

1. CEO international experience and its effects on total compensation.

Abstract

A considerable amount of research has been produced about the value of overseas assignments. This study offers a novel perspective by bridging human capital theory and social network theory to study the relationship between CEO international experience and compensation. Focusing on a panel dataset of Dutch and Swiss international companies over the five-year period from 2008-2012, with a total of 145 firm-year combinations, we found that total compensation effects of CEO international experience follow an inverted U-shaped relationship. Firm internationalization affects the main relationship by flattening the curve. These findings allow for a better understanding of the compensation effects of international experience. Managerial implications are discussed, together with opportunities for future research.

Keywords: Chief executive officer; compensation; firm complexity; international experience diversity; internationalization

1.1. Introduction

The amount of compensation received by top managers represents a highly relevant topic, especially after the financial crisis exploded. The objective value of overseas assignments is still a garbled concept, despite the increased exposure to foreign contexts, regions, and countries, and the subsequent relevance of internationally experienced executives in competing in today's business context (Finkelstein, Hambrick, & Cannella, 2009).

The literature about executive compensation has mainly focused on the pay-performance relationship (Finkelstein & Hambrick, 1996) and has been primarily interested in explaining the huge increase in pay that has occurred in the last decades. The highly cited paper by Jensen and Murphy (1990) sparked the interest of scholars about pay-performance sensitivity and represents a benchmark for comparison among studies. Agency theory, focusing on the separation between shareholders' ownership and managers' control (Berle & Means, 1932), has provided the main theoretical framework for analysing executive compensation. In their recent review, Hoskisson, Chirico, Zyung, and Gambeta (2017) addressed, among other things, the mechanisms provided by agency theory to control agents' risk taking (e.g., compensation incentives, monitoring): they found that while some scholars found compensation incentives to align principals' and agents' preferences by increasing CEO risk taking (e.g., Carpenter, Pollock, & Leary, 2003), too much risk could also be detrimental (Sanders & Hambrick, 2007).

Results exploiting the agency theory framework have not proven consistent and differing theoretical perspectives have been requested by various scholars (e.g., Peng, Sun, & Markóczy, 2015). The strong focus on the above-mentioned agency elements, while leading to important theoretical contributions and relevant findings, resulted in overlooking other aspects. Adopting a different perspective, focused on human and social networks elements, may prove interesting and have a twofold advantage: governance and board features become less relevant as it would favour a deep dive into CEO careers capital.

While scholars have focused on the value of CEO international experience for the firm, little empirical research exists on career outcomes (Hamori & Koyuncu, 2011) or compensation (Eby, Butts, & Lockwood, 2003): in other words, the value of international

experience for CEOs themselves is currently overlooked. Carpenter, Sanders, and Gregersen (2001), for example, did not find support for the fact that CEO international experience is reflected in higher compensation, especially under global strategic posture contingencies. Moreover, they found support for the fact that CEO international experience is connected to the rest of the TMT. This suggests that the “resourceful” international experience should not be looked at independently from other TMT members. More recently, Patzelt (2010) found support for the existence of a positive relationship between CEO international experience and the amount of venture capital acquired by a new technology venture. The author also found that investors perceive the human capital of CEOs in conjunction with the rest of the TMT. The international experience of the team also represents a source of cognitive capability: Bouquet, Morrison, and Birkinshaw (2009) found support for the fact that TMT abilities (e.g., international attention) are exploited to their full potential only under conditions of international experience and industry dynamism. Zajac supported the relevance of the topic and found that “almost 20 percent of the variance in firm performance could be explained solely by reference to issues relating to CEO [...] compensation” (1990, p. 227). Therefore, understanding whether and under what conditions executives matter became “centrally important for advancing theory and research on executive compensation” (Hambrick & Quigley, 2014, p. 473). Finally, Peng et al. (2015) were the first to address and find support for a human capital effect of international experience on compensation into an emerging economy setting.

All in all, there is little consensus on the value of overseas assignments (Gregersen, Morrison, & Black, 1998) and the previous literature has failed to provide a comprehensive perspective on the value of international experience for CEOs. Lehner listed some characteristics of international experience that may explain why a linear relationship with performance does not exist: some examples are the regional specificity of assignments and the capability of managing global challenges through the employment of middle managers, locals, or consultants, instead of internationally skilled executives.

By examining the relationship between CEO international experience and total compensation, this study has a threefold objective. First, it addresses the “combined effects

of executive characteristics and compensation systems” called for by Hambrick (2007, p. 339).

Second, it increases understanding of the contingency implications of international complexity (Eby et al., 2003). Third, it advances a more nuanced measure of international experience that moves away from a resource perspective and includes pros and cons as well.

Our study offers relevant theoretical and empirical contributions. First, this paper advances the executive compensation literature by combining human capital and social network theories: while previous works about compensation have proven interesting, this study focuses on human capital and the career elements of CEOs, which have been previously overlooked: benefits of international experience are sufficiently addressed, but we contend that there are also costs associated with extensive international experience that affect total compensation, such as lack of depth in international experience and weaker bonds in social networks (Granovetter, 1973). Adopting this novel perspective allows international experience to be conceived as a resource for the firm and the individual, which is in accordance with the prior literature (e.g., Bouquet et al., 2009; Daily, Certo, & Dalton, 2000). It also allows including other features (e.g., diversity of experience abroad), thus documenting international work experience as an antecedent of CEO compensation (as suggested by Hambrick & Quigley, 2014).

Second, this paper contributes to the CEO processing capability debate by exploiting the number of foreign subsidiaries as a measure for international complexity, as suggested by Tushman and Nadler (1978). The degree of internationalization of a firm in terms of commitment to foreign countries plays a pivotal role in determining the link between IE and executive pay. CEO compensation is higher in contexts where there is higher demand for information-processing capabilities due to increased complexity. To this end, our work highlights the importance of contingency factors in determining the link between CEO background experience and compensation (Hambrick, 2007).

Finally, this paper sheds light on the mechanism of CEO compensation, from which both executives and firms can benefit. On the one side, executives aiming at high levels of total

compensation know that extensive levels of international experience are perceived as “too much of a good thing”, thus leading to lower remuneration (Schmid & Dauth, 2014). On the other side, boards of directors are aware of both benefits and costs of international experience: they can accordingly decide the level of compensation linked to the information-processing capacity needed by the firm.

We tested our hypotheses on a sample of 145 Dutch and Swiss CEOs for which complete career details concerning international experience as well as total compensation were gathered in the five-year period from 2008-2012. Our results suggest a curvilinear relationship between CEO international experience and total compensation, positing a moderating effect of firm international complexity.

The paper is structured as follows. After providing theoretical background by leveraging human capital and social network theories in Section 1.2, the paper provides details about the sample and variables in Section 1.3. GLS results are presented and discussed in Section 1.4. Conclusions, limitations, and suggestions for further research are provided in the remainder sections.

1.2. Theoretical review

Executive compensation research has so far been characterized by a narrow focus: two reviews, published ten years apart, have argued that the field needs innovative theoretical perspectives and research design (Devers, Cannella, Reilly, & Yoder, 2007; Gomez-Mejia & Wiseman, 1997).

Executive compensation has generally been viewed within agency theory. The separation between owners (i.e., principals) and managers (i.e., agents) originates an agency issue whose problematic outcomes have been offset by aligning managers and owners’ personal interests with incentives. This explains the focus of the executive compensation literature on the compensation-performance relationship (Finkelstein & Hambrick, 1996). Since the paper of Jensen and Murphy (1990), the sensitivity between managerial compensation and firm performance has attracted significant attention. Hall and Liebman (1998), leveraging a larger and more detailed sample, argued that stock options were responsible for the

increasing sensitivity of CEO compensation to firm performance. More recently, scholars have focused on the detrimental effects of incentive plans, such as excessive risk taking and short-term focus (Holden, 2005), or accounting manipulation (Efendi, Srivastava, & Swanson, 2007). A recent study assessed that CEO cash-based compensation is twice as sensitive to negative as to positive stock returns, while incentive-based compensation is more symmetrical (Leone, Wu, & Zimmerman, 2006).

The influence of governance has played an important role in understanding executive compensation. Scholars have found that outside directors push boards and compensation committees towards market-based compensation of executive teams (Conyon & Peck, 1998). Interestingly, Tosi, Werner, Katz, and Gomez-Mejia (2000) found that 40% of CEO compensation is due to firm size, while only 5% is due to firm performance. Moreover, Kraft and Niederprüm (1999) found support for that fact that ownership concentration negatively affects the level of executive compensation and compensation performance sensitivity. Finally, institutional investors' role is puzzling: while they negatively affect executive total compensation, they positively affect the pay-performance relationship (Hartzell & Starks, 2003). This brief overview of executive compensation, synthesized in Table 1, underlines that the principal-agent perspective adopted so far, while providing interesting results, overlooks important aspects of career development, such as human capital and social networks.

Recent studies in the strategic leadership literature have aimed at a more fine-grained analysis of the impact that top managers have on firms (Finkelstein et al., 2009; Nielsen, 2010), not only in terms of characteristics, which were not examined by Hambrick and Mason (1984), as suggested by Kor (2003), but also regarding the operationalization of those characteristics. The benefit would be twofold: on the one side this would avoid significant distortions; on the other side, it would allow using the full information potential (Bolino, 2007; Sommer, 2013).

