO age, gender, education, work experience and other socio-demographic characteristics is obtained through Statistics Norway (SSB). In addition, we collect detailed information about individuals' wealth reported in their tax returns from SSB. The information about wealth and income is very detailed and precise since it is reported directly to the tax authorities from employers, banks and financial institutions, and other relevant administrative entities. As a result, these data are much more reliable than survey data recording income and wealth based on individuals' self-reported figures. The three most important sources of wealth in the data are deposits in banks, financial assets (bonds, stocks, mutual funds, etc.), and real estate property. It is important to note that each part of these data comes from a different agency or data provider. After getting the permission to obtain the data from each entity, the entity (e.g., CCGR for firm level variables including personal identifier of its CEO) sends the data to Statistics Norway. Statistics Norway matches different datasets together and supplement it with other personal data on CEOs (e.g., wealth, marital status, age) and then anonymizes the data and return it to us. Therefore, we cannot identify companies or individuals within our sample.

We adopt the European Commission definition of SMEs according to which SMEs are firms that employ 250 or fewer employees and do not exceed the equivalent of EUR 50 million in annual turnover (European Commission, 2000; OECD, 2005). Thus, we exclude firms that do not comply with these criteria. In addition, to be included in the study sample, we require firms to have at least one M&A (either domestic or international) during the period covered by this study.³ The resulting sample comprises 1062 CBAs and 820 CEO-firm pairs, with 720 unique firms and 776 unique CEOs. The number of firms in the sample with at

least one CBA is 316. On average, the number of CBAs (during the period 2000–2013) among these firms is 1.54.

4.1.1. Dependent variables

We use three dependent variables corresponding to our three hypotheses. First, we measure *CBA scale* as the number of CBAs (Lu & Beamish, 2001; Nadolska & Barkema, 2007) conducted by a firm in the timeframe of our study. Second, we measure *CBA scope* based on the number of unique countries each firm has entered for acquisitions (George, et al., 2005; Lu & Beamish, 2001). Third, we measure likelihood of engaging in *high political risk* locations using a dummy variable that equals 1 if SMEs conduct an acquisition in a high political risk location and 0 otherwise. We categorize a location as high on political risk if the composite political risk score of that location is lower than the sample median political risk. The composite political risk score is calculated as the mean across the World Bank governance indicators for institutional quality; namely, the voice and accountability, political stability and absence of violence dummy, government effectiveness, regulatory quality, rule of law, and control of corruption (Slangen & Beugelsdijk, 2010; Zijlstra, Adarkwah, & Sabel, 2022). The sample median in our study is 1.6 and a country is categorized as high political risk when it scores below 1.6, based on the logic that lower institutional quality leads to higher political risk.

4.1.2. Independent variables

Our main independent variable is *Log wealth*, for which the data is obtained from the tax records. It is the sum of financial and non-financial assets such as real estate. We use the average wealth during our sample period in the cross-sectional regressions, but we get very similar results when using 3-year or 5-year moving averages. We also use a time-varying wealth variable as our main independent variable in our panel regressions. Financial assets include bank deposits, bonds, stocks, mutual funds, and money market funds. Prior studies have used similar data in Norway (which are typically rare outside Nordic countries) to address research questions related to individuals' and entrepreneurs' wealth (Fagereng, Mogstad, & Rønning, 2021; Hvide & Møen, 2010).

4.1.3. Control variables

Following prior literature, we include several controls at the CEO, firm, industry, and country level that can affect the relationship between CEO wealth and CBAs. At the CEO level, we control for CEO age, gender, tenure, civil status, education level, inherited wealth, international exposure, and ultimate ownership in the firm. *CEO age* is related to riskier firm policies as younger CEOs have a higher likelihood of engaging in M&As (Yim, 2013) and internationalization (Tihanyi, et al., 2000). As male CEOs are more inclined towards risk taking (Faccio, et al., 2016), we control for *CEO gender* using a dummy variable that equals one if the CEO is male and zero otherwise. *CEO tenure* is related to various aspects of foreign strategic decisions such as international diversification (Herrmann & Datta, 2005). *CEO education* may influence CEO's knowledge base, information processing capacity and tolerance for uncertainty. Thus, CEOs with higher education are more likely to engage in CBAs. We measure CEO education as an ordinal variable that takes the values zero to three, where zero denotes high-school as the highest education level, while three implies a PhD. *CEO civil status* is a dummy variable that equals 1 for married CEOs and 0 otherwise. To isolate the role of wealth beyond CEO's capabilities and firm's internationalization incentives, we control for *CEO log salary*. Salary has been extensively used in the literature as a proxy for human capital (Harris & Helfat, 1997). In addition, CEOs that follow expansion strategies, either through domestic or CBAs, on average have higher compensation (Sanders & Carpenter, 1998). We control for *CEO ultimate ownership*, as CEOs who have a higher stake invested in their firms tend to be less willing to engage in riskier investments and thus less involved in CBAs (George, et al., 2005). *CEO ultimate ownership* is measured as the percentage of all shares owned by the CEO in their firms. As prior research

³ We note that while we do have access to data and could include all companies (even those that have never engaged in any M&As), using this criterion makes the sample more homogenous so that firms are more comparable to each other. Still, when removing this criterion, the estimated main effects are in fact even larger in magnitude. These results are available upon request.

reports that CEO exposure to international markets positively influences the extent to which the firms they manage engage in foreign activities (Reuber & Fischer, 1997) and the characteristics of foreign entry modes (Herrmann & Datta, 2002), we control for *CEO international exposure*. International exposure is a dummy variable that equals one if either the CEO is not born in Norway or one of the parents is not born in Norway. Finally, we control for *CEO log inheritance* in order to check whether the effect of wealth is uniform across different sources of wealth.

At the firm level, consistent with previous literature (Boellis, Mariotti, Minichilli, & Piscitello, 2016; Herrmann & Datta, 2006), we control for firms' size, revenues, age, leverage, PPE, and profitability. Firm size is measured as the logarithm of firms' assets (*Log assets*). Larger firms have more resources at their disposal and are therefore more likely to invest in resource intensive activities such as CBAs. *Firm age* is measured as the number of years since a firm's inception. Older firms tend to be more experienced and knowledgeable about evaluating and engaging in acquisition targets. *Leverage* is calculated as the ratio of long-term liabilities to total assets. Firms that have higher debt levels would be less inclined to use the scarce financial resources they possess in investing abroad. PPE is calculated as the log of property, plant, and equipment (*Log PPE*). Firm revenues are measured as the logarithm of total revenues, *Log revenue*. Profitability is measured using return on assets (*ROA*). Firms with higher revenues and profitability are more likely to have the resources necessary for engaging in acquisitions.

Consistent with previous literature (Chakrabarti & Mitchell, 2013; Georgallis, Albino-Pimentel, & Kondratenko, 2021; Mohr & Batsakis, 2019; Witte, et al., 2017; Zilja, et al., 2022), we also add several important variables at the target-country level. Specifically, we add a *Nordic dummy* to control for target countries that share similar languages and history with Norway. We also control for the *Log geographic distance* between Norway and the target, and the target country's *Natural resource*, *Log population*, *Log GDP per capita* and *GDP growth*. Again, we note that all our cross-sectional regressions include industry fixed effects to control for variation at the industry level that explains differences in observed CBA patterns (Grøgaard, Gioia, & Benito, 2013). Table 1 lists all variables and their definitions.

4.2. Method

To test our three hypotheses, we use the following cross sectional regression specification:

$$y_{ij} = \alpha + \beta \times \text{Log wealth}_i + \text{CONTROLS} + \text{Industry FE} + \varepsilon_{ij} \quad (1)$$

where y_{ij} represents *CBA scale*, *CBA scope*, and likelihood of entry into a *high political risk* country (in three distinct regressions) for firm i run by CEO j . *CONTROLS* refers to a large set of control variables at the CEO, firm, and target country level. *Industry FE* is a set of industry fixed effects controlling for any time-invariant unobserved characteristics at the industry level that could be correlated with the CEO wealth as well as CBA. Our main coefficient of interest is β , estimating the effect of CEO wealth on each of the dependent variables.

Our first dependent variable, *CBA scale* is a count measure of the number of CBAs that takes a limited range, from zero to 19 of positive integer values that are overly dispersed. Following the literature, given the dispersion in the count data we use negative binomial models to estimate the effect of CEO wealth on the number of CBAs (Albino-Pimentel, Oetzel, Oh, & Poggioli, 2021; George, et al., 2005; Oh & Oetzel, 2011). Our second dependent variable, *CBA scope* is also a count measure (number of target countries), and again we use negative binomial models. Our third dependent variable, CBA in *high political risk* country is a dummy variable equal to 1 if the firm engages in M&As in a country with political risk higher than the median, and 0 otherwise. Hence, we use probit models to estimate the corresponding regression equation (Mietta, 2015; Paunov, 2012). Our conclusions remain unchanged for the first two dependent variables when we use OLS instead of negative

Table 1

Variable list, data sources, and measures.

Construct	Source	Measurement
CBA scale	SDC Platinum	Count number of cross-border acquisitions
CBA scope	SDC Platinum	Count number of distinct cross-border acquisitions countries
High political risk	World Bank	Dummy variable equal to 1 if the composite political risk measure is below the sample mean measured as the average across the six WGI indicators.
Log wealth	SSB	CEO total wealth resulting from bank savings, real estate ownership and investments in financial assets such as bonds, mutual funds and stock
CEO age	SSB	CEO age at that fiscal year in number of years
CEO gender	SSB	Dummy variable, Male = 1; Female = 0
CEO tenure	SSB	CEO's tenure in number of years
CEO civil status	SSB	Equals 1 if CEO is married and 0 otherwise
CEO education	SSB	Dichotomous variable taking the values 0 (high school), 1 (bachelor), 2 (masters), 3 (PhD)
CEO founder	CCGR	Dummy variable equal to 1 if the CEO is also the founder
Log salary	SSB	Log of CEO salary
CEO ultimate ownership	CCGR	Percentage of share owned by the CEO in the firm
International exposure	SSB	Dummy variable equal to 1 if either the CEO or one of the parents is foreign born
Log inheritance	SSB	CEO log inheritance received
Family firm dummy	CCGR	Dummy variable equal to one if the family controls more than 50 % of the shares and zero otherwise
Log assets	CCGR	Log of firm's assets
Log revenue	CCGR	Log of annual revenues
Firm age	CCGR	Number of years since firm's inception
Leverage	CCGR	The ratio of long-term debt to total assets
Log PPE	CCGR	Log property, plant & equipment
ROA	CCGR	Return on Assets
Nordic dummy	SDC Platinum	Dummy variable equal to 1 for Nordic countries
Log geographic distance	(Berry, Guillén, & Zhou, 2010)	Log of geographic distance between Norway and target country
Natural resource	World Bank	Log of target country's natural resources
Log population	World Bank	Log of population of the target country
Log GDP per capita	World Bank	Log of GDP per capita for the target country
GDP growth	World Bank	Target country GDP growth

binomial method, and when using logit instead of probit regressions for the third dependent variable.

Our main analysis is based on CEO-firm pairs. As such, if a firm has two CEOs in the sample, we will have two observations for that firm: one that records the number of CBAs done by CEO 1, and another indicating the number of CBAs for CEO 2. Our statistical analysis will then investigate whether firms run by CEOs with higher wealth engage in more CBAs. We point out that our main regressions are based on paired firm-CEO observations because our dependent variables are not informative on a year-by-year basis, particularly for SMEs that are typically not involved in many CBAs each year. This cross-sectional approach is consistent with prior studies (Brouthers & Nakos, 2004; Dawson, Pae-glis, & Basu, 2018).

