When is foreign professional experiences good for you? The moderating effect of project type on the relationship between professional experience abroad and high performing creative innovations

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Abstract

Professionals face a choice between gathering experience abroad and deep embeddedness in their local context. This paper addresses the question of whether the characteristics of the projects individuals engage in affects the outcome of their tradeoff between professional experience abroad and local experience. Based on longitudinal data from the Danish film industry the results show that project characteristics determine the value of professional experience abroad: Professionals’ likelihood of contributing to high performing creative innovations increase with professional experience abroad when projects are characterized by a low level of constraints. The value of professional experience abroad increases with distance to the context of origin and decreases with availability of professional experience abroad in the local context.
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ABSTRACT

Professionals face a choice between gathering experience abroad and deep embeddedness in their local context. This paper addresses the question of whether the characteristics of the projects individuals engage in affects the outcome of their tradeoff between professional experience abroad and local experience. Based on longitudinal data from the Danish film industry the results show that project characteristics determine the value of professional experience abroad: Professionals’ likelihood of contributing to high performing creative innovations increase with professional experience abroad when projects are characterized by a low level of constraints. The value of professional experience abroad increases with distance to the context of origin and decreases with availability of professional experience abroad in the local context.

1. Introduction

Diverse experience increases creativity and is often a precondition to excel at creating novelty. Extant literature has analyzed creative individuals and teams and found diversity to increase innovative ability of both (Godart et al., 2015; Rothaermel & Hess, 2007). Diverse experience is important to idea generation and innovation, and one potential source of diverse experience is professional experience abroad (Godart et al. 2015). Like diverse experience in general, professional experience abroad endows professionals with many and varied sources of ideas. But it also embeds professionals in diverse and far reaching networks, which tend to be richer in weak ties structural holes than local networks (Granovetter, 1985; Burt, 1992). This diverse human and social capital increase the potential
search landscape and thereby improve idea generation and judgement in idea generation and selection (Godart et al., 2015), and the likelihood of highly creative outcomes increases. However, diverse experience comes at the cost of higher communication and coordination costs (Bercovitz & Feldman, 2011; Uzzi & Spiro, 2005), and teams of professionals with diverse backgrounds tend to be most successful when they tackle complex and relatively open-ended problems (Bercovitz & Feldman, 2011; Ferriani, Cattani, & Baden-Fuller, 2009). Extant research has found diverse experience to be most beneficial, when professionals engage with team members, with whom they also share some form of similarity, or have collaborated with previously (Bercovitz & Feldman, 2011), or when teams consists of a combination of a non-diverse core combined with diverse newcomers (Ferriani, Cattani, & Baden-Fuller, 2009). This paper tests another, equally important, boundary condition for the value of professionals’ diverse experience: Project characteristics are also likely to affect the utility of professionals’ diverse experience. Professional experience abroad may be of greater value to professionals engaging in projects characterized by complex, open-ended problems than to professionals engaging in projects constrained by predefined frameworks limiting the landscape for search and solutions. The question pertains, under which conditions the increased idea generation ability matters more or less than efficient execution. This analysis focuses on whether the positive relationship between professionals’ experience abroad and high-level creativity depends on the characteristics of the projects they engage in. More specifically, the paper tests boundary conditions of the value of professional experience abroad by distinguishing between projects with different levels of constraints.

To address this question, the paper leverages longitudinal data from the Danish film industry. In the film industry, professionals can contribute to a variety of projects with very different characteristics. One important project characteristic is the extent of constrains to creativity faced by the professionals (Rosso, 2016). These can be process constraints such as e.g. time schedules and specific production consideration, or product constraints such as e.g. genre specific requirements and censor guidelines. Depending on project constraints, professionals undertake very different types of task. Tasks are more narrowly defined and less open ended in projects with a high level of constraints. And thus,
professionals working on highly constrained versus less constrained projects face different opportunities for applying professional experience gained abroad. This offers an optimal setting for studying if project constraints moderate the effects of professionals’ diverse experience in guise of professional experience abroad. The Danish film industry is relatively small and strongly embedded (Andersen, 2013), and hence an excellent context for comparison between professionals with experience abroad and professionals with only local experience.