Table 1: Selection of relevant papers in the executive compensation literature

Author(s)	Year	Journal	Sample	Findings
Carpenter, Sanders, & Gregersen	2001	Academy of Management Journal	245 MNCs 1993-1996	CEO international experience positively affects compensation only when global strategic posture is taken into account.
Conyon & Peck	1998	Academy of Management Journal	Panel of 94 UK listed companies 1991-1994	Performance predicts compensation. Moreover, NED percentage in board and compensation committees is positively linked to market-based TMT compensation.
Conyon, Peck, & Sadler	2001	Strategic Management Journal	532 UK executives 1997-1998	Variation in executive compensation has a relatively small role in affecting company performance.
Efendi, Srivastava, & Swanson	2007	Journal of Financial Economics	190 US listed firms 2001-2002	Stock options increase the likelihood of accounting manipulation.
Hall & Liebman	1998	Journal of Finance	478 US companies 1980-1994	CEO compensation and firm performance are related more than previously thought. CEO compensation responsiveness to firm performance is due to incentive packages.
Hartzell & Starks	2003	Journal of Finance	Panel of 1,914 US firms 1992-1997	Institutional ownership concentration is positively linked to the sensitivity of executive compensation to performance and negatively related to total compensation.
Holden	2005	Journal of Economic Perspectives	DuPont and General Motor case studies	Stock option plans have evident disadvantages such as excessive risk taking, short-term focus, and value misallocation.
Jensen & Murphy	1990	Journal of Political Economy	2,000 CEOs spanning 50 years	The relationship between CEO wealth and shareholder wealth is small. CEO compensation mainly increases due to incentive packages.
Kraft & Niederprüm	1999	Journal of Economic Behavior and Organization	170 German manufacturing firms 1987-1996	Firm performance is related to pay. Moreover, ownership concentration negatively affects the level of executive compensation and compensation performance sensitivity.
Leone, Wu, & Zimmerman	2006	Journal of Accounting and Economics	2,751 US CEO-year observations 1994-2000	CEO cash-based compensation is twice as sensitive to negative as to positive stock returns. On the contrary, incentive-based compensation is more symmetrical.
Peng, Sun, & Marcoczy	2015	Journal of Management Studies	10,329 firm-year in China 2001-2008	Two important forms of human capital (i.e., international experience and political ties) and their positive effects on CEO compensation are identifies.

Source: Author

Several scholars have agreed that top managers' international experience positively affects firm performance (e.g., Daily et al., 2000; Hamori & Koyuncu, 2011; Roth, 1995). More recently, scholars have looked at the signalling effect of internationally experienced top managers (Schmid & Dauth, 2014). If it is true that shareholders and stock prices react to the appointment of international top managers, then firms must be willing to pay them more: the stock price increase actually represents the expected incremental firm value produced by internationally experienced top managers. Nevertheless, there is a discussion about the extent to which international experience affects or does not affect firm level outcomes: for example, the past compensation literature has overlooked the role of international experience in that "recent attention to intangible resources, such as those embedded in human capital, has given rise to questions" (Carpenter et al., 2001, p. 498). In their paper, they argued that since human capital is intangible and socially complex it provides greater benefits when bundled with complementary resources, as suggested by the emerging enabling process advocated by Ployhart and Moliterno (2011).

Exploiting human and social capital arguments with the aim of understating the firm level effects of internationally exposed executives has already been proven successful. Boxman, de Graaf, and Flap (1991) contended that human capital and social capital of Dutch managers are important for their compensation and argued in favour of an interaction of the two capitals: on the one side, education, work experience, and functional background, and on the other side, internal and external work contacts increase the knowledge of executives and, ultimately, their compensation. Social capital and human capital are highly analogous and interrelated with each other (Burt, 2009), and their respective influences were found to have a strong impact on executive pay (Devers et al., 2007). Accordingly, the following two sections more deeply explore international experience effects according to human capital and social capital theories.

International experience: a human capital perspective

Human capital theory suggests that economic value is created when competences, experiences, and skills are augmented (Becker, 1975): individuals work more effectively when they are more experienced, having developed this knowledge and competence either locally or abroad (e.g., Judge, Cable, Boudreau, & Bretz, 1995; Wayne, Liden, Kraimer, & Graf, 1999). This additional capital available to individuals increases firms' potential productivity but also leads to cumulative rents for themselves, which usually translate into higher and sustained personal income (Becker, 1975). For this reason, human-capital variables have been widely recognized as important determinants of career success (Ng, Eby, Sorensen, & Feldman, 2005), of which compensation represents an objective measure (Judge et al., 1995).

How does international experience affect individuals' mindset? International experience translates into human capital by bringing in international knowledge, expertise, and skills (Hillman & Dalziel, 2003; Nielsen, 2009). Executives with international experience have dealt with country factors that are relevant for internationalizing firms, including economic and market factors, laws, and cultural norms, which is similar to what happens with foreign executives (Nielsen & Nielsen, 2010). This international perspective translates into specific beliefs that favour engagement in global operations (Piaskowska & Trojanowski, 2014; Sambharya, 1996): internationally experienced individuals are less affected by cultural differences and host country risks, as they possess specific knowledge, abilities, and other qualities that affect their cognition and value base.

Scholars have argued that CEOs with international experience represent a valuable and inimitable resource (Carpenter et al., 2001; Daily et al., 2000), which is currently becoming increasingly relevant as firms target emerging countries and become more globalized (Conyon, Hass, Vergauwe, & Zhang, 2016). Firms exploit this human capital to cope with uncertainty, which stems from internationalization choices, and achieve first-hand knowledge of foreign countries (Athanassiou & Nigh, 1999; Sambharya, 1996). Accordingly, executives possessing international experience receive higher compensation than those lacking it. We expect that the relationship is not linear, but similar to a logarithm

function, as international experience in the n^{th} country will marginally affect the cognition base, following an information overload perspective (O'Reilly, 1980).

Linking human capital and compensation has recently been suggested by some scholars (e.g. Hamori & Koyuncu, 2011). Ng et al., who argued that human capital and socio-demographics “indicate one’s worth to the organization itself and therefore [are] more frequently associated with salary growth and promotional opportunities” (2005, p. 394). More recently, Ramaswami, Carter, and Dreher (2016) exploited human capital theory and proposed that the existence of a relationship between experience abroad and compensation, as the former represents a strong developmental experience for individuals.

Scholars have linked compensation to different aspects of human capital. Effects in terms of pay or career success deriving from education (e.g. Psacharopoulos, 1985), external board memberships (Edström & Galbraith, 1977), and career length or company tenure (e.g. Cox & Harquail, 1991) were all found to be significant. In a recent review of the executive compensation literature, Devers et al. (2007) supported the importance of human capital variables for executive compensational future research. All in all, human capital theory arguments suggest that international experience, which we labelled international human capital” has decreasing marginal benefits on compensation (*vid.* top left graphical representation, continued blue line, in Figure 1).

International experience: a social networks perspective

While human capital theory suggests that international experience positively affects compensation, social network theory is focused on the role played by contacts and networks (Hollenbeck & Jamieson, 2015).

Internationally experienced executives contribute to the firm in the form of network contacts to foreign stakeholders (Hillman & Dalziel, 2003; Nielsen, 2009), foreign business contacts (Blomstermo, Eriksson, Lindstrand, & Sharma, 2004), personal acquaintances in foreign firms (Useem, 1984), and advice networks (Athanassiou & Nigh, 2005). Personal contacts in foreign firms represent a valuable source of information, as well as a cognitive capacity enhancer (Schoorman, Bazerman, & Atkin, 1981; Useem, 1984). Business

contacts such as interlocking directors represent a co-optation instrument with international stakeholders (Ruigrok, Peck, & Keller, 2006; Young, Charns, & Shortell, 2001).

The majority of academic literature posits that firm size, industry, and country effects are the most relevant determinants of executive compensation (e.g., Murphy, 1999), scholars have recently found that the quality and size of executive social networks are predictive of compensation (Hwang & Kim, 2009). Nevertheless, results are still inconsistent: Hallock (1997) found that interlocked CEOs receive, on average, higher compensation than non-interlocked ones, while Core, Holthausen, and Larcker (1999) failed to find such a relation. More recently, Larcker, Richardson, Seary, and Tuna (2005) found that a “friendly” social network is positively related to CEO total compensation. Nevertheless, Brown, Gao, Lee, and Stathopoulos (2012) found that board size explains only around 4% of CEO social networks. All in all, these results stress the dearth of coherent results about the effects of social network on executive compensation.

Sufficiently long enough international assignments have a double effect. On the one hand, individuals interact with people within the firm in the host country: as a consequence of their network capital, executives’ bargaining power in the labour market increases, which explains the influence of social networks on executive compensation (Adler & Kwon, 2002; Belliveau, O'Reilly, & Wade, 1996; Burt, 1997; Geletkanycz, Boyd, & Finkelstein, 2001). Top managers’ international experience represents an asset for the firm from an outbound perspective as well, in that it allows access to international networks deemed crucial for the firm strategy. On the other hand, long periods spent abroad in international assignments represent a “double-edged sword” in that they keep individuals away from headquarters. This affects their network formation with top decision makers within the firm (Suutari & Mäkelä, 2007) and slows their time to the top (Georgakakis, Dauth, & Ruigrok, 2016; Hamori & Koyuncu, 2011). The drawbacks of international experience represent a clear shortcoming for social networks (Adler & Kwon, 2002), which increases along with the gaining of international experience and results in less capability to establish strong and lengthy relationships and specific network contexts (Xiao & Tsui, 2007), negative groups

effects (Lechner, Frankenberger, & Floyd, 2010), and over-embeddedness (Gargiulo, Ertug, & Galunic, 2009).