Although we argue, as discussed above, that cross sectional analysis is the best approach to test our hypotheses, we also exploit the richness of our panel data to both test the robustness of our cross-sectional results and more importantly to help address some endogeneity concerns. Specifically, we run the following panel regressions:

$$y_{ijt} = \alpha + \beta \times \text{Log wealth}_{jt} + \text{CONTROLS} + \text{Firm FE} + \varepsilon_{ijt} \quad (2)$$

where y_{ijt} represents *CBA scale*, *CBA scope*, and *high political risk* of CBAs (in three distinct regressions) for firm i , run by CEO j and in year t . In these panel regressions, CEO wealth is time-varying, similar as all our

control variables. We add firm fixed effects to control for unobserved time-invariant firm-level characteristics. We note that a fixed effect regression effectively implies that our coefficient of interest estimates the effect of *changes* in CEO wealth on the dependent variables. Therefore, the results of these regressions are very helpful in diminishing endogeneity concerns. For example, while one could expect that there is a positive correlation between CEO wealth and the network of the CEO in the cross-section regressions (and hence our cross sectional results could be driven by CEO network rather than the CEO wealth), it is unlikely that a change in CEO wealth that might occur due to changes in the financial portfolio of the manager or its real estate holding would promptly lead to changes in the CEO's network. As a result, while we cannot completely rule out endogeneity concerns (since we do not have access to an experiment that exogenously changes CEO wealth), our empirical methods are well suited to address plausible alternative hypotheses explaining the relationships we document.

5. Results

Table 2 provides the descriptive statistics of all variables used in our analysis. As shown, firms in our sample have, on average, 1.54 cross border acquisitions (*CBA scale*), with a minimum of 0 and maximum of 19. In addition, while an average firm internationalizes in one target country (*CBA scope*), there is a large variation across companies, ranging from 0 to 10 target countries per firm. We also observe that the average likelihood of engaging in CBAs in *high political risk* countries is 31 %. Our study aims at studying to what extent these variations in scale, scope and choice of high political risk locations of CBA by Norwegian firms may be driven by differences in CEO wealth.

Table 3 presents the correlation matrix. While the bivariate correlations vary substantially, none of the correlations are large enough to suggest multicollinearity in the data. To further check for multicollinearity, we computed the variance-inflated factors for the variables. The highest VIF value is 4.73 for *Log assets* while the average VIF is 1.88; both are well below the respective thresholds of 10 and 6 (Hair, Anderson, Black, & Babin, 2010). This suggests little need for concern about multicollinearity in our empirical analysis.

Before proceeding with testing of our hypotheses, we also provide

Table 2
Descriptive statistics.

Variables	Mean	SD	Min	Median	Max
CBA scale	1.54	3.14	0.00	0.00	19.00
CBA scope	0.99	1.79	0.00	0.00	10.00
High political risk	0.31	0.46	0.00	0.00	1.00
Log wealth	15.39	1.35	10.23	15.34	21.66
CEO age	47.23	7.97	27.00	47.00	76.00
CEO gender	0.95	0.22	0.00	1.00	1.00
CEO tenure	4.26	2.80	1.00	4.00	15.00
CEO civil status	0.82	0.38	0.00	1.00	1.00
CEO education	0.99	0.71	0.00	1.00	3.00
Log salary	14.28	1.08	7.87	14.29	17.50
CEO founder	0.25	0.43	0.00	0.00	1.00
CEO ultimate ownership	11.45	23.78	0.00	0.00	100.00
Log inheritance	4.33	6.04	0.00	0.00	17.88
International exposure	0.02	0.15	0.00	0.00	1.00
Log assets	19.12	2.69	11.63	18.98	25.03
Log revenue	5.75	10.16	-6.91	6.23	19.69
Firm age	16.32	26.16	0.00	8.00	332.00
Leverage	-6.40	1.26	-6.91	-6.91	-0.07
Log PPE	17.48	5.01	-6.91	18.27	23.93
ROA	5.23	12.81	-91.01	3.86	69.26
Nordic dummy	0.10	0.20	0.00	0.00	1.00
Log geographic distance	10.49	21.75	0.00	0.00	131.73
Natural resource	7.42	4.33	0.00	8.80	30.12
Log population	15.90	0.98	11.59	15.42	20.95
Log GDP per capital	11.05	0.38	7.28	11.12	11.54
GDP growth	1.10	2.20	-8.10	1.36	12.41

The definition of all variables as well as their sources are provided in Table 1.

information about the distribution of target countries in our sample in Table 4. As shown, and not surprisingly, Sweden and Denmark are target countries for a large proportion of CBAs (47 %) in our sample. Still, the sample comprises 40 target countries ranging from United States, United Kingdom, Germany, Finland, to Estonia, Russia, Czech Republic, Chile, Romania, Latvia, Turkey, Ukraine, and United Arab Emirates.

Table 5 presents the tests of our three hypotheses, with each of the three columns corresponding to one of the hypotheses. Hypothesis 1 predicts that CEO personal wealth is positively related to the scale of SME cross-border acquisitions. Specifically, the first column shows a positive and statistically significant effect of CEO personal wealth (*Log wealth*) on the scale of CBAs (Model 1: $\beta = 0.288$, $p = 0.000$). This is consistent with the prediction of Hypothesis 1. This is also an economically significant effect,⁴ since a one standard deviation increase in log wealth is associated with 0.66 more CBAs, which is quite sizable and represents a 43 % increase from the mean in the number of foreign acquisitions. Hypothesis 2 predicts that CEO wealth is positively correlated with the scope of CBA (or the number of unique target countries). Column 2 of the table reports the results consistent with this prediction (Model 2: $\beta = 0.196$, $p = 0.005$). This effect is also economically sizable as it implies that a one standard deviation increase in log CEO wealth is associated, on average, with 0.6 more target countries. Given that the average SME in our sample has acquired a target in one country, this is a 60 % increase in the number of target countries. To put the impact of CEO wealth on CBAs further into perspective, we compare the size effect with that of other managerial antecedents of internationalization activity for small firms and larger firms. In the context of SMEs, previous studies have found that managers' formal and informal ties increase international intensity with 0.65 % per tie (Yavuz, 2021), while additional technical and business education in the funding team increases export intensity between 9 % and 23 % (Ganotakis & Love, 2012). In comparison, in MNEs, CEO attributes such as extraversion (Malhotra, Reus, Zhu, & Roelofsen, 2018), network centrality (El-Khatib, Fogel, & Jandik, 2015), career horizon (Matta & Beamish, 2008) and risk-taking (Boustanifar, et al., 2022; Cain & McKeon, 2016) increase the frequency of acquisitions between 4 % and 33 % points. While this contextualization should be taken with caution given the differences in constructs, countries, timeframes, and units of change in the independent variable, they provide a base for understanding better the importance of CEO wealth. To sum it up, our initial results suggest that CEO wealth is beneficial for SMEs' ability to engage in CBAs and the impact is of a comparable magnitude to other well established CEO level characteristics.

Hypothesis 3 predicts that CEO personal wealth increases the likelihood of the SME engaging in cross-border acquisitions in politically risky locations. Column 3 of Table 5 provides evidence consistent with this hypothesis ($\beta = 0.103$, $p = 0.015$), which implies a statistically significant effect. Due to the difficulties associated with an economic interpretation of the z-scores generated by the probit model, we report the marginal effects of the likelihood of entering a high political risk location as a function of log wealth in Fig. 1. Given the distribution of the probit model, the impact of CEO wealth on the probability to enter a high political risk country is a non-linear function of CEO wealth. As can be seen from the graph, an increase in log CEO wealth e.g., from 10 to 18, doubles the likelihood that the SME will engage in CBA in a high political risk country.

Overall, the empirical results provided in Table 5 strongly support the predictions of Hypotheses 1–3. That is, SMEs run by CEOs with higher wealth tend to have larger scope and scale of cross-border acquisitions. Furthermore, these firms also tend to expand to countries with higher political risk. The findings are consistent with our theorizing that CEO wealth plays a dual role in the CBA activity of SMEs by

⁴ Specifically, the effect is calculated as $= (e^{\beta} - 1) \times SD$.

[illegible]

Table 4
Distribution of target nations in cross-border acquisitions.

Target Nations	Cumulative frequency (percentage)
Sweden	33.59
Denmark	47.14
United States	56.25
United Kingdom	64.32
Germany	69.79
Finland	73.96
Netherlands	77.08
Canada	79.69
Australia	81.77
France	83.59
Estonia	84.90
Russia	86.20
Singapore	87.50
Czech Republic	88.54
Switzerland	89.58
Chile	90.36
Lithuania	91.15
Romania	91.93
Spain	92.71
Hong Kong	93.75
India	94.27
Italy	94.79
Latvia	95.31
Poland	95.83
Serbia	96.35
Other	100

This table shows the cumulative frequency (in percentage) of target nations in our sample of cross-border acquisitions by Norwegian firms, sorted in descending order. The last category “Other” include the following countries: Austria, Belgium, Brazil, Faroe Islands, Hungary, Ireland, Japan, Portugal, Slovak Republic, Thailand, Turkey, Ukraine, and United Arab Emirates.

alleviating financial constraints and increasing willingness to take risks.

5.1. Additional analysis

In previous sections, we hypothesized and found supporting evidence that SMEs managed by wealthier CEOs engage in more CBAs in total, and in doing so, they tend to expand to more countries and with more political risk. In testing our hypotheses, we were careful to include as many observable variables as possible (given the richness of our data) that are likely to be correlated to wealth and could also be related to CBA of firms. These were variables at the CEO level (such as age, salary, tenure, education, and international exposure) and at the firm-level (such as firm performance, size and age). We also controlled for many target country level variables as well as any unobserved fixed variable at the industry level. Despite these efforts, there might still be concerns related to selection bias, omitted variables or reverse causality, which we address in the next sections.

5.1.1. Selection bias

Since not all firms choose to engage in CBAs, we face a sample-induced selection issue (Marquis & Qiao, 2020). To address this issue, consistent with recent literature (Marquis & Qiao, 2020; Symeonidou, Bruneel, & Autio, 2017), we estimate a two-stage Heckman model (Heckman, 1979). In the first stage, we run a probit regression to model the likelihood of a firm to make a CBA. We then calculate the inverse Mills ratio in the first stage and include it in the second stage regressions as a right-hand side variable.

The first stage regression requires an exogenous instrument. The ideal instrument must be correlated with CEO wealth but should not directly affect firm CBA as the dependent variable. We use wealth of the CEO's parents as an instrument for CEO wealth. This choice is inspired by the literature documenting that family wealth is strongly correlated with the next generation's wealth (Pfeffer & Waikuk, 2021). While there

Table 5

The effect of CEO wealth on scale, scope, and political risk of CBAs.