The focus of this analysis is to study effects of professional experience abroad beyond individual characteristics, which may motivate professionals to go abroad in the first place. Therefore, professionals with professional experience abroad are matched with comparable professionals without professional experience abroad. Logit models are estimated based on 1,860 observations of professionals collaborating on film projects (930 with professional experience abroad and 930 without). Furthermore, professionals’ contributions must be isolated from that of their team members, to do that analyses account for team members’ abilities and access to resources. The results point to a positive relationship between professional experience abroad and performance, except for professionals engaging in projects with a high level of constraints. The paper contributes to the literature on effects of diverse and foreign knowledge with an important contingency, namely project characteristics. It further contributes with insight into the role of scarcity as an important determinant of the effects of professional experience.

2. Theoretical background

Similar to other organizational forms, projects draw on routines and shared perspectives, but, the short life span of projects requires routines and shared perspectives to be nested in the immediate context rather than in the project itself. A context is a setting drawing on a common knowledge landscape rich in interaction, which leads to shared world views (Corredoira & Rosenkopf, 2010). Professionals inhabiting such contexts will over time accumulate context specific experience, which will affect their perspectives on tasks and problem solutions (Litchfield & Gentry, 2010). This development of context
specific professional experience is at the root of the interest in effects of professional experience from other geographical, organizational, or cognitive settings (for examples, see Almeida & Kogut, 1999, Lawson & Lorenz, 1999, Rosenkopf & Almeida, 2003). An underlying premise for this interest is the notion that knowledge tends to be “sticky”, and that variation in experience across contexts therefore exceeds variation in experience within contexts. Almeida & Kogut (1999) find evidence of varying degrees of knowledge localization across regions, and argue that local labor mobility is an important mechanism driving creation of local knowledge flows, which result in lower diversity of experience within than across contexts. This effect is enhanced by informal interaction through local networks and chance face-to-face encounters which also increase knowledge localization (Gertler 1995; Storper & Venables, 2004). The lower knowledge heterogeneity within (compared to across) contexts allows professionals within regions to draw upon a collective body of tacit knowledge, and thereby facilitates easy collaboration (Lawson & Lorenz, 1999). The result is efficient collaboration and low knowledge diversity, and structures, institutions, and behavior promote similarity through the homosocial mechanisms of attraction, selection, and retention (Boone & van Witteloostuijn, 2007). Over time, experience particular to the context develops and lead to greater heterogeneity across than within contexts (Almeida & Kogut, 1999). This development of context specific experience through geographical concentration of activities is typical for the film industry, the most famous examples being Hollywood and Bollywood. But worldwide there are several smaller film-producing contexts, which have their own distinctive strengths, styles, and routines guiding organization and collaboration. Such contexts do not operate in isolation, rather they are characterized by high levels of internal collaboration combined with sporadic across-context interaction facilitated by professionals gaining experience abroad (Lorenzen & Mudambi, 2013). They simultaneously cater to domestic markets and compete regionally and internationally, and hence face different local consumer preferences further promoting development of context specific features (Andersen, 2013). Hence, professional experience abroad is likely to impact the creative potential of filmmakers working in such smaller film-producing contexts.
Within an organizational framework the issues pertaining to integration of diverse experience can be resolved through the provision of incentives and by strategic recruitment (Hansen, 1999; Song, Almeida & Wu, 2003). However, firm level strategies cannot address this challenge in settings where creativity is organized in projects based on informal networks of freelancers. Diverse experience must be embedded within each project during its short lifespan, typically through the recruitment of individual professionals who have engaged in activities and gained experience needed for the project at hand (Faulkner & Anderson, 1987). This emphasizes the importance of professional experience and professional experience abroad in project based industries.

Godart et al. (2015), show that fashion directors’ professional experience abroad has a positive effect on their level of creative innovation, defined as “... the extent to which final, implemented products or services are novel and useful from the standpoint of external audiences.” (Godart et al., 2015: 195). This positive relationship is attributed to evolutionary dynamics: foreign perspectives acquired through professional experience abroad improve both idea generation and selection. There are similarities between the fashion and film industries which suggest we should expect similar mechanisms to function in the film industry. Both industries rely on creating creative innovations, and performance evaluation depends on the qualities of the final creative innovation, which means that variation in idea generation and judgement in idea selection are more important than quality of the average idea generated in the development process (Godart et al., 2015). But at the same time, the film industry delivers outputs very different from the high-end fashion shows analyzed by Godart and colleagues. High-end fashion shows are all about attention catching expressions and display the technical abilities of the fashion house (Catry, 2003; Crane, 1997). In the film industry two distinct market segments coexist, and professionals face very different constraints depending on which market segment their projects aim for. Professionals contributing to projects aimed for the market segment of adult moviegoers engage in creative innovation with few constraints besides from the allocated budget. Multiple genres and dominant categories (Suarez & Grodal, 2015; Suarez, Grodal, & Gotsopoulos, 2015) coexists and breaking category boundaries is neither uncommon nor necessarily unwelcome (Suarez & Grodal, 2015). On the other hand, professionals contributing to projects aimed
for the children/family market segment face constraints in terms of e.g. censoring and pedagogical considerations. Though some professionals may work on productions, which fall between or within both market segments, these two main market segments are sufficiently distinct for parallel systems of subsidiary, assessment, promotion and awards to coexist. The distinction between these two market segments is employed to analyze how constraints affect professionals’ opportunities for benefitting from diverse professional experience, namely professional experience abroad.