The impact of CEO social networks on total compensation is thus characterized by the escalating costs summarized above (*vid.* top right graphical representation in Figure 1) as we expect that the costs associated with international experience will follow an exponential path: increasing international experience leads to higher costs of maintaining the already existing network, and this effect is paired with lower commitment to the parent company (Gregersen & Black, 1992).

Hypotheses development: an integrative perspective.

We build on previous literature and argue that CEO internationalization affects firm performance, which is ultimately reflected in their compensation. According to human capital theory, CEO international experience is reflected in their total compensation. However, as outlined by Schmid and Dauth (2014), a certain amount of international experience is required for it to have an impact on compensation. In their paper, they show that investors react to the appointment of executives that have above-average international experience, arguing that a certain threshold or turning point must be exceeded before investors include this aspect in their decision-making process. It is intuitive that a one-year experience in a foreign country is likely to marginally affect the cognition base of an individual when the whole career is taken into account. As long as CEO international career increases, the associated human capital will be reflected in total compensation.

A threshold exists where the benefits associated with CEOs' human capital start to be eroded by costs associated with CEO social networks. Schmid and Dauth (2014) also suggested that too much international experience actually negatively affects stock returns, as IE is a "double-edged sword" (Nielsen & Nielsen, 2010). In other words, high values of international experience diversity are reflected in lower compensation, as the social networks cannot be leveraged and exploited. This threshold has a twofold theoretical grounding. First, this is due to the fact that individuals perceive the social network as too

costly to maintain, in line with previous findings about the negative implications of internationalization (Andreason & Kinneer, 2005; Hamori & Koyuncu, 2011).

Second, there is a misalignment between the value attributed to international experience by the individual and by the firm in that individual perception needs to be paired with organizational context, so that international assignments are fully encompassed (Reichlin, 2004). This is due to the fact that individuals and organizations have differing perceptions of career capital (Dickmann & Harris, 2005): from a firm perspective, the network associated with an the international assignment (i.e., *knowing whom*) is the least managed area, but individuals consider it critical for career capital gathering. Therefore, we expect that career capital will be compensated until a threshold beyond which IE diversity becomes detrimental for a CEO as it implies higher “social network costs” (for a graphical representation see Figure 1).

H1: There is an inverted U-shaped relationship between CEO international experience diversity and total compensation.

The moderating effect of firm internationalization

What happens to the IE - compensation relationship when firms increase their international presence? Firm international presence refers to the number of foreign subsidiaries established by a company and is a proxy of the undergone increasing complexity. Rather than other aspects of internationalization, such as foreign sales to total sales, the number of foreign subsidiaries is better able to describe the different social, legal, economic, and financial complexities challenging the firm. International experience represents the lenses exploited to face these complexities.

We advance two arguments to explain the positive moderation of firm international presence. First, past scholars have found that the impact of CEO IE on firm performance (and their compensation too) is augmented under conditions of greater internationalization (Carpenter et al., 2001; Daily et al., 2000; Roth, 1995). Since managers have limited capability to collect and process burgeoning information (McGaffey & Christy, 1975), we

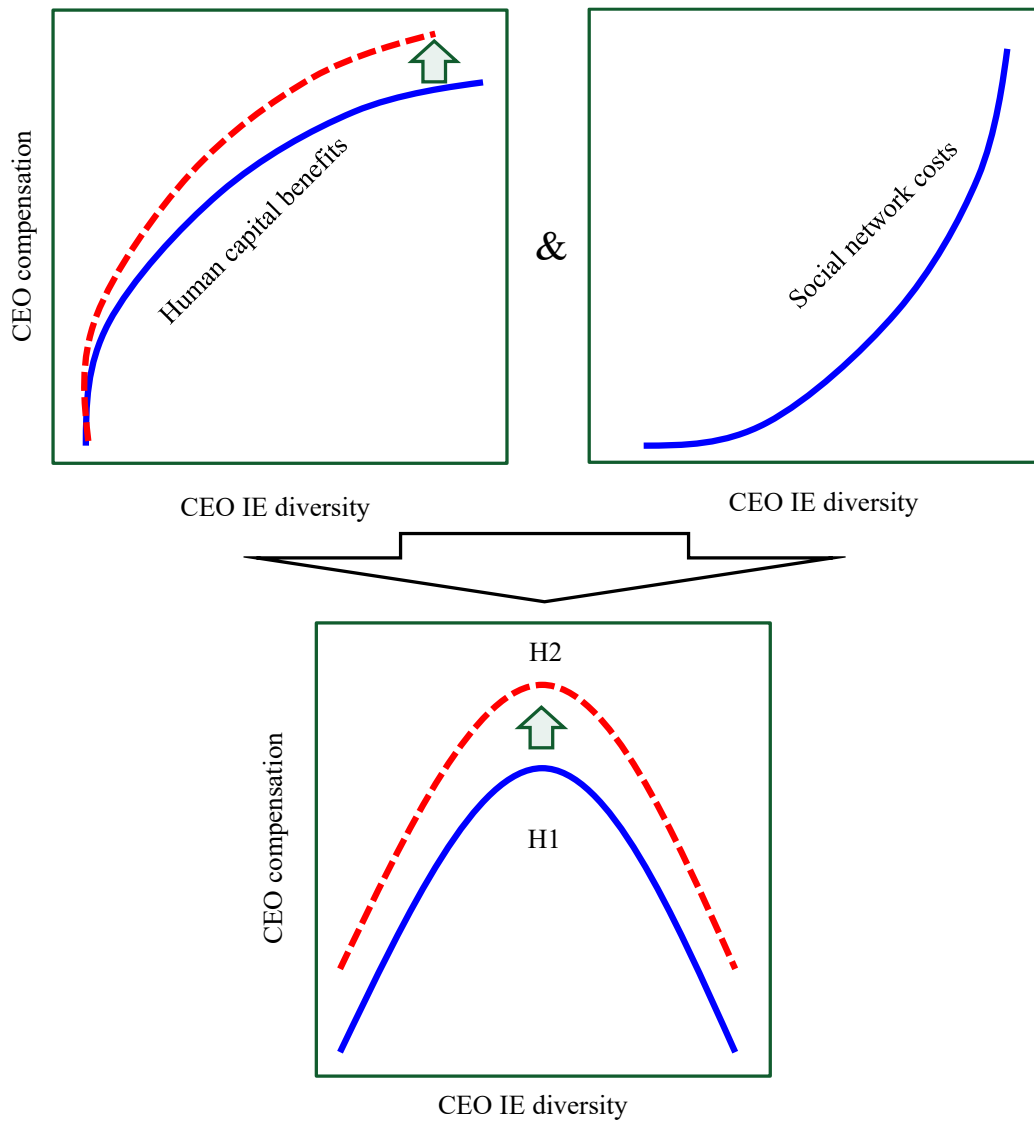
expect that CEOs with extensive international experience will handle the arising complexity coming from internationalization better than CEOs with limited international experience (Greve, Nielsen, & Ruigrok, 2009). This is due to the fact that they are better able to assess the risk of internationalization (Ghoshal & Bartlett, 1990) and that the wider the dispersion of activities, the more critical the ability to process information (Egelhoff, 1991). All these aspects are reflected in higher CEO human capital and, consequently, will lead to higher compensation (Finkelstein & Hambrick, 1989; Henderson & Fredrickson, 1996). Leveraging information-processing and agency theories, Sanders and Carpenter (1998) theoretically argued and empirically supported that firms cope with the increasing complexity deriving from international exposure through higher total compensation. The latter could also be exploited for retaining within the firm CEOs with relevant international experience (Coff, 1997; Gregersen et al., 1998; Lublin).

Second, an increased level of complexity also represents the opportunity for executives to display their human capital. A similar argument was advanced by Ramaswami et al. (2016), who contended that an executive-level position represents an opportunity for individuals to test their human capital. This line of thinking was explored by Hamori and Koyuncu (2011), who compared the stress deriving from international assignments to the “shock” of running a company.

Consequently, in accordance with human capital theory, individual higher human capital translates into higher productivity and, consequently, higher career returns. Firms are willing to pay higher compensation to CEOs able to gather and process relevant information and cope with international complexity (Tushman & Nadler, 1978), as represented by the dotted red curve (*vid.* bottom graphical representation in Figure 1).

H2: The U-shaped relationship is positively moderated by firms’ higher number of foreign subsidiaries.

Figure 1: Additive combination of latent mechanisms resulting in an inverted U-shaped effect



Source: Author

1.3. Methods

1.3.1. Sample

The sample of this study is based on 166 listed companies headquartered in two European countries (i.e., the Netherlands, and Switzerland) over the five-year period from 2008-2012. The companies included in this study were selected according to the manual adopted by the FIM Institute for the “Data Collection Project”, as summarized below. First, listed companies in the Netherlands and in Switzerland between 2008 and 2012 were selected. All firms listed in each country on December 31st of each year were ranked by market capitalization at year end. The following eligibility criteria were applied for each year of assessment. First, small and medium enterprises, defined by the European Union (European Union, 2015) as those with less than 250 full-time employees, Euro 50 million annual turnover, or Euro 43 million total assets were dropped.

Second, all companies whose primary SIC code starts with the digits 67 were also excluded, as they represent primarily portfolio investors or investment vehicles.