	(1) CBA scale	(2) CBA scope	(3) High political risk
Log wealth	0.288 (0.000)	0.196 (0.005)	0.103 (0.015)
CEO age	-0.003 (0.524)	0.002 (0.439)	0.002 (0.815)
CEO gender	-0.785 (0.000)	-0.066 (0.251)	-0.544 (0.007)
CEO tenure	0.031 (0.024)	-0.007 (0.236)	-0.097 (0.000)
CEO civil status	0.418 (0.001)	-0.010 (0.701)	0.153 (0.230)
CEO education	0.074 (0.167)	0.043 (0.097)	0.104 (0.118)
Log salary	0.176 (0.000)	0.032 (0.046)	0.083 (0.149)
CEO founder	-0.503 (0.000)	0.061 (0.065)	-0.214 (0.068)
CEO ultimate ownership	-0.013 (0.000)	-0.002 (0.004)	-0.003 (0.334)
Log inheritance	-0.011 (0.052)	0.003 (0.231)	0.003 (0.733)
International exposure	0.293 (0.304)	0.137 (0.080)	-0.259 (0.398)
Log assets	-0.061 (0.020)	0.007 (0.520)	-0.006 (0.887)
Log revenue	0.002 (0.596)	0.006 (0.000)	-0.006 (0.219)
Firm age	-0.007 (0.001)	-0.000 (0.615)	-0.003 (0.202)
Leverage	-0.107 (0.000)	-0.003 (0.815)	-0.088 (0.013)
Log PPE	0.002 (0.899)	-0.009 (0.015)	0.009 (0.573)
ROA	-0.005 (0.001)	0.004 (0.001)	0.001 (0.731)
Nordic dummy	1.734 (0.000)	0.282 (0.003)	0.209 (0.545)
Log geographic distance	0.034 (0.000)	0.074 (0.000)	0.003 (0.166)
Natural resource	-0.019 (0.005)	-0.017 (0.009)	0.134 (0.000)
Log population	0.166 (0.000)	0.056 (0.039)	1.020 (0.000)
Log GDP per capital	-0.033 (0.719)	-0.140 (0.040)	-1.096 (0.000)
GDP growth	-0.008 (0.410)	-0.004 (0.636)	-0.047 (0.203)
Observations	820	820	820
Pseudo R-squared	0.389	0.401	0.308

Note: p-values in parentheses. All regressions include industry fixed effects. The definition of all variables as well as their sources are provided in Table 1.

is no formal statistical test for exclusion restriction, our results suggest our instrument is valid. Specifically, when we include the wealth of CEO family in our main model together with CEO wealth to explain CBA scale, the estimated coefficient on CEO family wealth is 0.095 with the p-value of 0.483. This suggests that the instrument does not have a direct effect on our outcome variable. To summarize, family wealth has a logical and positive relationship with CEO wealth (inclusion restriction) and does not appear to directly influence CBA (exclusion restriction), supporting the appropriateness of our choice of instrument.

Table 6 reports the results of first and second stage regressions. In the first stage regression (Column 1), we find that wealth of the CEO's family is positively and significantly correlated with that of the CEO ($\beta = 0.054$; p -value = 0.006). The F -statistic is 19.02, which is significantly higher than the rule of thumb threshold of 10 (Stock, Wright, & Yogo, 2002), and hence the instrument is unlikely to be weak. In the second stage, we find evidence supporting the results that higher CEO wealth increases CBA scale, scope, and likelihood of conducting CBAs in high political risk countries (Columns 2–4).

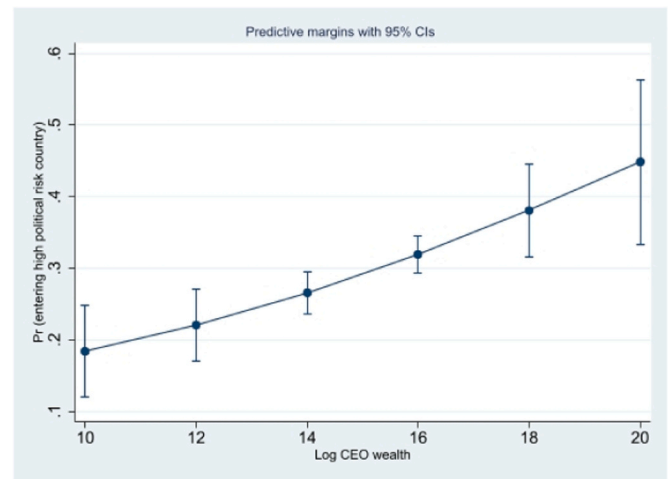


Fig. 1. Predicted probabilities of conducting a CBA in a high political risk country. Note: Predicted probabilities as a function of CEO wealth are estimated based on the probit regression results reported in column 3 of Table 5. The vertical lines indicate the 95 % confidence intervals of the estimated effects.

As columns 2–4 show, even after taking into account the selection issue, our results are in line with the main results, both in terms of the magnitude and statistical significance. If anything, the results are slightly stronger after controlling for selection. This increases our confidence that the results are not affected by selection issues.

5.1.2. Panel regressions

The results we have reported so far are based on cross-sectional observations at the firm-CEO level. We believe this is the most appropriate methodology in our context, as explained earlier, and is also consistent with prior literature. However, we further assess the robustness of our results on the relation between CEO wealth and CBAs using panel data regressions. The advantage of panel models is their accounts for the possibility that CEOs are matched with firms based on unobserved firm characteristics. In panel regressions, we can also allow for wealth of the CEO to be time-varying, and hence estimate how CBA activities of a particular firm changes following changes in its CEO's wealth. Consistent with previous studies, in the panel data specification the dependent variable is the stock or accumulated number of CBAs (Yang, Lu, & Jiang, 2017; Zhang, Li, Li, & Zhou, 2010). In addition, in these panel regressions, we are also able to control for previous experience of firms in CBAs. Specifically, we add a dummy variable, *CBA exposure*, as an additional control variable that gets the value of 1 in year t if the firm has had at least one CBA in the past and 0 otherwise.

Table 7 reports the results of panel regressions. There are three columns in the table corresponding to each hypothesis. The results are again consistent with our earlier results. As one might expect, the estimations provide lower magnitudes for the coefficients of interest in panel versus cross sectional regressions. This is normal since there is typically less variation within firms in the dependent variables than across firms. Indeed, taking into account the standard deviation of dependent variables, we find quite similar economic effects to those reported for our cross-sectional regressions in Table 5.

Overall, the fact that the relationships between CEO wealth and CBA scale, CBA scope, and likelihood of engaging in CBA in high political risk countries hold in the panel regressions further increases our confidence that the results we report are unlikely to be driven by omitted variables. For example, one could imagine that there are other variables – such as CEO network – that could be correlated with CEO wealth, and which could also be an important driver of CBA decisions (Musteen, et al., 2010). While this is, potentially, a significant issue in cross-sectional regressions, it is much less of a concern in our panel regressions. The reason is that CEO network is a much more persistent variable than the

Table 6
CEO wealth and CBAs: Two-stage Heckman model.

	First stage (1) Foreign acquisition dummy	Second stage (2) CBA scale	(3) CBA scope	(4) High political risk
Log wealth	0.270 (0.000)	0.302 (0.003)	0.201 (0.009)	0.096 (0.004)
Family wealth	0.054 (0.006)			
CEO age	-0.007 (0.348)	-0.007 (0.344)	0.002 (0.773)	-0.005 (0.093)
CEO gender	-1.062 (0.000)	-0.540 (0.024)	-0.139 (0.491)	-0.433 (0.002)
CEO tenure	0.001 (0.958)	0.012 (0.535)	0.008 (0.561)	0.002 (0.717)
CEO civil status	0.396 (0.011)	0.171 (0.214)	0.056 (0.617)	0.100 (0.033)
CEO education	0.147 (0.069)	0.083 (0.247)	0.086 (0.120)	0.089 (0.003)
Log salary	0.400 (0.000)	0.154 (0.010)	0.118 (0.017)	0.075 (0.011)
CEO founder	0.007 (0.957)	0.115 (0.354)	0.278 (0.003)	-0.091 (0.067)
CEO ultimate ownership	-0.007 (0.029)	0.001 (0.743)	0.003 (0.220)	-0.005 (0.006)
Log inheritance	0.002 (0.859)	-0.008 (0.347)	-0.001 (0.848)	-0.012 (0.002)
International exposure	-0.413 (0.354)	-0.125 (0.748)	0.128 (0.658)	0.162 (0.137)
Log assets	0.112 (0.010)	0.295 (0.000)	0.253 (0.000)	0.057 (0.002)
Log revenue	0.001 (0.896)	-0.005 (0.295)	0.009 (0.010)	0.003 (0.059)
Firm age	-0.006 (0.006)	0.002 (0.212)	0.001 (0.454)	-0.002 (0.060)
Leverage	-0.189 (0.000)	-0.014 (0.758)	0.040 (0.250)	-0.085 (0.001)
Log PPE	-0.004 (0.838)	-0.083 (0.000)	-0.072 (0.000)	-0.002 (0.744)
ROA	0.012 (0.028)	0.002 (0.536)	0.009 (0.008)	0.003 (0.020)
Nordic dummy	0.15 (0.000)	0.832 (0.002)	0.331 (0.005)	1.715 (0.007)
Log geographic distance	-0.162 (0.000)	0.012 (0.080)	0.033 (0.104)	0.001 (0.291)
Natural resource	-0.150 (0.000)	0.005 (0.735)	0.026 (0.015)	0.007 (0.012)
Log population	3.016 (0.000)	-0.172 (0.001)	-0.126 (0.001)	0.147 (0.000)
Log GDP per capital	— (0.002)	0.087 (0.287)	-0.131 (0.025)	-0.132 (0.000)
GDP growth	0.013 (0.704)	0.033 (0.186)	-0.006 (0.739)	-0.012 (0.004)
Invers Mills ratio		-1.337 (0.000)	-1.405 (0.000)	-0.531 (0.049)
Observations	820	820	820	820
R-squared	0.235	0.309	0.410	0.287

Note: p-values in parentheses. All regressions include industry fixed effects. Family wealth is used as the instrument. The definition of all variables as well as their sources are provided in Table 1.

CEO wealth; while CEO wealth could double in one year, a sudden significant change in the network of CEO is highly unlikely. In sum, the panel regressions that show when the CEO wealth increases, CBA activities changes in the direction predicted by our hypotheses, seem

Table 7
CEO wealth and CBAs: Panel regressions.