Finally, companies that were acquired or ceased operations within the period from 2008-2012 were excluded. The remaining 166 companies (830 firm-year observations) represent the final balanced sample of companies that can make independent strategic decisions, with 63 Dutch firms and 103 Swiss firms respectively. These choices were made to create a sample of product- and service-based companies, active both locally and internationally, characterized by some degree of complexity, and within a post-financial crisis time frame.

1.3.2. Variables

1.3.2.1. Dependent variable

CEO total compensation includes base salary, short-term and long-term incentive plans (STI and LTI, respectively), stock grants, stock options, and annual bonuses, among others. CEO total compensation was chosen instead of short- or long-term compensation as IE affects both short- and long-term strategies. Moreover, since total compensation is highly

correlated with total cash compensation (Judge et al., 1995, p. 497), the former was chosen to take into account equity-based aspects of payment.

Because the remuneration of executives is likely to be positively skewed, compensation level is measured as the natural logarithm of the total of all forms of compensation granted each year (Gerhart & Milkovich, 1987), as reported in a company's annual report.

CEO total compensation is single-year lagged, similar to previous research (Carpenter et al., 2001).

1.3.2.2. Independent variable

In order to capture the full information potential and avoid using simplistic indices, which could lead to significant distortions (Bolino, 2007; Sommer, 2013), this paper computes CEO international experience diversity (*CEO IE Blau index*), using the Blau (1977) index. This index gauges the extent to which an individual has a highly diversified international career and is computed according to the following formula:

$$Blau_Index_{IE} = 1 - \sum_{i=1}^n p_i^2$$

where n is the number of countries in which an individual has worked, and p_i is the relative proportion of the individual's career spent in a country i (Bunderson & Sutcliffe, 2002; Engeler, 2013). This measure highlights the breadth and length of individual international career experience advocated by Rivas (2012, p. 557), as it takes into account both the number of countries in which an executive has worked and the length of time spent in each one. The index ranges from 0 to 1: low values indicate that CEOs have concentrated their career in a few countries, while high values represent a more diverse international experience. This measure has already been used by scholars to calculate the intrapersonal experience diversity (Cannella, Park, & Lee, 2008; Dahlin, Weingart, & Hinds, 2005).

Foreign internationalization is measured as the total number of foreign subsidiaries (*Total number of foreign subsidiaries*) subsequent to the year the CEO IE Blau's index is computed. This allows consideration of international complexity better than the foreign sales over total sales (FSTS) ratio, or the foreign assets over total assets (FATA) ratio. It was computed each year by counting the subsidiaries of the company, as reported in the annual report, excluding the Netherlands or Switzerland, respectively. A similar approach was adopted by Greve (2009), who similarly computed the *total number of foreign countries*, as the number of countries where the company has established subsidiaries, as reported in a company's annual report, excluding the Netherlands or Switzerland, respectively.

1.3.2.3. Control variables

To control for potentially puzzling effects on CEO compensation, we applied the following set of control variables, which include: *country* and *year dummies* (used to control for variance attributable to locational or temporal factors, which include regulatory changes), *industry munificence* and *dynamism*¹, *firm size* (operationalized as number of employees) as a proxy of organizational complexity (Tosi & Gomez-Mejia, 1994), *TMT (excluding the CEO) IE Blau index*, and CEO demographics (i.e., *gender dummy*, *foreigner dummy*).

TMT size may affect the heterogeneity level of a team. The larger the size, for example, the higher the diversity of backgrounds, or the lower the likelihood that adding one dissimilar member would completely change the team composition. Therefore, TMT size was measured by the number of individuals on each firm's top management team.

¹ Industry categorical variables (operationalized exploiting two-digits SIC codes), a common proxy for industrial diversification, were excluded as their inclusion would lead to arising multicollinearity issues detected by VIF values above 10. Instead they will be used industry munificence and dynamism, allowing for paucity of independent variables in every model.

1.4. Results

Following the recommendations advanced by Aguinis, Werner, Abbott, Angert, Park, and Kohlhausen (2010), Table 2 reports the means, standard deviations, and correlations, accompanied by significance values, between all observable variables.

There is a moderate-high positive correlation between CEO foreign nationality and their international education ($r=.76$), signalling that CEOs likely attend university courses in their own country. Moreover, there is a moderate positive correlation between firm size and the number of foreign subsidiaries established by the company ($r=.72$), meaning that the more subsidiaries the company has established abroad, the higher the number of employees it has hired to manage them, which is in line with the rigidity argument suggested by Vermeulen and Barkema (2002). Finally, there is a strong positive correlation between the total number of foreign subsidiaries and foreign countries ($r=.83$): they both represent the complexity of a high degree of international involvement.

To test the proposed hypotheses, a generalized least squares (GLS) random effects model was used. GLS is appropriate since there is a certain degree of correlation between the residuals and the ordinary least squares technique could lead to misleading results (Greene, 2003). Random effects are appropriate because some of the independent variables (e.g., country dummies) are time-invariant. Moreover, the performed Hausman test revealed no significant correlations between the independent variables and firm-level fixed effects (Hausman, 1978). Results are summarized in Table 3.

In addition, to tackle multicollinearity issues that may affect the interpretation of results, the variance inflation factors (VIF) measure of independent variables was computed for our basic model and returned a maximum value of 3.65 and an average value of 2.17, which are below the common threshold of 10 (Hair, Black, Babin, Anderson, & Tatham, 2006), confirming that multicollinearity is not an issue.

Model 1 is a baseline model that includes all control variables and moderators. Moreover, the interpersonal international experience heterogeneity of the rest of the TMT (i.e., TMT IE excluding the CEO Blau index) positively affects CEO compensation ($p<.10$). This suggests that CEO human capital is also recognized in view of the rest of the TMT, similar

to findings of previous research (e.g. Patzelt, 2010). This may be due to the fact that internationalization decisions involve a high degree of complexity and thus assume high behavioural integration (Hambrick, Davison, Snell, & Snow, 1998). Model 2 was included to show that there is no linear effect between CEO international experience diversity and compensation, similar to the finding of Carpenter et al. (2001). Model 3 tested and found support for Hypothesis 1 ($p < .01$): there is an inverted U-shaped relationship between CEO international experience Blau index and CEO total compensation. The coefficient of the squared term is significant and of the expected sign (i.e., negative); moreover, the slope is sufficiently steep at both ends, and the turning point lies within the data range (as shown by Figure 2).

Finally, Model 4 tested Hypothesis 2. A statistically significant positive moderating effect of total foreign subsidiaries was found for the main relationship ($p < .001$).

Table 2: Means, standard deviations, and intercorrelations among variables

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1. CEO compensation (ln)	14.24	1.00	1										
2. CEO IE Blau index	0.27	0.25	0.40*	1									
3. CEO international education dummy	0.30	0.48	0.56	0.87*	1								
4. Total foreign countries	51.52	69.35	0.51*	0.40*	-0.18	1							
5. Total foreign subsidiaries	17.57	19.73	0.46*	0.44*	-0.18	0.83*	1						
6. Industry munificence	0.04	0.04	0.07	0.04	0.14	0.28*	0.24*	1					
7. Industry dynamism	0.05	0.03	-0.07	-0.10	0.30	-0.25*	-0.18*	0.54*	1				
8. Employees	20384	41651	0.41*	0.40*	-0.09	0.60*	0.72*	0.06	-0.19*	1			
9. TMT IE (excluding CEO) Blau index	0.38	0.28	0.48*	0.46*	0.21	0.55*	0.53*	0.32*	0.11	0.36*	1		
10. TMT size	5.29	2.67	0.43*	0.21*	-0.03	0.59*	0.56*	0.05	-0.07	0.43*	0.56*	1	
11. CEO gender dummy	0.96	0.20	-0.07	-0.02	-0.51	0.16	0.14	0.03	0.17*	0.02	-0.02	0.19*	1
12. CEO foreigner dummy	0.34	0.48	0.35*	0.68*	0.76*	0.38*	0.35*	0.25*	0.01	0.27*	0.42*	0.14	-0.21*

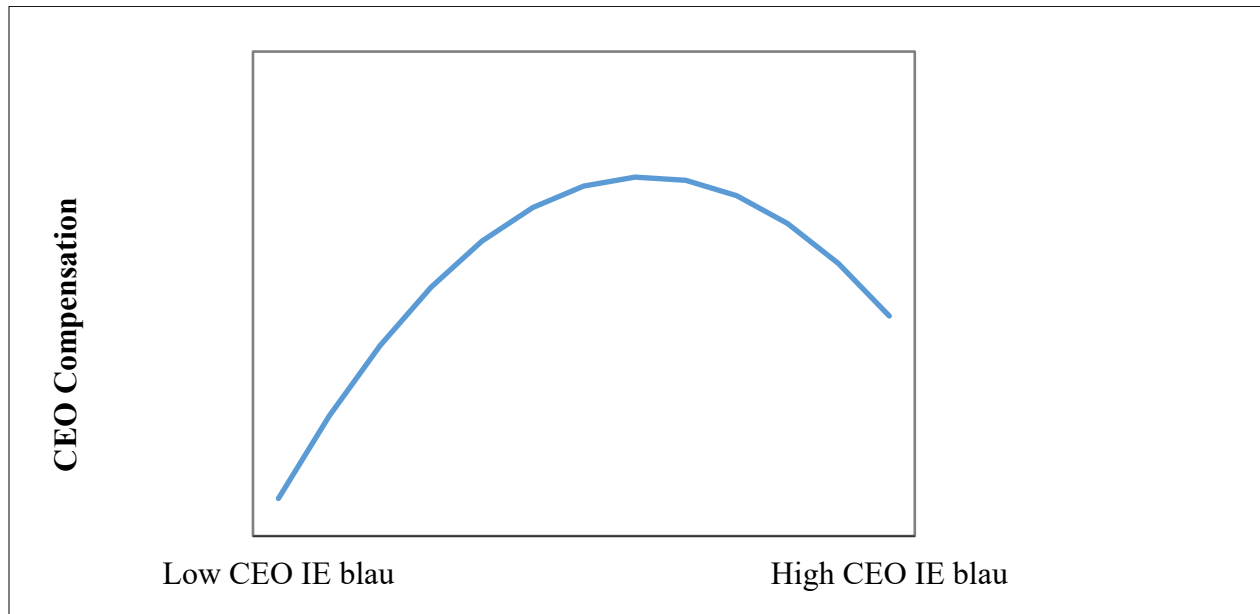
Observations: 145. All variables were measured in year t, with the exception of Total foreign countries and Total foreign subsidiaries, which were measured in year t+1. * p<0.05. Source: Author

Table 3: Results of random effects GLS regression analysis

CEO total compensation (ln)	Model 1	Model 2	Model 3	Model 4
Constant	13.78 *** (0.55)	13.76 *** (0.55)	13.56 *** (0.48)	14.03 *** (0.44)
Total foreign subsidiaries	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Industry munificence	-1.88 (3.46)	-1.49 (3.51)	-1.23 (2.98)	-3.59 (2.69)
Industry dynamism	2.27 (4.88)	2.27 (4.88)	1.23 (4.21)	4.9 (4.02)
Employees	0.00 (0.00)	0.00 (0.00)	0.00 † (0.00)	0.00 * (0.00)
TMT IE (excluding CEO)	0.89 † (0.46)	0.83 † (0.47)	0.68 (0.42)	0.53 (0.38)
Blau index				
TMT size	0.01 (0.05)	0.02 (0.05)	0.02 (0.05)	0.04 (0.04)
CEO gender dummy	-0.48 (0.53)	-0.51 (0.53)	-0.49 (0.46)	-0.93 * (0.41)
CEO foreigner dummy	0.18 (0.24)	0.10 (0.28)	-0.02 (0.25)	-0.05 (0.22)
CEO IE Blau		0.30 (0.51)	3.23 ** (1.11)	0.39 (1.30)
CEO IE Blau SQ			-4.69 ** (1.67)	-0.45 (2.03)
CEO IE Blau x Total foreign subsidiaries				0.04 * (0.01)
CEO IE Blau SQ x Total foreign subsidiaries				-0.05 *** (0.02)
Wald Chi2	41.21	41.72	66.65	107.70
R-sq	.3832	.3904	.4519	.5048

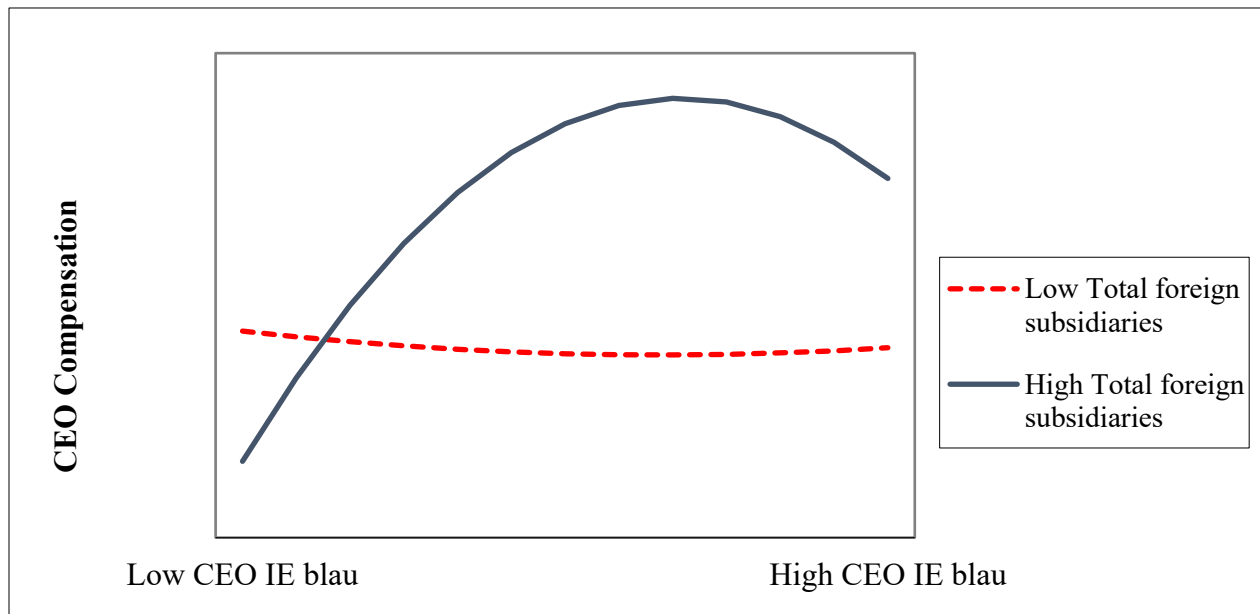
Observations: 145. Country and year dummies were included in all models and the result were not statistically significant. Unstandardized coefficients are reported. Standard errors are reported in parentheses. † p<0.10, * p<0.05, ** p<0.01, *** p<0.001. Source: Author

Figure 2: Curvilinear relationship between CEO international experience and total compensation



Source: Author

Figure 3: Interaction effect of total foreign subsidiaries on the CEO IE Blau – compensation relationship



Moderating effects presented in Figure 3 are based on plus or minus 1.5 standard deviations, or inflection points (Dawson, 2014). Source: Author

1.5. Robustness checks

A number of robustness tests were performed to verify the findings presented above. First, the use of standardized and non-standardized CEO total compensation gave the same statistically significant results (*vid.* **Error! Reference source not found.**, Model 1A). Moreover, because using the logarithm of total compensation could produce for curvilinear results, raw compensation was used, with the same results (not shown as respective coefficients were large).

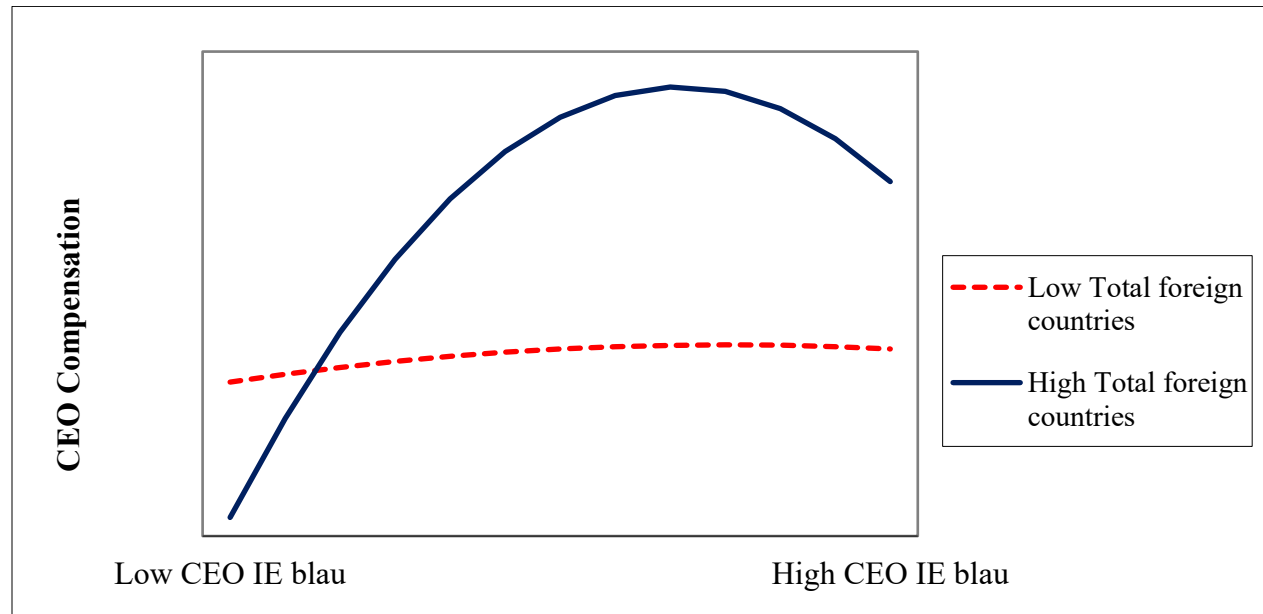
Second, internationalization complexity measured by total number of foreign countries or foreign subsidiaries yielded comparable significant results (for a graphical representation *vid* Figure 4, cf. Models 1A and 2A in **Error! Reference source not found.**).

Third, Model 1B operationalized CEO origin according to the cultural region clustering proposed by Ronen and Shenkar (2013): while there may be different degrees of foreignness when it comes to CEO compensation, these are not based on a single country's peculiarities but on a region's commonalities. This study mostly focused on MNCs, where there are more than 30% foreigner CEOs. Nevertheless, the results were coherent with the previously described models and showed statistically insignificant coefficients.