	(1) CBA scale	(2) CBA scope	(3) High political risk
Log wealth	0.101 (0.032)	0.092 (0.005)	0.030 (0.040)
CEO age	0.001 (0.106)	0.000 (0.953)	-0.004 (0.256)
CEO gender	0.005 (0.862)	0.008 (0.769)	-0.005 (0.963)
CEO tenure	0.008 (0.000)	0.002 (0.101)	-0.009 (0.147)
CEO civil status	0.015 (0.275)	-0.038 (0.005)	0.035 (0.550)
CEO education	-0.012 (0.109)	0.024 (0.002)	-0.027 (0.398)
Log salary	-0.001 (0.881)	0.031 (0.000)	0.053 (0.077)
CEO founder	-0.022 (0.105)	0.022 (0.092)	-0.030 (0.606)
CEO ultimate ownership	-0.000 (0.307)	-0.001 (0.000)	-0.001 (0.246)
Log inheritance	0.000 (0.597)	-0.000 (0.983)	0.001 (0.725)
International exposure	-0.018 (0.625)	0.049 (0.235)	0.000 (0.998)
Log assets	0.000 (0.978)	-0.016 (0.000)	0.056 (0.002)
Log revenue	-0.001 (0.124)	0.002 (0.002)	-0.000 (0.935)
Firm age	-0.000 (0.388)	0.000 (0.934)	-0.002 (0.012)
Leverage	-0.007 (0.081)	0.002 (0.533)	-0.040 (0.022)
Log PPE	0.000 (0.776)	0.002 (0.364)	0.006 (0.477)
ROA	-0.001 (0.002)	0.001 (0.000)	0.002 (0.170)
Nordic dummy	0.126 (0.291)	0.223 (0.026)	-0.144 (0.069)
Log geographic distance	0.067 (0.000)	0.066 (0.000)	0.773 (0.045)
Natural resource	-0.066 (0.000)	-0.025 (0.000)	0.013 (0.000)
Log population	-0.067 (0.001)	-0.001 (0.968)	-0.003 (0.801)
Log GDP per capital	-0.428 (0.000)	-0.173 (0.000)	0.798 (0.000)
GDP growth	-0.040 (0.003)	-0.018 (0.078)	-0.448 (0.000)
CBA experience	0.663 (0.000)	0.340 (0.000)	-0.021 (0.159)
Observations	8434	8434	8434
R-squared	0.412	0.351	0.342

Note: p-values in parentheses. All regressions include firm fixed effects. The definition of all variables as well as their sources are provided in Table 1.

credible and unlikely to be driven by factors other than CEO wealth.⁵

5.1.3. Reverse causality

Another concern is the direction of causality between CEO wealth and CBA. Specifically, CEOs of firms that follow a strategy of more CBAs might have higher compensation (Sanders & Carpenter, 1998), and hence higher wealth. For that reason, we controlled for CEO income in our regressions, and hence the effect we have reported is the effect of wealth over and beyond the compensation. One might be concerned that CBAs affect CEO wealth, i.e., reverse causality, in ways that are not easy to control for (e.g., creating particular opportunities for the CEO). To

⁵ We also find similar supporting evidence when we add firm-CEO fixed effects to these panel regressions, which essentially estimates the effect of CEO turnovers (and hence changes in CEO wealth) on CBAs.

address such a concern, we re-estimated our regressions in Table 5 using CEO's average wealth in the 1993–1999 period (the period before the start of our firm data) as the explanatory variable. As the average tenure of the CEO is roughly 4 years, using CEO wealth in the period 1993–1999 reduces the concern that the CEO has become wealthy as the result of being engaged in CBAs. The estimation results using CEO's wealth (log) for the period 1993–1999 are presented in Table 8 and are consistent with the findings in the main model. We note that the economic magnitude of the effects estimated are also quite similar to those reported in the main results in Table 5. For example, the coefficient of CEO wealth in column 1 Table 8 is 0.20 (*p*-value of 0.000) compared to the corresponding coefficient in Table 5, which is 0.28 (*p*-value of 0.000). Overall, including Heckman's selection model, panel regressions, and using pre-existing wealth data diminish concerns related to the interpretation of the findings.

5.1.4. Wealth percentiles

Previous studies of small and entrepreneurial firms (Evans &

Table 8
Pre-existing CEO wealth and CBAs.

	(1) CBA scale	(2) CBA scope	(3) High political risk
Log wealth (1993–1999)	0.200 (0.000)	0.187 (0.000)	0.078 (0.021)
CEO age	−0.012 (0.014)	−0.005 (0.341)	−0.002 (0.809)
CEO gender	−0.741 (0.000)	−0.645 (0.000)	−0.117 (0.613)
CEO tenure	0.042 (0.004)	0.029 (0.025)	−0.029 (0.125)
CEO civil status	0.378 (0.006)	0.209 (0.040)	−0.028 (0.824)
CEO education	0.090 (0.078)	0.143 (0.010)	0.163 (0.012)
Log salary	0.195 (0.000)	0.188 (0.000)	0.104 (0.056)
CEO founder	−0.453 (0.000)	−0.235 (0.008)	−0.193 (0.114)
CEO ultimate ownership	−0.009 (0.000)	−0.009 (0.000)	−0.001 (0.758)
Log inheritance	−0.013 (0.027)	−0.005 (0.417)	−0.013 (0.100)
International exposure	0.341 (0.358)	0.444 (0.165)	−0.237 (0.563)
Log assets	−0.034 (0.204)	−0.014 (0.598)	0.045 (0.237)
Log revenue	0.001 (0.822)	0.009 (0.002)	−0.010 (0.041)
Firm age	−0.008 (0.000)	−0.006 (0.005)	−0.003 (0.225)
Leverage	−0.076 (0.013)	−0.068 (0.032)	−0.111 (0.005)
Log PPE	−0.003 (0.800)	−0.015 (0.263)	0.005 (0.774)
ROA	−0.005 (0.007)	−0.001 (0.721)	−0.001 (0.813)
Nordic dummy	1.555 (0.000)	1.265 (0.000)	0.131 (0.665)
Log geographic distance	0.034 (0.000)	0.026 (0.000)	0.004 (0.139)
Natural resource	−0.022 (0.003)	−0.029 (0.000)	0.181 (0.000)
Log population	0.182 (0.000)	0.221 (0.000)	1.299 (0.000)
Log GDP per capital	0.020 (0.837)	−0.065 (0.467)	−1.153 (0.000)
GDP growth	−0.009 (0.396)	−0.002 (0.828)	−0.018 (0.543)
Observations	820	820	820
Pseudo R-squared	0.338	0.374	0.32

Note: *p*-values in parentheses. All regressions include industry fixed effects. The definition of all variables as well as their sources are provided in Table 1.

Jovanovic, 1989; Hvide & Møen, 2010) point out a strong impact of the initial founder's wealth on a resource-constrained firm's size and profitability. However, this relation is not always linear. For instance, as founders become wealthier, excess wealth has a decreasing impact on firm profitability. However, wealth has a continuous positive impact on firm's size for all levels of wealth (Hvide & Møen, 2010). To fully explore the relation between wealth and CBAs, we provide descriptive statistics by quartiles of wealth for number of CBAs (*CBA scale*), number of CBA countries (*CBA scope*) and engaging in CBA in high political risk countries in Table 9, Panel A. As we move from the first quartile of wealth (bottom 25 %) to the fourth quartile of wealth (top 25 %), the average *CBA scale* increases from approx. 0.8–2.3, a threefold increase. Moreover, the average *CBA scope* increases from 0.5 to 1.6 (3.5 × more), while the proportion of acquisitions in high political risk countries more than doubles from 0.18 to 0.46.

We proceed by formally testing the impact of wealth percentiles on CBA scale, CBA scope, and likelihood of engaging in CBA in high political risk countries. To do so, we create three dummy variables: 2nd quartile CEO wealth that equals 1 if CEO wealth represents percentiles 25–50, 3rd quartile CEO wealth that equals 1 if CEO wealth represents percentiles 50–75, and 4th quartile CEO wealth that equals 1 if CEO wealth represents percentiles 75–100. All these dummy variables are estimated with respect to the baseline group, namely the first quartile of CEO wealth.

The estimated results (Panel B of Table 9) show that moving from the 1st to the 2nd quartiles of CEO wealth has a positive but statistically insignificant impact on SMEs' CBA scale, scope, and likelihood of entering high political risk locations. However, CEOs with wealth in the 3rd quartile engage in more acquisitions (Model 1: $\beta=0.324$, *p*-value = 0.008), to more countries (Model 2: $\beta=0.360$, *p*-value = 0.017), and are more likely to enter in high political risk countries (Model 3: $\beta=0.141$, *p*-value = 0.040). The results are even stronger in magnitude and significance as we move from the 3rd to the 4th quartiles of CEO wealth. Overall, our results suggest that while low levels of CEO wealth do not have an impact on SMEs' CBAs, high levels of CEO wealth do.

5.1.5. Seemingly unrelated regressions for M&A scale and scope

Given the high overlap between *CBA scale* and *CBA scope* for SMEs, the error terms of the individual regressions could be correlated with one another. To formally test and empirically account for this

Table 9
CEO wealth quartiles and CBAs.

Panel A: Average CBA characteristics by CEO wealth quartiles				
	CEO wealth quartiles			
	1st	2nd	3rd	4th
CBA scale	0.79	1.26	1.83	2.31
CBA scope	0.46	0.68	1.21	1.62
High political risk	0.18	0.26	0.33	0.46
Panel B: CEO wealth quartiles and CBAs				
	(1) CBA scale	(2) CBA scope	(3) High political risk	
2nd quartile CEO wealth	0.103 (0.387)	0.127 (0.443)	0.058 (0.704)	
3rd quartile CEO wealth	0.324 (0.008)	0.360 (0.017)	0.141 (0.040)	
4th quartile CEO wealth	0.890 (0.000)	0.575 (0.000)	0.195 (0.038)	
Control variables	YES	YES	YES	
Observations	820	820	820	
Industry FE	YES	YES	YES	
Pseudo R-squared	0.378	0.391	0.376	

Note: *P*-values in parentheses. Regressions specifications in Panel B are the same as those in Table 5 with the difference that here we use wealth quartiles instead of log wealth as our main variables of interest. The indicator for the first quartile of CEO wealth is dropped out of regressions and hence the estimated coefficients on each wealth quartile is relative to the first quartile.

possibility, we also estimate seemingly unrelated regressions (SUR) (Srivastava & Giles, 1987). Table 10 presents the regression outputs, where we compare the impact of wealth in CBA scale and scope using ordinary least square (Model 1 and 2) and SUR (Model 3 and 4) models. The coefficients remain very similar across the different estimation models, suggesting there is no significant residuals' correlation across the two regressions of CBA scale and CBA scope. We further formally test the hypothesis of no residual correlation through the Breusch-Pagan test of independence. We obtain a p -value of 0.431, and hence cannot reject the null hypothesis that the two residual series are independent.

6. Discussion and conclusions

This study has analyzed the impact of CEO wealth on the scale, scope, and risks of CBA. We start with the resource-based view (Barney, 1991; Wernerfelt, 1984) and argue that CEO wealth may serve as an ancillary resource to a firm by facilitating its access to external financing. We complement the understanding of the role of CEO wealth by relying on the upper echelons theory (Hambrick & Mason, 1984), according to which CEO characteristics are reflected in strategic outcomes. Wealthier CEOs perceive CBAs as less risky or are more willing to take the risks associated with the strategy (Beckhouth, et al., 1995). Combining both perspectives, we hypothesize CEO personal wealth to be positively related to firm's cross-border M&As. Consistent with the theoretical reasoning, we find that SMEs managed by wealthier CEO engage in more CBA, acquire targets spread across more countries, and in locations that are characterized by higher political risk. Our results are robust to a series of alternative variable specifications and model estimations, hence boosting confidence in the findings.

Our findings providing some initial evidence on the role of CEO wealth as an enabler of CBAs for SMEs are important because the acquisition patterns of SMEs are different from those of large MNEs. SMEs are more financially constrained (Beck, et al., 2005; Chang & Rhee, 2011; Dutta, et al., 2016; Westhead, et al., 2001). The capital commitment required, which is strongly impacted by available financial resources (Autio, Sapienza, & Almeida, 2000; Erramilli & D'Souza, 1993; Knight & Kim, 2009; Lu & Beamish, 2001) makes CBAs an even riskier strategy in the case of SMEs. In contrast, financial constraints do not significantly impact MNEs' ability to engage in acquisitions or to bid for a specific target (Khatami, Marchica, & Mura, 2015). However, financial constraints or slack may have a more subtle impact through the choice of payment method e.g., stock vs cash (de Bodt, Cousin, & Officer, 2022), or subsequent performance of the acquired target (Khatami, et al., 2015). Several studies also focus on the targets' financial situation prior to the acquisition (Chen, Hua, & Boateng, 2017; Khatami, et al., 2015) instead of the financial situation of the acquirer. In our study, we find strong evidence of a CEO wealth effect that helps alleviate SMEs' financial constraints and increase risk-taking, as demonstrated by the CEO wealth's positive impact in the total number of acquisitions (scale) and the number of countries entered (scope). Hence, the findings further emphasize the importance of financial resources for SMEs' internationalization. The findings are also consistent with research on the determinants of bank financing that points to the role of the personal attributes – specifically, resources in the form of wealth – of small firms'

owners in obtaining loans (Berger & Udell, 2002).