Fourth, a post hoc power analysis based on the base model (computed with G*Power software) resulted in very good output of 0.999, which is the outcome of: squared multiple correlation ($R^2=0.4540$), effect size ($F^2=0.8315$), total sample size (145), and number of predictors (15).

Finally, Cook's distance measure was used to test for potential outliers' effects: the results did not change materially, when excluding observations with Cook's D values over $4/\text{sample size}$ (Bollen & Jackman, 1990). Most importantly, there was no change in either the sign or the significance levels of the coefficients (*vid.* **Error! Reference source not found.**, Model 4A).

Figure 4: Interaction effect of total foreign countries on the CEO IE Blau – compensation relationship



Moderating effects presented in Figure 4 are based on plus or minus 1.5 standard deviations, or inflection points (Dawson, 2014). Source: Author

1.6. Discussion: theoretical contributions and managerial implications

This paper contributes to the executive compensation literature by tackling executive compensation from a perspective different from the “recurring” principal-agent one. Our first objective consisted of addressing the “combined effects of executive characteristics and compensation systems” called for by Hambrick (2007, p. 339). Interesting aspects other than board of directors and corporate governance were found to explain CEO total compensation, namely the combination of human capital and social networks, which were found to be highly analogous and interrelated with each other (Burt, 2009), and with a strong impact on executive pay (Devers et al., 2007).

Scholars have long assessed that international experience translates into individual human capital in that it increases international knowledge, expertise, and skills (Hillman & Dalziel, 2003; Nielsen, 2009). Working abroad leads to dealing with country factors that are relevant for internationalizing firms: economic, legal, and cultural norms (Nielsen &

Nielsen, 2010). In line with previous work (Dickmann & Harris, 2005), we argued that the diverging perspectives of individuals and firms concerning career capital, and especially *knowing whom*, are also reflected in CEO compensation. While firms focus on internal networking activities and encourage upper echelons to help lower ones, individuals pursue their own benefits and chase high-value external contacts. This misalignment between individual and firm perspectives implies social network costs that escalate when international experience becomes extensive, thus eroding human capital benefits.

We argued and found support for an inverted U-shaped relationship between CEO international experience and total compensation: international experience increases CEO human capital and, consequently, their compensation up to a turning point where the detrimental effects of social networks begin to offset the human capital benefits. This suggests that *knowing whom* career capital, beyond a certain threshold, can hamper CEO total compensation. Extensive international assignments are associated with intrinsic liabilities (Gregersen, 1992) and lead to weaker ties and perceived value of personal contacts (Andersen, 2006), which have detrimental effects on the network with decision makers at headquarters (Georgakakis et al., 2016), resulting in skills that are not relevant in the home context (Harris, Brewster, & Sparrow, 2003). Beyond the maximum, the utility function of domestic social networks begins to decrease and the skills and insights acquired by individuals in their international assignment (*know why*) are perceived as difficult to implement in new jobs with other employers (Defillippi & Arthur, 1994; Dickmann & Harris, 2005).

This allowed us to advance a more nuanced measure of international experience that moves away from a standalone human capital perspective and includes social network costs as well. Moreover, we found support for a multilevel consideration of international experience: individuals' international experience is relevant not only *per se*, but also in association with the rest of the team members with whom they work. This finding was in line with the previous literature (Carpenter et al., 2001) and supports the argument of Ployhart and Moliterno (2011) about the emerging enabling process, which links the level where international experience resides (i.e., the individual level) and the level where it

becomes valuable (i.e., the unit level). This is in line with the concept of international human capital suggested in the literature review chapter.

Our second objective is related to understanding the contingency implications of international complexity (Eby et al., 2003). We found a statistically significant moderating effect of total foreign subsidiaries. Figure 3 helps understand this result. Companies characterized by a higher degree of international expansion give more compensation to those CEOs who have matured an extensive, but not extreme, international experience: “chairpersons reported that it was highly desirable that the CEO candidate to have had at least some exposure [to] business environments outside of the country” (Fitzsimmons & Callan, 2016, p. 12). Conversely, companies that have established a lower number of foreign subsidiaries (i.e., those that are less complex from an internationalization perspective) do not regard CEO international experience as an important aspect when determining their total compensation: in this case, CEO compensation shows an almost flat curvilinear effect. The coefficients of the moderated effect shown in Model 4 are lower than those observed in Model 3, suggesting that internationalization complexity decreases the effect of CEO international experience diversity on total compensation. This may be due to the fact that the independent variable and the moderators are not fully independent of each other; consequently, the inverted-U effect of highly internationalized firms is partially offset by the U-effect of less internationalized firms. Interestingly, substituting the subsidiaries moderator with the conventional foreign sales to total sales moderator turned the coefficients insignificant (*vid.* **Error! Reference source not found.**, Model 3A). This confirms that the former intrinsically represents the complexity companies undergo in their internationalization process: CEO human capital and social networks are reflected in total compensation to the extent to which they allow the CEO to unravel internationalization complexity.

1.7. Limitations and future research opportunities

The study presents inherent limitations, which may spark new ideas for future research opportunities. First, while this paper focuses on CEOs only, future research could focus on the relationship between the international experience of the whole TMT and its compensation: this is due to the fact that strategic decision-making in MNCs is rarely the exclusive domain of a single individuals, regardless of his chairman status (Herrmann & Datta, 2005).

Second, other ways of clustering international experience could be introduced, such as current vs. past international experience, as already done by Takeuchi, Tesluk, Yun, and Lepak (2005). This may be related to the fact that previous research on expatriates has found contrasting evidence for the effect of international experience on commitment to the parent company (e.g., Gregersen, 1992; Gregersen & Black, 1992). Moreover, distinguishing between firm-specific and non-firm-specific managerial skills driven by international experience may produce interesting results, according to the argument of Castanias and Helfat (1991, 2001), who advanced that “less specialized assets cannot compete as effectively in the specialized usage” (p.162).

Third, future research could include board and other governance aspects in the discussion, with the aim of aligning the innovative theoretical perspective adopted here with the managerial power hypothesis. Power forces, defined as “the capacity of individual actors to exert their will” according to Finkelstein (1992, p. 506), between the board and the CEO represent an important aspect in the compensation of executives and may be related to the previous international experience of executives. Accordingly, powerful managers may be better able to selfishly drive the remuneration decisions made by boards of directors. Thus, operationalizing power according to country rankings (Wade, Porac, Pollock, & Graffin, 2006) may prove to be both theoretically and empirically interesting. Moreover, CEO compensation can be seen as the result of competing offers coming from different firms (Murphy & Zabochnik, 2004), thus suggesting that an increase in CEO compensation may be due to other important characteristics such as general management skills.

Finally, due to the increasing importance of the incentive components in executive compensation, it may prove interesting to test whether the results presented here regarding total compensation hold for each component (e.g., salary, bonus, stock options) in line with the argument advanced by Mehran (1995): for example, do executives with international experience receive higher fixed compensation? Or, similarly, do foreign national executives receive more stock option? All these aspects remain unexamined and will likely lead to fruitful contributions.

All in all, this study stresses the important role played by international experience on CEO compensation: on average 50% of their compensation can be explained by international assignments. Understanding the dynamics that drive firms' and individuals' preference choices, together with the contingencies within which they are developed (e.g., international complexity), will result in interesting theoretical contributions in the expatriate and strategic leadership literatures.

References

- Adler, P. S., & Kwon, S.-W. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, 27(1), 17-40.
- Aguinis, H., Werner, S., Abbott, J. L., Angert, C., Park, J. H., & Kohlhausen, D. (2010). Customer-centric science: Reporting significant research results with rigor, relevance, and practical impact in mind. *Organizational Research Methods*, 13(3), 515-539.
- Andersen, P. H. (2006). Listening to the global grapevine: SME export managers' personal contacts as a vehicle for export information generation. *Journal of World Business*, 41(1), 81-96.
- Andreason, A. W., & Kinneer, K. D. (2005). Repatriation adjustment problems and the successful reintegration of expatriates and their families. *Journal of Behavioral and Applied Management*, 6(2), 109-126.
- Athanassiou, N., & Nigh, D. (1999). The impact of US company internationalization on top management team advice networks: A tacit knowledge perspective. *Strategic Management Journal*, 20(1), 83-92.
- Athanassiou, N. A., & Nigh, D. (2005). The impact of US company internationalization on top management team advice networks: A tacit knowledge perspective. In I. Nonaka (Ed.), *Knowledge Management. Critical Perspectives on Business and Management* (Vol. III, pp. 79-94). London and New York: Routledge.
- Becker, G. S. (1975). *Human capital: A theoretical and empirical analysis*. New York, NY: National Bureau for Economic Research.
- Belliveau, M. A., O'Reilly, C. A., & Wade, J. B. (1996). Social capital at the top: Effects of social similarity and status on CEO compensation. *Academy of Management Journal*, 39(6), 1568-1593.
- Berle, A., & Means, G. (1932). *The modern corporation and private property*. New Brunswick, NJ: Transaction publishers.
- Blau, P. M. (1977). *Inequality and heterogeneity - A primitive theory of social structure* (Vol. 7). New York, NY: Free Press.
- Blomstermo, A., Eriksson, K., Lindstrand, A., & Sharma, D. D. (2004). The perceived usefulness of network experiential knowledge in the internationalizing firm. *Journal of International Management*, 10(3), 355-373.
- Bolino, M. C. (2007). Expatriate assignments and intra-organizational career success: Implications for individuals and organizations. *Journal of International Business Studies*, 38(5), 819-835.
- Bollen, K. A., & Jackman, R. W. (1990). *Regression diagnostics: An expository treatment of outliers and influential cases*. Newbury Park, CA: Sage Publications.
- * Bouquet, C., Morrison, A., & Birkinshaw, J. (2009). International attention and multinational enterprise performance. *Journal of International Business Studies*, 40(1), 108-131.

- Boxman, E. A., de Graaf, P. M., & Flap, H. D. (1991). The impact of social and human capital on the income attainment of Dutch managers. *Social Networks*, 13(1), 51-73.
- Brown, R., Gao, N., Lee, E., & Stathopoulos, K. (2012). What are friends for? CEO networks, pay and corporate governance. In S. Boubacker, B. D. Nguyen, & D. K. Nguyen (Eds.), *Corporate Governance. Recent developments and new trends* (pp. 287-307). New York, NY: Springer Heidelberg
- Bunderson, J. S., & Sutcliffe, K. M. (2002). Comparing alternative conceptualizations of functional diversity in management teams: Process and performance effects. *Academy of Management Journal*, 45(5), 875-893.
- Burt, R. S. (1997). The contingent value of social capital. *Administrative Science Quarterly*, 42(2), 339-365.
- Burt, R. S. (2009). *Structural holes: The social structure of competition*. Cambridge, MS: Harvard University Press.
- Cannella, A. A., Park, J.-H., & Lee, H.-U. (2008). Top management team functional background diversity and firm performance: Examining the roles of team member colocation and environmental uncertainty. *Academy of Management Journal*, 51(4), 768-784.
- * Carpenter, M. A., Pollock, T. G., & Leary, M. M. (2003). Testing a model of reasoned risk-taking: Governance, the experience of principals and agents, and global strategy in high-technology IPO firms. *Strategic Management Journal*, 24(9), 803-820.
- * Carpenter, M. A., Sanders, W. G., & Gregersen, H. B. (2001). Bundling human capital with organizational context: The impact of international assignment experience on multinational firm performance and CEO pay. *Academy of Management Journal*, 44(3), 493-511.
- Castanias, R. P., & Helfat, C. E. (1991). Managerial resources and rents. *Journal of Management*, 17(1), 155-171.
- Castanias, R. P., & Helfat, C. E. (2001). The managerial rents model: Theory and empirical analysis. *Journal of Management*, 27(6), 661-678.
- Coff, R. W. (1997). Human assets and management dilemmas: Coping with hazards on the road to resource-based theory. *Academy of Management Review*, 22(2), 374-402.
- Canyon, M. J., Hass, L. H., Vergauwe, S., & Zhang, Z. (2016). Foreign Experience and CEO Compensation. 47. Retrieved from <http://dx.doi.org/10.2139/ssrn.2755631>
- Canyon, M. J., & Peck, S. I. (1998). Board control, remuneration committees, and top management compensation. *Academy of Management Journal*, 41(2), 146-157.
- Canyon, M. J., Peck, S. I., & Sadler, G. V. (2001). Corporate tournaments and executive compensation: Evidence from the UK. *Strategic Management Journal*, 22(8), 805-815.
- Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, CEO compensation, and firm performance. *Journal of Financial Economics*, 51, 371-406.

Gremmo, D. & Ruigrok, W. (2017) - working paper

- Cox, T. H., & Harquail, C. V. (1991). Career paths and career success in the early career stages of male and female MBAs. *Journal of Vocational Behavior*, 39(1), 54-75.
- Dahlin, K. B., Weingart, L. R., & Hinds, P. J. (2005). Team diversity and information use. *Academy of Management Journal*, 48(6), 1107-1123.
- * Daily, C. M., Certo, S. T., & Dalton, D. R. (2000). International experience in the executive suite: The path to prosperity? *Strategic Management Journal*, 21(4), 515-523.
- Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of Business and Psychology*, 29(1), 1-19. doi:10.1007/s10869-013-9308-7
- Defillippi, R. J., & Arthur, M. B. (1994). The boundaryless career: A competency-based perspective. *Journal of Organizational Behavior*, 15(4), 307-324.
- Devers, C. E., Cannella, A. A., Reilly, G. P., & Yoder, M. E. (2007). Executive compensation: A multidisciplinary review of recent developments. *Journal of Management*, 33(6), 1016-1072.
- * Dickmann, M., & Harris, H. (2005). Developing career capital for global careers: The role of international assignments. *Journal of World Business*, 40(4), 399-408.
- Eby, L. T., Butts, M., & Lockwood, A. (2003). Predictors of success in the era of the boundaryless career. *Journal of Organizational Behavior*, 24(6), 689-708.
- Edström, A., & Galbraith, J. R. (1977). Transfer of managers as a coordination and control strategy in multinational organizations. *Administrative Science Quarterly*, 22(2), 248-263.
- Efendi, J., Srivastava, A., & Swanson, E. P. (2007). Why do corporate managers misstate financial statements? The role of option compensation and other factors. *Journal of Financial Economics*, 85, 667-708.
- Egelhoff, W. G. (1991). Information-processing theory and the multinational enterprise. *Journal of International Business Studies*, 22(3), 341-368.
- Engeler, M. (2013). *International experience diversity: Insights from the experiential composition of professional football teams*. University of St.Gallen, Switzerland, Gutenberg, Schaan. (Dissertation n. 4142)
- European Union. (2015). *SME definition*. Luxembourg: Official Journal of the European Union L 124, p. 36 of 20 May 2003: Publications Office of the European Union Retrieved from http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition/index_en.htm.
- Finkelstein, S. (1992). Power in top management teams: Dimensions, measurement, and validation. *Academy of Management Journal*, 35(3), 505-538.
- Finkelstein, S., & Hambrick, D. C. (1989). Chief executive compensation: A study of the intersection of markets and political processes. *Strategic Management Journal*, 10(2), 121-134.
- Finkelstein, S., & Hambrick, D. C. (1996). *Strategic leadership: Top executives and their effects on organizations*. West, Minneapolis/St. Paul, MN: West Publishing.

Gremmo, D. & Ruigrok, W. (2017) - working paper

- Finkelstein, S., Hambrick, D. C., & Cannella, A. A. (2009). *Strategic leadership. Theory and research on executives, top management teams, and boards*. Oxford, GB: Oxford University Press.
- Fitzsimmons, T. W., & Callan, V. J. (2016). CEO selection: A capital perspective. *The Leadership Quarterly*, 27, 765-787.
- Gargiulo, M., Ertug, G., & Galunic, C. (2009). The two faces of control: Network closure and individual performance among knowledge workers. *Administrative Science Quarterly*, 54(2), 299-333.
- Geletkanycz, M. A., Boyd, B. K., & Finkelstein, S. (2001). The strategic value of CEO external directorate networks: Implications for CEO compensation. *Strategic Management Journal*, 22(9), 889-898.
- Georgakakis, D., Dauth, T., & Ruigrok, W. (2016). Too much of a good thing: Does international experience variety accelerate or delay executives' career advancement? *Journal of World Business*, 51(3), 425-437.
- Gerhart, B. A., & Milkovich, G. T. (1987). Salaries, salary growth, and promotions of men and women in a large, private firm. *CAHRS Working Paper Series*, 1-40.
- Ghoshal, S., & Bartlett, C. A. (1990). The multinational corporation as an interorganizational network. *Academy of Management Review*, 15(4), 603-625.
- Gomez-Mejia, L., & Wiseman, R. M. (1997). Reframing executive compensation: An assessment and outlook. *Journal of Management*, 23(3), 291-374.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360-1380.
- Greene, W. H. (2003). *Econometric analysis (Fifth edition)*. Upper Saddle River, NJ: Pearson Education Inc.
- * Gregersen, H. B. (1992). Commitments to a parent company and a local work unit during repatriation. *Personnel Psychology*, 45(1), 29-54.
- * Gregersen, H. B., & Black, J. S. (1992). Antecedents to commitment to a parent company and a foreign operation. *Academy of Management Journal*, 35(1), 65-90.
- Gregersen, H. B., Morrison, A. J., & Black, J. S. (1998). Developing leaders for the global frontier. *MIT Sloan Management Review*, 40(1), 21-32.
- Greve, P. (2009). *International mobility in executive labour markets*. University of St. Gallen, Switzerland, D-Druck Spescha, St. Gallen. (Dissertation n. 3618)
- Greve, P., Nielsen, S., & Ruigrok, W. (2009). Transcending borders with international top management teams: A study of European financial multinational corporations. *European Management Journal*, 27(3), 213-224.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis (Vol. 6)*: Upper Saddle River, NJ: Pearson Prentice Hall.
- Hall, B. J., & Liebman, J. B. (1998). Are CEOs really paid like bureaucrats? *Quarterly Journal of Economics*, 113(3), 653-691.
- Hallock, K. F. (1997). Reciprocally interlocking boards of directors and executive compensation. *Journal of financial and Quantitative Analysis*, 32(3), 331-344.