We find evidence of a positive association between CEO personal wealth and SMEs' choice of a high-risk CBA location. This is consistent with our theorizing that because higher wealth reduces risk aversion, SMEs managed by wealthier CEOs are more likely to engage in acquisitions in high political risk countries. In particular, this finding relates to the international business literature that seeks to understand the determinants of location choice adopting managerial lenses (Buckley, et al., 2016; Buckley, et al., 2018; Buckley, et al., 2007). A key finding is that CEO characteristics such as their experience with risk in the home country (as a proxy for risk propensity) play an important role in firms' decision to operate in locations characterized by high institutional risk (Buckley, et al., 2016; Buckley, et al., 2007). Furthermore, relying on surveys and experimental methods, these studies suggest that while the choice of FDI locations managers take into consideration is done more consistently with traditional economic theories, the choice of final location is highly idiosyncratic to the managers making it. Indeed, we find that even when controlling for key factors suggested by existing economic theory such as market opportunities in the host country, CEO personal wealth has a sizable impact on the likelihood of making CBAs in high-risk countries. More broadly, our findings are consistent with the upper echelon theory on the importance of managers' characteristics (Finkelstein, Hambrick, & Cannella, 2009; Hambrick & Mason, 1984) for understanding firms' strategic outcomes.

6.1. Limitations and future research directions

The results of our study, while robust, should be interpreted in the light of their limitations. First, we base our hypotheses on theoretical arguments derived from extant literature, but we cannot test the mechanism directly; that is, whether the likelihood of obtaining or the amount of external financing obtained is univocally due to higher CEO wealth. To fully capture the financial demands that acquisitions pose on SMEs, the study should ideally have measured the deal value of acquisitions. Unfortunately, due to the limited availability of data, we do not know deal values and hence their financial implications for the firm. Previous studies examining the acquisition activities of SMEs have similar challenges, and they either rely on qualitative case methods (Haapanen, et al., 2019) or proxy acquisitions through count measures (number) of foreign direct investments (Lu & Beamish, 2001).

Second, our analysis is based on a single home country, which could limit the generalizability of the results to a wider set of countries. For instance, Spliid (2013) argues that venture equity firms that offer alternative financial capital are less widespread in Norway than in other Nordic countries, such as Denmark and Sweden. Even though the theoretical drivers of the relationship are not bounded to a specific country or situation, the study could benefit from replication in other countries that differ in terms of availability of alternative sources of financing for SMEs.

A related limitation arises from categorizing countries as high or low political risk based on the median political riskiness of the countries in which Norwegian SMEs have conducted CBAs; i.e. 40 target countries out of more than 190 potential countries. Given the limited extent to which SMEs engage in CBAs (Huett, Baum, Schwens, & Kabst, 2014), the approach ensures sufficient variance in the political riskiness of the location choice and captures the impact of CEO wealth as a driver of the within sample relative political riskiness. However, the approach excludes countries where Norwegians SMEs did not engage in CBAs, in some cases possibly due to political risk considerations. This introduces a potential selection bias where instead of looking at the absolute riskiness of all locations, we measure the relative political riskiness of the location choices in the sample. While it is unlikely that managers of SMEs would actively consider acquisition targets in all the countries of the world, not only on the grounds of political risk, future studies may advance our understanding of the link between CEO wealth and choice of location by drawing from a sample with a larger spread of political

Table 10

SUR and the impact of CEO wealth in CBA scale and scope.

	Regular OLS		SUR regressions (OLS)	
	(1) CBA scale	(2) CBA scope	(3) CBA scale	(4) CBA scope
Log wealth	0.113 (0.037)	0.068 (0.001)	0.114 (0.029)	0.068 (0.000)
Controls	YES	YES	YES	YES
Observations	820	820	820	820
R-squared	0.395	0.421	0.395	0.421

Note: P-values in parentheses. Control variables are the same as those in Table 5.

riskiness in target countries.

Finally, we develop hypotheses based on established theory and employ rigorous econometric methods, including instrumental variable techniques and the Heckman model to alleviate potential endogeneity concerns. However, we do not claim that we fully map causality between CEO wealth and SMEs' cross-border acquisitions. Future research could improve the causal interpretation of the results by relying on exogenous wealth shocks e.g., due to unanticipated asset price shocks (Paiella & Pistaferri, 2017) that may provide a quasi-experimental setup, or include additional variables that could enhance our understanding of the phenomenon. As an example, CEO social capital defined as the "sum of the actual and potential resources embedded within, available through, and derived from the network" (Nahapiet & Ghoshal, 1998) could provide SMEs' with the ability to identify new markets and improve the knowledge about these markets (Chetty & Agndal, 2007; Doornich, 2018). Measuring CEO social capital is difficult, and previous studies have either taken a qualitative approach (Chetty & Agndal, 2007; Prashantham & Dhanaraj, 2010) or relied on rather simple survey measures (Musteen, et al., 2010; Yavuz, 2021). Ideally, we would want to control for social capital as such capital – beyond financial capital and human capital, both of which we account for in our analysis – may matter for firms' competitive advantage and international activity (Lindstrand, Melén, & Nordman, 2011). However, appropriate data to measure such a construct are not readily available. We hope future research aims to provide a more complete account of individual determinants of SMEs' cross-border acquisition activity.

Notwithstanding its limitations, put into context (Békés, et al., 2021; Biru, Filatotchev, Bruton, & Gilbert, 2022; Fung, Qiao, Yau, & Zeng, 2020; Oesterle, et al., 2016), our study provides a strong and robust account of individual level determinants of firms' international outcomes.

6.2. Contributions and implications

Taken together, our findings contribute to the growing literature in strategic management that focuses on the role of individual manager characteristics for enhancing the understanding of firms' strategies as a whole (Barker III & Mueller, 2002; Custódio & Metzger, 2014; Davis, Babakus, Englis, & Pett, 2010; Hambrick, 2007), as well as to the international business literature, in particular the micro-foundation perspective of firms' foreign activities (Békés, et al., 2021; Foss & Pedersen, 2019; Geppert, et al., 2013; Mohr & Batsakis, 2019; Piaskowska & Trojanowski, 2014; Sawant, et al., 2021).

6.2.1. Contributions to the international business literature

This study adds to the micro-foundations research stream within international business that has examined the role of several managerial attributes: Demographic characteristics (Albino-Pimentel, Anand, & Dussauge, 2018; Békés, et al., 2021; Clark, et al., 2018; Herrmann & Datta, 2006; Li, 2018), values (Semadeni, Chin, & Krause, 2021), and personality (Buckley, et al., 2018; Gupta, Nadkarni, & Mariam, 2019; Oesterle, et al., 2016). Specifically, we extend this literature in three important dimensions. First, we focus on SMEs instead of large multinational firms. A focus on SMEs' CBA activity is important as acquisitions offer several benefits for SMEs, such as improving innovation and overall performance (Haapanen, et al., 2019; Lu & Beamish, 2001; Mawson & Brown, 2017). While SMEs are increasingly engaging in acquisitions, the majority of SMEs behave differently from large firms (Weitzel & McCarthy, 2011) and find themselves unable to fully take advantage of CBAs given their resource disadvantage vis-à-vis large MNEs (Fagiolo & Luzzi, 2006; Fernández & Nieto, 2006). At the same time, the role of CEOs is even more prominent in the case of smaller firms. Hence, the second contribution of this paper is to propose CEO wealth as an important factor to take into account when considering SMEs' financial constraints by increasing their access to external capital. The motivation for focusing on CEO wealth comes from the

entrepreneurship literature given the prominence of entrepreneurs' personal wealth for the performance of entrepreneurial firms (Andersen & Nielsen, 2012; Hvide & Møen, 2010). We extend the role of wealth to the international business sphere by arguing that CEO's wealth facilitates CBAs as it indirectly serves as a resource that enables firms to obtain financial resources by signaling higher quality and likelihood of payback to credit providers. Third, we contribute to the important debate on FDI risk-taking (Buckley, et al., 2016). Given the macro risk characterizing FDIs, several studies look at the micro determinants of decision-makers risk-taking. However, most of these studies infer managers' risk-taking from firm behavior i.e., by looking at firms' internationalization (Acedo & Jones, 2007; George, et al., 2005), entry mode choice (Filatotchev, Strange, Piesse, & Lien, 2007; Forlani, et al., 2008) or location choice (Buckley, et al., 2018). Our study joins the set of rare international business studies (Békés, et al., 2021; Boustanifar, et al., 2022) that examine managers' willingness to take risks outside the firm context and specifically by looking at CEO's personal wealth.

6.2.2. Contributions to the strategic management and entrepreneurship literature

This study also contributes to the literature in the intersection of entrepreneurship and strategic management focusing on managerial determinants of firms' strategies. The entrepreneurship research stream has focused on the initial wealth of the entrepreneurs or firm founders, as firms initiated by wealthier entrepreneurs tend to have a higher likelihood of survival (Holtz-Eakin, Joulfaian, & Rosen, 1994) and, on average, a better performance (Hvide & Møen, 2010). In the context of small firms, Cavalluzzo and Wolken (2005) find evidence that the personal wealth of a business owner affects the likelihood of business loan acceptance. Also, substantial literature in strategic management in the upper echelons tradition (Hambrick, 2007; Hambrick & Mason, 1984) highlights the importance of CEO characteristics for an array of organizational outcomes. In this study, we bridge these research streams and document the implications of not only founders', but also CEOs' wealth for firms' policies, which go well beyond the initial start-up phase. Controlling for the share of ownership, founder status of the CEO, and CEO education and salary, we provide evidence that wealth is related to firms' international strategies, and more specifically, that higher CEO wealth is associated with a higher number of CBAs. The importance of CEO wealth is likely to be generalizable beyond acquisitions, to other corporate strategies that have similarly high resource requirements such as diversification into new business areas and expansion through greenfield investments.

6.2.3. Policy implications

At the policy level, the main implication is that to the extent that the relationship between CEO wealth and CBAs is partly driven by liquidity constraints, governmental policies and credit institutions do not fully cover SMEs' need of financing potentially profitable growth opportunities. The findings are consistent with and complement previous literature that highlights financial constraints as a motive for holding back innovation and growth for SMEs (Beck & Demirgüç-Kunt, 2006; Hyytiäinen & Toivanen, 2005). An alternative and complementary explanation is that SMEs may not be fully aware of all public financial support at their disposal or be discouraged in applying for such external financing (Wernli & Dietrich, 2022). Increased availability of credit and awareness of credit options should play a beneficial role in supporting SMEs' cross-border acquisition activity.

Code availability

Available from authors.

Conflict of interest

None.

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Data Availability

The authors do not have permission to share data.

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References

- Acedo, F. J., & Jones, M. V. (2007). Speed of internationalization and entrepreneurial cognition: Insights and a comparison between international new ventures, exporters and domestic firms. *Journal of World Business*, 42(3), 236–252.
- Adarkwah, G. K., & Benito, G. R. G. (2023). Dealing with high-risk environments: Institutional-based tools to reduce political risk costs. *Journal of International Management*, 29(4), Article 101033.
- Albino-Pimentel, J., Oetzel, J., Oh, C. H., & Poggioli, N. A. (2021). Positive institutional changes through peace: The relative effects of peace agreements and non-market capabilities on FDI. *Journal of International Business Studies*, 52(7), 1256–1278.
- Albino-Pimentel, J., Anand, R., & Dussauge, P. (2018). How do firm political connections impact foreign acquisitions? The effects of decision makers' political and firm embeddedness. *Global Strategy Journal*, 8(3), 421–446.
- Andersen, S., & Nielsen, K. M. (2012). Ability or finances as constraints on entrepreneurship? evidence from survival rates in a natural experiment. *The Review of Financial Studies*, 25(12), 3684–3710.
- Anderson, E., & Gatignon, H. (1986). Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies*, 17(3), 1–26.
- Arregle, J. L., Naldi, L., Nordqvist, M., & Hitt, M. A. (2012). Internationalization of family-controlled firms: A study of the effects of external involvement in governance. *Entrepreneurship Theory and Practice*, 36(6), 1115–1143.
- Arrow, K. J. 1971. *Essays in the theory of risk-bearing*. Chicago, IL: Markham.
- Autio, E., Sapienza, H. J., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of Management Journal*, 43(5), 909–924.
- Avery, R. B., Bostic, R. W., & Samolyk, K. A. (1998). The role of personal wealth in small business finance. *Journal of Banking & Finance*, 22(6–8), 1019–1061.
- Barkema, H. G., Bell, J. H., & Pennings, J. M. (1996). Foreign entry, cultural barriers, and learning. *Strategic Management Journal*, 17(2), 151–166.
- Barker III, V. L., & Mueller, G. C. (2002). CEO characteristics and firm R&D spending. *Management Science*, 48(6), 782–801.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Basuil, D. A., & Datta, D. K. (2015). Effects of industry- and region-specific acquisition experience on value creation in cross-border acquisitions: The moderating role of cultural similarity. *Journal of Management Studies*, 52(6), 766–795.
- Beck, T., & Demirgüç-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30(11), 2931–2943.
- Beck, T., Demirgüç-Kunt, A., & Maksimovic, V. (2005). Financial and legal constraints to growth: Does firm size matter? *The Journal of Finance*, 60(1), 137–177.
- Békés, G., Benito, G. R. G., Castellani, D., & Muraközy, B. (2021). Into the unknown: The extent and boldness of firms' international footprint. *Global Strategy Journal*, 11(3), 468–493.
- Bellone, F., Musso, P., Nesta, L., & Schiavo, S. (2010). Financial constraints and firm export behaviour. *World Economy*, 33(3), 347–373.
- Benito, G. R. G. (1997). Divestment of foreign production operations. *Applied Economics*, 29(10), 1365–1378.
- Berger, A. N., El Ghoul, S., Guedhami, O., & Roman, R. A. (2017). Internationalization and bank risk. *Management Science*, 63(7), 2283–2301.
- Berger, A. N., & Udell, G. F. (1995). Relationship lending and lines of credit in small firm finance. *Journal of Business*, 68(3), 351–381.
- Berger, A. N., & Udell, G. F. (2002). Small business credit availability and relationship lending: The importance of bank organisational structure. *Economic Journal*, 112(477), F32–F53.
- Berry, H., Guillén, M. F., & Zhou, N. (2010). An institutional approach to cross-national distance. *Journal of International Business Studies*, 41(9), 1460–1480.
- Bettis, R. A. (2017). Organizationally intractable decision problems and the intellectual virtues of heuristics. *Journal of Management*, 43(8), 2620–2637.
- Biru, A., Filatotchev, I., Bruton, G., & Gilbert, D. (2022). CEOs' regulatory focus and firm internationalization: The moderating effects of CEO overconfidence, narcissism and career horizon. *International Business Review*, 32(3), 1–13.
- Boellis, A., Mariotti, S., Minichilli, A., & Piscitello, L. (2016). Family involvement and firms' establishment mode choice in foreign markets. *Journal of International Business Studies*, 47(8), 929–950.
- Boustani, H., Zajac, E. J., & Zijlstra, F. (2022). Taking chances? The effect of CEO risk propensity on firms' risky internationalization decisions. *Journal of International Business Studies*, 53(2), 302–325.
- Brouthers, K. D. (2002). Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies*, 33, 203–221.
- Brouthers, K. D., & Hennart, J.-F. (2007). Boundaries of the firm: Insights from international entry mode research. *Journal of Management*, 33(3), 395–425.
- Brouthers, K. D., & Nakos, G. (2004). SME entry mode choice and performance: A transaction cost perspective. *Entrepreneurship Theory and Practice*, 28(3), 229–247.
- Brouthers, K. D., Nakos, G., & Dimitratos, P. (2015). SME entrepreneurial orientation, international performance, and the moderating role of strategic alliances. *Entrepreneurship Theory and Practice*, 39(5), 1161–1187.
- Brouthers, L. E., Gao, Y., & McNicol, J. P. (2008). Corruption and market attractiveness influences on different types of FDI. *Strategic Management Journal*, 29(6), 673–680.
- Buckley, P. J., Chen, L., Clegg, L. J., & Voss, H. (2016). Experience and FDI risk-taking: A microfoundational reconceptualization. *Journal of International Management*, 22(2), 131–146.
- Buckley, P. J., Chen, L., Clegg, L. J., & Voss, H. (2018). Risk propensity in the foreign direct investment location decision of emerging multinationals. *Journal of International Business Studies*, 49(2), 153–171.
- Buckley, P. J., Devinney, T. M., & Louviere, J. J. (2007). Do managers behave the way theory suggests? A choice-theoretic examination of foreign direct investment location decision-making. *Journal of International Business Studies*, 38(7), 1069–1094.
- Busse, M., & Hefeker, C. (2007). Political risk, institutions and foreign direct investment. *European Journal of Political Economy*, 23(2), 397–415.
- Cain, M. D., & McKeon, S. B. (2016). CEO personal risk-taking and corporate policies. *Journal of Financial and Quantitative Analysis*, 51(1), 139–164.
- Caligiuri, P., & Santo, V. D. (2001). Global competence: what is it, and can it be developed through global assignments? *Human Resource Planning*, 24(3), 27–35.
- Carpenter, R. E., & Petersen, B. C. (2002). Is the growth of small firms constrained by internal finance? *Review of Economics and Statistics*, 84(2), 298–309.
- Cavalluzzo, K., & Wolken, J. (2005). Small business loan turn downs, personal wealth, and discrimination. *The Journal of Business*, 78(6), 2153–2178.
- Cavusgil, S. T., & Naor, J. (1987). Firm and management characteristics as discriminators of export marketing activity. *Journal of Business Research*, 15(3), 221–235.
- Chakrabarti, R., Gupta-Mukherjee, S., & Jayaraman, N. (2009). Mars-Venus marriages: Culture and cross-border M&A. *Journal of International Business Studies*, 40(2), 216–236.
- Chakrabarti, A., & Mitchell, W. (2013). The persistent effect of geographic distance in acquisition target selection. *Organization Science*, 24(6), 1805–1826.
- Chang, S.-J., & Rhee, J. H. (2011). Rapid FDI expansion and firm performance. *Journal of International Business Studies*, 42(8), 979–994.
- Chen, Y., Hua, X., & Boateng, A. (2017). Effects of foreign acquisitions on financial constraints, productivity and investment in R&D of target firms in China. *International Business Review*, 26(4), 640–651.
- Chetty, S., & Agndal, H. (2007). Social capital and its influence on changes in internationalization mode among small and medium-sized enterprises. *Journal of International Marketing*, 15(1), 1–29.
- Chittoor, R., Aulakh, P. S., & Ray, S. (2019). Microfoundations of firm internationalization: The owner CEO effect. *Global Strategy Journal*, 9(1), 42–65.
- Clark, D. R., Li, D., & Shepherd, D. A. (2018). Country familiarity in the initial stage of foreign market selection. *Journal of International Business Studies*, 49(4), 442–472.
- Coviello, N., Kano, L., & Liesch, P. W. (2017). Adapting the Uppsala model to a modern world: Macro-context and microfoundations. *Journal of International Business Studies*, 48(9), 1151–1164.
- Cuervo-Cazurra, A. (2006). Who cares about corruption? *Journal of International Business Studies*, 37(6), 807–822.
- Cuervo-Cazurra, A., & Genc, M. (2008). Transforming disadvantages into advantages: Developing-country MNEs in the least developed countries. *Journal of International Business Studies*, 39(6), 957–979.
- Custódio, C., & Metzger, D. (2014). Financial expert CEOs: CEO's work experience and firm's financial policies. *Journal of Financial Economics*, 114(1), 125–154.
- Cyert, R. M., & March, J. G. 1963. *A behavioral theory of the firm*. Englewood Cliffs, NJ: Prentice-Hall.
- Davis, P. S., Babakus, E., Englis, P. D., & Pett, T. (2010). The influence of CEO gender on market orientation and performance in service small and medium-sized service businesses. *Journal of Small Business Management*, 48(4), 475–496.
- Dawson, A., Paeglis, I., & Basu, N. (2018). Founder as steward or agent? A study of founder ownership and firm value. *Entrepreneurship Theory and Practice*, 42(6), 886–910.
- de Bodt, E., Cousin, J.-G., & Officer, M. S. (2022). Financial constraints, ownership dilution, and the method of payment in M&A transactions. *Journal of Corporate Finance*, 75, Article 102250.
- Delios, A., & Henisz, W. J. (2003). Political hazards, experience, and sequential entry strategies: The international expansion of Japanese firms, 1980–1998. *Strategic Management Journal*, 24(11), 1153–1164.
- Devers, C. E., Wuorinen, S., McNamara, G., Halebian, J., Gee, I. H., & Kim, J. (2020). An integrative review of the emerging behavioral acquisition literature: Charting the next decade of research. *Academy of Management Annals*, 14(2), 869–907.
- Dikova, D., Sahib, P. R., & Van Witteloostuijn, A. (2010). Cross-border acquisition abandonment and completion: The effect of institutional differences and organizational learning in the international business service industry, 1981–2001. *Journal of International Business Studies*, 41(2), 223–245.