Gremmo, D. & Ruigrok, W. (2017) - working paper

- Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review*, 32(2), 334-343.
- Hambrick, D. C., Davison, S. C., Snell, S. A., & Snow, C. C. (1998). When groups consist of multiple nationalities: Towards a new understanding of the implications. *Organization Studies*, 19(2), 181-205.
- 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.
- Hambrick, D. C., & Quigley, T. J. (2014). Toward more accurate contextualization of the CEO effect on firm performance. *Strategic Management Journal*, 35(4), 473-491.
- Hamori, M., & Koyuncu, B. (2011). Career advancement in large organizations in Europe and the United States: Do international assignments add value? *International Journal of Human Resource Management*, 22(4), 843-862.
- Harris, H., Brewster, C., & Sparrow, P. (2003). *International human resource management*. London, GB: Chartered Institute of Personnel and Development Publishing.
- Hartzell, J. C., & Starks, L. T. (2003). Institutional investors and executive compensation. *Journal of Finance*, 58(6), 2351-2374.
- Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica*, 46(6), 1251-1271.
- Henderson, A. D., & Fredrickson, J. W. (1996). Information-processing demands as a determinant of CEO compensation. *Academy of Management Journal*, 39(3), 575-606.
- 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.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383-396.
- Holden, R. T. (2005). The original management incentive schemes. *Journal of Economic Perspectives*, 19(4), 135-144.
- Hollenbeck, J. R., & Jamieson, B. B. (2015). Human capital, social capital, and social network analysis: Implications for strategic human resource management. *Academy of Management Perspectives*, 29(3), 370-385.
- Hoskisson, R. E., Chirico, F., Zyung, J., & Gambeta, E. (2017). Managerial risk taking: A multitheoretical review and future research agenda. *Journal of Management*, 43(1), 137-169.
- Hwang, B.-H., & Kim, S. (2009). It pays to have friends. *Journal of Financial Economics*, 93(1), 138-158.
- Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top-management incentives. *Journal of political economy*, 98(2), 225-264.

Gremmo, D. & Ruigrok, W. (2017) - working paper

- Judge, T. A., Cable, D. M., Boudreau, J. W., & Bretz, R. D. (1995). An empirical investigation of the predictors of executive career success. *Personnel Psychology*, 48(3), 485-519.
- Kor, Y. Y. (2003). Experience-based top management team competence and sustained growth. *Organization Science*, 14(6), 707-719.
- Kraft, K., & Niederprüm, A. (1999). Determinants of management compensation with risk-averse agents and dispersed ownership of the firm. *Journal of Economic Behavior & Organization*, 40, 17-27.
- Larcker, D. F., Richardson, S. A., Seary, A., & Tuna, A. (2005). *Back door links between directors and executive compensation*. Retrieved from <https://ssrn.com/abstract=671063>
- Lechner, C., Frankenberger, K., & Floyd, S. W. (2010). Task contingencies in the curvilinear relationships between intergroup networks and initiative performance. *Academy of Management Journal*, 53(4), 865-889.
- Lehner, U. (26 September 1996). Who's the boss. *Wall Street Journal*, p. R15. Retrieved from <https://www.wsj.com/articles/SB843248193723756000>
- Leone, A. J., Wu, J. S., & Zimmerman, J. L. (2006). Asymmetric sensitivity of CEO cash compensation to stock returns. *Journal of Accounting and Economics*, 42(1), 167-192.
- Lublin, J. (29 January 1996). An overseas stint can be a ticket to the top. *Wall Street Journal*, p. B1. Retrieved from <https://global.factiva.com/hp/printsavews.aspx?pp=Save&hc=Publication>
- McGaffey, T. N., & Christy, R. (1975). Information processing capability as a predictor of entrepreneurial effectiveness. *Academy of Management Journal*, 18(4), 857-863.
- Mehran, H. (1995). Executive compensation structure, ownership, and firm performance. *Journal of Financial Economics*, 38(2), 163-184.
- Murphy, K. J. (1999). Executive compensation. *Handbook of labor economics*, 3, 2485-2563.
- Murphy, K. J., & Zabojnik, J. (2004). CEO pay and appointments: A market-based explanation for recent trends. *American Economic Review*, 94(2), 192-196.
- Ng, T. W., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology*, 58(2), 367-408.
- Nielsen, S. (2009). Why do top management teams look the way they do? A multilevel exploration of the antecedents of TMT heterogeneity. *Strategic Organization*, 7(3), 277-305.
- Nielsen, S. (2010). Top management team diversity: A review of theories and methodologies. *International Journal of Management Reviews*, 12(3), 301-316.
- Nielsen, S., & Nielsen, B. B. (2010). Why do firms employ foreigners on their top management team? An exploration of strategic fit, human capital and attraction-

- selection-attrition perspectives. *International Journal of Cross Cultural Management*, 10(2), 195-209.
- O'Reilly, C. A. (1980). Individuals and information overload in organizations: is more necessarily better? *Academy of Management Journal*, 23(4), 684-696.
- * Patzelt, H. (2010). CEO human capital, top management teams, and the acquisition of venture capital in new technology ventures: An empirical analysis. *Journal of Engineering and Technology Management*, 27, 131-147.
- Peng, M. W., Sun, S. L., & Markóczy, L. (2015). Human capital and CEO compensation during institutional transitions. *Journal of Management Studies*, 52(1), 117-147.
- 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.
- Ployhart, R. E., & Moliterno, T. P. (2011). Emergence of the human capital resource: A multilevel model. *Academy of Management Review*, 36(1), 127-150.
- Psacharopoulos, G. (1985). Returns to education: A further international update and implications. *Journal of Human resources*, 20(4), 583-604.
- Ramaswami, A., Carter, N. M., & Dreher, G. F. (2016). Expatriation and career success: A human capital perspective. *Human Relations*, 69(10), 1959-1987.
- Reichlin, I. (2004). Getting the global view. *Chief Executive*. Retrieved from www.chiefexecutive.net/depts/leaders/202.htm
- Rivas, J. L. (2012). Board versus TMT international experience: a study of their joint effects. *Cross Cultural Management: An International Journal*, 19(4), 546-562.
- Ronen, S., & Shenkar, O. (2013). Mapping world cultures: Cluster formation, sources and implications. *Journal of International Business Studies*, 44(9), 867-897.
- * Roth, K. (1995). Managing international interdependence: CEO characteristics in resource-based framework. *Academy of Management Journal*, 38(1), 200-231.
- Ruigrok, W., Peck, S. I., & Keller, H. (2006). Board characteristics and involvement in strategic decision making: Evidence from Swiss companies. *Journal of Management Studies*, 43(5), 1201-1226.
- Sambharya, R. B. (1996). Foreign experience of top management teams and international diversification strategies of U.S. multinational corporations. *Strategic Management Journal*, 17(9), 739-746.
- Sanders, W. G., & Hambrick, D. C. (2007). Swinging for the fences: The effects of CEO stock options on company risk taking and performance. *Academy of Management Journal*, 50(5), 1055-1078.
- Sanders, W. M. 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.
- Schmid, S., & Dauth, T. (2014). Does internationalization make a difference? Stock market reaction to announcements of international top executive appointments. *Journal of World Business*, 49(1), 63-77.

Gremmo, D. & Ruigrok, W. (2017) - working paper

- Schoorman, F. D., Bazerman, M. H., & Atkin, R. S. (1981). Interlocking directorates: A strategy for reducing environmental uncertainty. *Academy of Management Review*, 6(2), 243-251.
- Sommer, L. (2013). Measuring internationality of board members via secondary data-a comparison of methods. *Journal of Applied Business Research*, 29(1), 235-256.
- Suutari, V., & Mäkelä, K. (2007). The career capital of managers with global careers. *Journal of Managerial Psychology*, 22(7), 628-648.
- * Takeuchi, R., Tesluk, P. E., Yun, S., & Lepak, D. P. (2005). An integrative view of international experience. *Academy of Management Journal*, 48(1), 85-100.
- Tosi, H. L., & Gomez-Mejia, L. R. (1994). CEO compensation monitoring and firm performance. *Academy of Management Journal*, 37(4), 1002-1016.
- Tosi, H. L., Werner, S., Katz, J. P., & Gomez-Mejia, L. R. (2000). How much does performance matter? A meta-analysis of CEO pay studies. *Journal of Management*, 26(2), 301-339.
- Tushman, M. L., & Nadler, D. A. (1978). Information processing as an integrating concept in organizational design. *Academy of Management Review*, 3(3), 613-624.
- Useem, M. (1984). *The inner circle: Large corporations and the rise of business political activity in U.S. and U.K.* Oxford, NY: Oxford University Press.
- Vermeulen, F., & Barkema, H. (2002). Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Strategic Management Journal*, 23(7), 637-653.
- Wade, J. B., Porac, J. F., Pollock, T. G., & Graffin, S. D. (2006). The burden of celebrity: The impact of CEO certification contests on CEO pay and performance. *Academy of Management Journal*, 49(4), 643-660.
- Wayne, S. J., Liden, R. C., Kraimer, M. L., & Graf, I. K. (1999). The role of human capital, motivation and supervisor sponsorship in predicting career success. *Journal of Organizational Behavior*, 20(5), 577-595.
- Xiao, Z., & Tsui, A. S. (2007). When brokers may not work: The cultural contingency of social capital in Chinese high-tech firms. *Administrative Science Quarterly*, 52(1), 1-31.
- Young, G. J., Charns, M. P., & Shortell, S. M. (2001). Top manager and network effects on the adoption of innovative management practices: a study of TQM in a public hospital system. *Strategic Management Journal*, 22(10), 935-951.
- Zajac, E. J. (1990). CEO selection, succession, compensation and firm performance: A theoretical integration and empirical analysis. *Strategic Management Journal*, 11(3), 217-230.