- Doornich, J. B. (2018). Managerial learning from social capital during internationalization. *International Business Review*, 27(4), 877–892.
- Duanmu, J.-L. (2012). Firm heterogeneity and location choice of Chinese multinational enterprises (MNEs). *Journal of World Business*, 47(1), 64–72.
- Duanmu, J.-L. (2014). State-owned MNCs and host country expropriation risk: The role of home state soft power and economic gunboat diplomacy. *Journal of International Business Studies*, 45(8), 1044–1060.
- Duarte, F., Matias Gama, A. P., & Esperança, J. P. (2016). The role of collateral in the credit acquisition process: evidence from SME lending. *Journal of Business Finance & Accounting*, 43(5–6), 693–728.
- Dutta, D. K., Malhotra, S., & Zhu, P. (2016). Internationalization process, impact of slack resources, and role of the CEO: The duality of structure and agency in evolution of cross-border acquisition decisions. *Journal of World Business*, 51(2), 212–225.
- Eeckhoudt, L., Gollier, C., & Schlesinger, H. (1995). The risk-averse (and prudent) newsboy. *Management Science*, 41(5), 786–794.
- El-Khatib, R., Fogel, K., & Jandik, T. (2015). CEO network centrality and merger performance. *Journal of Financial Economics*, 116(2), 349–382.
- Erramilli, M. K., & D'Souza, D. E. (1993). Venturing into foreign markets: The case of the small service firm. *Entrepreneurship Theory and Practice*, 17(4), 29–41.
- European Commission. 2020. Unleashing the full potential of European SMEs. https://ec.europa.eu/commission/presscorner/detail/en/fs_20_426.
- Evans, D. S., & Jovanovic, B. (1989). An estimated model of entrepreneurial choice under liquidity constraints. *Journal of Political Economy*, 97(4), 808–827.
- Faccio, M., Marchica, M.-T., & Mura, R. (2016). CEO gender, corporate risk-taking, and the efficiency of capital allocation. *Journal of Corporate Finance*, 39, 193–209.
- Fagereng, A., Mogstad, M., & Rønning, M. (2021). Why do wealthy parents have wealthy children? *Journal of Political Economy*, 129(3), 703–756.
- Fagiolo, G., & Luzzi, A. (2006). Do liquidity constraints matter in explaining firm size and growth? Some evidence from the Italian manufacturing industry. *Industrial and Corporate Change*, 15(1), 1–39.
- Fagre, N., & Wells, L. T. (1982). Bargaining power of multinationals and host governments. *Journal of International Business Studies*, 13, 9–23.
- Felin, T., Foss, N. J., & Ployhart, R. E. (2015). The microfoundations movement in strategy and organization theory. *Academy of Management Annals*, 9(1), 575–632.
- Fernández, Z., & Nieto, M. J. (2006). Impact of ownership on the international involvement of SMEs. *Journal of International Business Studies*, 37(3), 340–351.
- Filatovchev, I., Strange, R., Piesse, J., & Lien, Y.-C. (2007). FDI by firms from newly industrialised economies in emerging markets: corporate governance, entry mode and location. *Journal of International Business Studies*, 38(4), 556–572.
- Finkelstein, S., Hambrick, D. C., & Cannella, B. 2009. Strategic leadership: Theory and research on executives, top management teams, and boards. Oxford, UK: Oxford University Press.
- Forlani, D., Parthasarathy, M., & Keaveney, S. M. (2008). Managerial risk perceptions of international entry-mode strategies: The interaction effect of control and capability. *International Marketing Review*, 25(3), 292–311.
- Foss, N. J., & Pedersen, T. (2019). Microfoundations in international management research: The case of knowledge sharing in multinational corporations. *Journal of International Business Studies*, 50(9), 1594–1621.
- Fung, H.-G., Qiao, P., Yau, J., & Zeng, Y. (2020). Leader narcissism and outward foreign direct investment: Evidence from Chinese firms. *International Business Review*, 29(1), Article 101632.
- Gaffney, N., Karst, R., & Clampit, J. (2016). Emerging market MNE cross-border acquisition equity participation: The role of economic and knowledge distance. *International Business Review*, 25(1), 267–275.
- Ganotakis, P., & Love, J. H. (2012). Export propensity, export intensity and firm performance: The role of the entrepreneurial founding team. *Journal of International Business Studies*, 43(8), 693–718.
- García-Canal, E., & Guillén, M. F. (2008). Risk and the strategy of foreign location choice in regulated industries. *Strategic Management Journal*, 29(10), 1097–1115.
- Georgallis, P., Albino-Pimentel, J., & Kondratenko, N. (2021). Jurisdiction shopping and foreign location choice: The role of market and nonmarket experience in the European solar energy industry. *Journal of International Business Studies*, 52(5), 853–877.
- George, G., Wiklund, J., & Zahra, S. A. (2005). Ownership and the internationalization of small firms. *Journal of Management*, 31(2), 210–233.
- Geppert, M., Dörrenbächer, C., Gammelgaard, J., & Taplin, I. (2013). Managerial risk-taking in international acquisitions in the brewery industry: institutional and ownership influences compared. *British Journal of Management*, 24(3), 316–332.
- Goerzen, A., & Beamish, P. W. (2003). Geographic scope and multinational enterprise performance. *Strategic Management Journal*, 24(13), 1289–1306.
- Grogaard, B., Gioia, C., & Benito, G. R. G. (2013). An empirical investigation of the role of industry factors in the internationalization patterns of firms. *International Studies of Management & Organization*, 43(1), 81–100.
- Guiso, L., & Paiella, M. (2008). Risk aversion, wealth, and background risk. *Journal of the European Economic Association*, 6(6), 1109–1150.
- Gupta, A., Nadkarni, S., & Mariam, M. (2019). Dispositional sources of managerial discretion: CEO ideology, CEO personality, and firm strategies. *Administrative Science Quarterly*, 64(4), 855–893.
- Haapanen, L., Hurmelinna-Laukkanen, P., Nikkilä, S., & Paakkolanvaara, P. (2019). The function-specific microfoundations of dynamic capabilities in cross-border mergers and acquisitions. *International Business Review*, 28(4), 766–784.
- Hair, J. F., Anderson, R. E., Black, W. C., & Babin, B. J. 2010. Multivariate data analysis: A global perspective. Englewood Cliffs, NJ: Pearson Prentice Hall.
- Haleblian, J., Devers, C. E., McNamara, G., Carpenter, M. A., & Davison, R. B. (2009). Taking stock of what we know about mergers and acquisitions: A review and research agenda. *Journal of Management*, 35(3), 469–502.
- Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review*, 32(2), 334–334.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193–206.
- Han, L., Fraser, S., & Storey, D. J. (2009). Are good or bad borrowers discouraged from applying for loans? Evidence from US small business credit markets. *Journal of Banking & Finance*, 33(2), 415–424.
- Harris, D., & Helfat, C. (1997). Specificity of CEO human capital and compensation. *Strategic Management Journal*, 18(11), 895–920.
- Harrison, J. S., Hitt, M. A., Hoskisson, R. E., & Ireland, R. D. (1991). Synergies and post-acquisition performance: Differences versus similarities in resource allocations. *Journal of Management*, 17(1), 173–190.
- Hashai, N. (2011). Sequencing the expansion of geographic scope and foreign operations by “born global” firms. *Journal of International Business Studies*, 42(8), 995–1015.
- Heckman, J. J. (1979). Sample selection bias as a specification error. *Econometrica*, 47(1), 153–161.
- Herrmann, P., & Datta, D. K. (2006). CEO experiences: Effects on the choice of FDI entry mode. *Journal of Management Studies*, 43(4), 755–778.
- Herrmann, P., & Datta, D. K. (2002). CEO successor characteristics and the choice of foreign market entry mode: An empirical study. *Journal of International Business Studies*, 33(3), 551–569.
- Herrmann, P., & Datta, D. K. (2005). Relationships between top management team characteristics and international diversification: An empirical investigation. *British Journal of Management*, 16(1), 69–78.
- Hessels, J., & Parker, S. C. (2013). Constraints, internationalization and growth: A cross-country analysis of European SMEs. *Journal of World Business*, 48(1), 137–148.
- Hitt, M. A., Hoskisson, R. E., & Kim, H. (1997). International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*, 40(4), 767–798.
- Holburn, G. L., & Zelner, B. A. (2010). Political capabilities, policy risk, and international investment strategy: Evidence from the global electric power generation industry. *Strategic Management Journal*, 31(12), 1290–1315.
- Holtz-Eakin, D., Joulfaian, D., & Rosen, H. S. (1994). Sticking it out: Entrepreneurial survival and liquidity constraints. *Journal of Political Economy*, 102(1), 53–75.
- Hou, W., Li, S., & Priem, R. L. (2013). How do CEOs matter? The moderating effects of CEO compensation and tenure on equity ownership in international joint ventures. *Journal of International Management*, 19(2), 138–151.
- Huett, P., Baum, M., Schwens, C., & Kabst, R. (2014). Foreign direct investment location choice of small-and medium-sized enterprises: The risk of value erosion of firm-specific resources. *International Business Review*, 23(5), 952–965.
- Humphrey-Jenner, M., Sautner, Z., & Suchard, J. A. (2017). Cross-border mergers and acquisitions: The role of private equity firms. *Strategic Management Journal*, 38(8), 1688–1700.
- Hvide, H. K., & Møen, J. (2010). Lean and hungry or fat and content? Entrepreneurs' wealth and start-up performance. *Management Science*, 56(8), 1242–1258.
- Hymer, S. H. (1976). *The international operations of national firms: A study of direct foreign investment*. Boston, MA: MIT Press.
- Hyttinen, A., & Toivanen, O. (2005). Do financial constraints hold back innovation and growth? Evidence on the role of public policy. *Research Policy*, 34(9), 1385–1403.
- Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm—A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23–32.
- Johanson, J., & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411–1431.
- Keupp, M. M., & Gassmann, O. (2009). The past and the future of international entrepreneurship: a review and suggestions for developing the field. *Journal of Management*, 35(3), 600–633.
- Khatami, S. H., Marchica, M.-T., & Mura, R. (2015). Corporate acquisitions and financial constraints. *International Review of Financial Analysis*, 40, 107–121.
- King, T., Loncan, T., & Khan, Z. (2021). Investment, leverage and political risk: Evidence from project-level FDI. *Journal of Corporate Finance*, 67, Article 101873.
- Kiss, A. N., Fernhaber, S., & McDougall-Covin, P. P. (2018). Slack, innovation, and export intensity: Implications for small-and medium-sized enterprises. *Entrepreneurship Theory and Practice*, 42(5), 671–697.
- Knight, G. A., & Kim, D. (2009). International business competence and the contemporary firm. *Journal of International Business Studies*, 40(2), 255–273.
- Korkeamäki, T., Liljeblom, E., & Pasternack, D. (2018). CEO's total wealth characteristics and implications on firm risk. *International Review of Finance*, 18(1), 35–58.
- Kwok, D. W., Meschi, P.-X., & Bertrand, O. (2020). In CEOs we trust: When religion matters in cross-border acquisitions. The case of a multifaith country. *International Business Review*, 29(4), Article 101705.
- Lagassé, J.-F., Boudrand, J., & Widmer, A. 2021. Deloitte 2021 survey on M&A activity in the Swiss SME sector. Deloitte.
- Le, S., & Kroll, M. (2017). CEO international experience: Effects on strategic change and firm performance. *Journal of International Business Studies*, 48(5), 573–595.
- Li, D., Wei, L.-Q., Cao, Q., & Chen, D. (2022). Informal institutions, entrepreneurs' political participation, and venture internationalization. *Journal of International Business Studies*, 53(6), 1–29.
- Li, P.-Y. (2018). Top management team characteristics and firm internationalization: The moderating role of the size of middle managers. *International Business Review*, 27(1), 125–138.
- Li, Q., & Vashchilko, T. (2010). Dyadic military conflict, security alliances, and bilateral FDI flows. *Journal of International Business Studies*, 41(5), 765–782.

- Liesch, P. W., Welch, L. S., & Buckley, P. J. (2011). Risk and uncertainty in internationalisation and international entrepreneurship studies. *Management International Review*, 51(6), 851–873.
- Lin, W.-T. (2012). Family ownership and internationalization processes: Internationalization pace, internationalization scope, and internationalization rhythm. *European Management Journal*, 30(1), 47–56.
- Lindstrand, A., Melén, S., & Nordman, E. R. (2011). Turning social capital into business: A study of the internationalization of biotech SMEs. *International Business Review*, 20(2), 194–212.
- Loock, M., & Hinnen, G. (2015). Heuristics in organizations: A review and a research agenda. *Journal of Business Research*, 68(9), 2027–2036.
- Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic Management Journal*, 22(6–7), 565–586.
- Lu, J. W., & Beamish, P. W. (2006). SME internationalization and performance: Growth vs. profitability. *Journal of International Entrepreneurship*, 4(1), 27–48.
- Luo, X. R., Yang, L., & He, X. (2020). Can one stone kill two birds? Political relationship building and partner acquisition in new ventures. *Entrepreneurship Theory and Practice*, 44(4), 817–841.
- MacCrimmon, K. R., & Wehrung, D. A. (1990). Characteristics of risk taking executives. *Management Science*, 36(4), 422–435.
- Maietta, O. W. (2015). Determinants of university–firm R&D collaboration and its impact on innovation: A perspective from a low-tech industry. *Research Policy*, 44(7), 1341–1359.
- Maitland, E., & Sammartino, A. (2015). Managerial cognition and internationalization. *Journal of International Business Studies*, 46(7), 733–760.
- Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, 22(5), 387–401.
- Malhotra, S., Reus, T. H., Zhu, P., & Roelofs, E. M. (2018). The acquisitive nature of extraverted CEOs. *Administrative Science Quarterly*, 63(2), 370–408.
- Marquis, C., & Qiao, K. (2020). Waking from Mao's dream: Communist ideological imprinting and the internationalization of entrepreneurial ventures in China. *Administrative Science Quarterly*, 65(3), 795–830.
- Martineau, C., & Pastoriza, D. (2016). International involvement of established SMEs: A systematic review of antecedents, outcomes and moderators. *International Business Review*, 25(2), 458–470.
- Mata, J., & Freitas, E. (2012). Foreignness and exit over the life cycle of firms. *Journal of International Business Studies*, 43(7), 615–630.
- Matta, E., & Beamish, P. W. (2008). The accentuated CEO career horizon problem: Evidence from international acquisitions. *Strategic Management Journal*, 29(7), 683–700.
- Mawson, S., & Brown, R. (2017). Entrepreneurial acquisitions, open innovation and UK high growth SMEs. *Industry and Innovation*, 24(4), 382–402.
- McDougall, P. P., Shane, S., & Oviatt, B. M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of Business Venturing*, 9(6), 469–487.
- Mohr, A., & Batsakis, G. (2019). The contingent effect of TMT international experience on firms' internationalization speed. *British Journal of Management*, 30(4), 869–87.
- Morin, R. A., & Suarez, A. F. (1983). Risk aversion revisited. *The Journal of Finance*, 38(4), 1201–1216.
- Muller, P., Caliendo, C., Peycheva, V., Gagliardi, D., Marzocchi, C., Ramlogan, R., & Cox, D. 2015. Annual report on European SMEs. Brussels, Belgium: *European Commission*.
- Musteen, M., Francis, J., & Datta, D. K. (2010). The influence of international networks on internationalization speed and performance: A study of Czech SMEs. *Journal of World Business*, 45(3), 197–205.
- Nachum, L. (2016). Liability of foreignness. In M. Augier, & D. Teece (Eds.), *The Palgrave encyclopedia of strategic management*. London, UK: Palgrave Macmillan. https://doi.org/10.1057/978-1-349-94848-2_752-1.
- Nadolska, A., & Barkema, H. G. (2007). Learning to internationalise: The pace and success of foreign acquisitions. *Journal of International Business Studies*, 38(7), 1170–1186.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242–266.
- Naldi, L., & Davidsson, P. (2014). Entrepreneurial growth: The role of international knowledge acquisition as moderated by firm age. *Journal of Business Venturing*, 29(5), 687–703.
- Oesterle, M.-J., Elosge, C., & Elosge, L. (2016). Me, myself and I: The role of CEO narcissism in internationalization decisions. *International Business Review*, 25(5), 1114–1123.
- Oh, C. H., & Oetzel, J. (2011). Multinationals' response to major disasters: How does subsidiary investment vary in response to the type of disaster and the quality of country governance? *Strategic Management Journal*, 32(6), 658–681.
- Ono, A., & Uesugi, I. (2009). Role of collateral and personal guarantees in relationship lending: Evidence from Japan's SME loan market. *Journal of Money, Credit and Banking*, 41(5), 935–960.
- Paiella, M., & Pistaferrri, L. (2017). Decomposing the wealth effect on consumption. *Review of Economics and Statistics*, 99(4), 710–721.
- Paul, J., Parthasarathy, S., & Gupta, P. (2017). Exporting challenges of SMEs: A review and future research agenda. *Journal of World Business*, 52(3), 327–342.
- Paunov, C. (2012). The global crisis and firms' investments in innovation. *Research Policy*, 41(1), 24–35.
- Pfeffer, F. T., & Waitkus, N. (2021). The wealth inequality of nations. *American Sociological Review*, 86(4), 567–602.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. Stanford University Press.
- Piaskowska, D., & Trojanowski, G. (2014). Twice as smart? The importance of managers' formative-years' international experience for their international orientation and foreign acquisition decisions. *British Journal of Management*, 25(1), 40–57.
- Pietro, F., & Pozzolo, A. F. (2021). Credit constraints and exports of SMEs in emerging and developing countries. *Small Business Economics*, 56(1), 311–332.
- Pool, V. K., Stoffman, N., Yonker, S. E., & Zhang, H. (2019). Do shocks to personal wealth affect risk-taking in delegated portfolios? *Review of Financial Studies*, 32(4), 1457–1493.
- Prashantham, S., & Dhanaraj, C. (2010). The dynamic influence of social capital on the international growth of new ventures. *Journal of Management Studies*, 47(6), 967–994.
- Pratt, J. W. (1964). Risk aversion in the small and in the large. *Econometrica*, 32(1–2), 122–136.
- Rabier, M. R. (2017). Acquisition motives and the distribution of acquisition performance. *Strategic Management Journal*, 38(13), 2666–2681.
- Reeb, D. M., Kwok, C. C., & Baek, H. Y. (1998). Systematic risk of the multinational corporation. *Journal of International Business Studies*, 29(2), 263–279.
- Reuber, A. R., & Fischer, E. (1997). The influence of the management team's international experience on the internationalization behaviors of SMEs. *Journal of International Business Studies*, 28(4), 807–825.
- Riley Jr, W. B., & Chow, K. V. (1992). Asset allocation and individual risk aversion. *Financial Analysts Journal*, 48(6), 32–37.
- Sanders, W. G., & Carpenter, M. A. (1998). Internationalization and firm governance: The roles of CEO compensation, top team composition, and board structure. *Academy of Management Journal*, 41(2), 158–178.
- Sarabi, A., Froese, F. J., Chng, D. H., & Meyer, K. E. (2020). Entrepreneurial leadership and MNE subsidiary performance: The moderating role of subsidiary context. *International Business Review*, 29(3), Article 101672.
- Sawant, R. J., Nachum, L., & Panibratov, A. Y. (2021). The effect of interpersonal political embeddedness on firm internationalization scope. *British Journal of Management*, 32(3), 812–831.
- Semadeni, M., Chin, M., & Krause, R. (2021). Pumping the brakes: Examining the impact of CEO political ideology divergence on firm responses. *Academy of Management Journal*, 65(2), 516–544.
- Shimizu, K., Hitt, M. A., Vaidyanath, D., & Pisano, V. (2004). Theoretical foundations of cross-border mergers and acquisitions: A review of current research and recommendations for the future. *Journal of International Management*, 10(3), 307–353.
- Sitkin, S. B., & Pablo, A. L. (1992). Reconceptualizing the determinants of risk behavior. *Academy of Management Review*, 17(1), 9–38.
- Slangen, A. H., & Beugelsdijk, S. (2010). The impact of institutional hazards on foreign multinational activity: A contingency perspective. *Journal of International Business Studies*, 41(6), 980–995.
- Spliid, R. (2013). Is Nordic private equity different? *The Journal of Private Equity*, 16(2), 20–37.
- Srivastava, V. K., & Giles, D. E. (1987). *Seemingly unrelated regression equations models: Estimation and inference*. CRC press.
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *American Economic Review*, 71(3), 393–410.
- Stock, J. H., Wright, J. H., & Yogo, M. (2002). A survey of weak instruments and weak identification in generalized method of moments. *Journal of Business & Economic Statistics*, 20(4), 518–529.
- Sun, P., Doh, J. P., Rajwani, T., & Siegel, D. (2021). Navigating cross-border institutional complexity: A review and assessment of multinational nonmarket strategy research. *Journal of International Business Studies*, 52(9), 1818–1853.
- Sunder, J., Sunder, S. V., & Zhang, J. (2017). Pilot CEOs and corporate innovation. *Journal of Financial Economics*, 123(1), 209–224.
- Symeonidou, N., Bruneel, J., & Autio, E. (2017). Commercialization strategy and internationalization outcomes in technology-based new ventures. *Journal of Business Venturing*, 32(3), 302–317.
- Tihanyi, L., Ellstrand, A. E., Daily, C. M., & Dalton, D. R. (2000). Composition of the top management team and firm international diversification. *Journal of Management*, 26(6), 1157–1177.
- Ughetto, E. (2008). Does internal finance matter for R&D? New evidence from a panel of Italian firms. *Cambridge Journal of Economics*, 32(6), 907–925.
- UNCTAD. (2021). World investment report 2021. *Investing in Sustainable Recovery*. Geneva: United Nations.
- Vermeulen, F., & Barkema, H. (2001). Learning through acquisitions. *Academy of Management Journal*, 44(3), 457–476.
- Wagenvoort, R. (2003). Are finance constraints hindering the growth of SMEs in Europe? *EIB Papers*, 8(2), 23–50.
- Weitzel, U., & McCarthy, K. J. (2011). Theory and evidence on mergers and acquisitions by small and medium enterprises. *International Journal of Entrepreneurship and Innovation Management*, 14(2–3), 248–275.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Wernli, R., & Dietrich, A. (2022). Only the brave: Improving self-rationing efficiency among discouraged Swiss SMEs. *Small Business Economics*, 59(3), 977–1003.
- Westhead, P., Wright, M., & Ucbasaran, D. (2001). The internationalization of new and small firms: A resource-based view. *Journal of Business Venturing*, 16(4), 333–358.
- Wiseman, R. M., & Gomez-Mejia, L. R. (1998). A behavioral agency model of managerial risk taking. *Academy of Management Review*, 23(1), 133–153.
- Witte, C., Burger, M., Ianchovichina, E., & Pennings, E. (2017). Dodging bullets: The heterogeneous effect of political violence on greenfield FDI. *Journal of International Business Studies*, 48(7), 862–892.

- Yang, J. Y., Lu, J., & Jiang, R. (2017). Too slow or too fast? Speed of FDI expansions, industry globalization, and firm performance. *Longest Range Planning*, 50(1), 74–92.
- Yavuz, R. I. (2021). Founders' education, social capital, and their interplay in the intensity of new-venture internationalization. *Journal of Small Business Management*. <https://doi.org/10.1080/00472778.2021.1913596>
- Yim, S. (2013). The acquisitiveness of youth: CEO age and acquisition behavior. *Journal of Financial Economics*, 108(1), 250–273.
- Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2), 341–363.
- Zhang, J., & He, X. (2014). Economic nationalism and foreign acquisition completion: The case of China. *International Business Review*, 23(1), 212–227.
- Zhang, Y., Li, H., Li, Y., & Zhou, L. A. (2010). FDI spillovers in an emerging market: The role of foreign firms' country origin diversity and domestic firms' absorptive capacity. *Strategic Management Journal*, 31(9), 969–989.
- Zilja, F., Adarkwah, G. K., & Sabel, C. A. (2022). Do environmental policies affect MNEs' foreign subsidiary investments? An empirical investigation. *Management International Review*, 62(1), 53–102.
- Zucchella, A. (2021). International entrepreneurship and the internationalization phenomenon: Taking stock, looking ahead. *International Business Review*, 30(2), Article 101800.