2.1. Benefits of professional experience abroad

Because of the project organization of the film industry, professionals at times relocate temporarily to foreign contexts, and accumulate professional experience abroad working on time-limited projects. Afterwards, most professionals return to their context of origin. Temporary project participation abroad allows professionals to acquire foreign experience and upon return they can integrate this with the local experience in their ‘home’ context.

In an industry such as the film industry, individual level effects of professional experience abroad are likely to prevail due to the weak presence of organizations in crucial creative phases. Films are produced by small teams consisting of 10-15 core members. This small team size allows each of the core team members to make a significant contribution to the project’s success. Team members’ professionals’ experience abroad may consequently have significant impact on project direction and outcome.

Ample research has found diversity in knowledge and experience to benefit innovation, especially innovation aiming for high levels of novelty and performance. One reason is that access to diverse input increases the potential for recombinations of knowledge (Galunic & Rodan, 1998; Rodan & Galunic, 2004). Homogeneous input tends to lead to low impact innovations, whereas diverse input tend to lead to innovations with higher impact (Rosenkopf & Nerkar, 2001), and multiple studies show how performance levels, and especially outstanding performance benefit from access to diverse experience (Agrawal, Cockburn, & McHale, 2006; Bercovitz & Feldman, 2011; Singh & Agrawal,
The diverse experience which is necessary to create knowledge heterogeneity at aggregate levels is reconstructed at the individual level. One example of such individual level actions constructing diverse experience is professional experience abroad. By combining local experience with non-local experience in guise of professional experience abroad, professionals collect a diverse set of perspectives to draw upon, which increases the likelihood of creating high level creative innovations (Godart et al., 2015). This positive relationship between professional experience abroad and creative innovation is reflected in hypothesis 1:

**Hypothesis 1:** Professionals with professional experience abroad will have increased likelihood of contributing to high performing creative innovations.

Filmmakers do no directly reap the benefits of project level performance, but participation in high preforming creative innovations is likely to affect their future careers (Jensen & Kim, 2015). Such a success provides access to A-list collaboration partners, projects, and funding, raises the likelihood of increased cumulative career advantages (see Azoulay, Stuart et al., 2014 for a similar argument on status effects for scientists). However, professionals may not be at liberty to apply their professional experience abroad equally in their work. Project constraints may limit their opportunities to do so.

#### 2.2. The moderating effect of project constraints and task characteristics

Professionals who acquire professional experience abroad will, ceteris paribus, have less time for gaining local experience. This tradeoff between local and non-local experience may affect their performance differently depending on the projects they engage in. There are two issues related to the local versus non-local experience tradeoff: the experience itself and the social networks that comes from gaining experience by collaborating in project teams. By being embedded in a local context, professionals develop strong local networks. Prior research shows, that embeddedness in a local context increases commercial performance on the local market, but at the same time, it impedes commercial performance abroad (Andersen, 2013). Evaluation of projects based on commercial success is not directly comparable to evaluation based on the degree of creative innovation, but these
findings indicate, that though embeddedness in a local context benefits performance tied to local market preferences, local embeddedness does not benefit all types of performance. Non-local professional experience may ‘pollute’ local experience in the sense that the diversity of experiences expands professionals’ range of perspective and approaches to tasks (Hong & Page, 2001). The value of such diverse experience depends of the task at hand. Though complex, open-ended tasks benefit from diverse experience (Hong & Page, 2001), strictly constrained projects and tasks benefit less, and instead depend on smooth communication and collaboration (Bercovitz & Feldman, 2011). Local experience facilitates such collaboration in the local context, and improves the professional’s ability to conform to the paradigms of that context (Cattani & Ferriani, 2008; Andersen, 2013). Therefore, professional experience abroad is not of particular value to professionals contributing to projects with many constraints determining processes and outcomes. Rather, non-local experience may impede efficient collaboration. Professional experience abroad comes at the price of comparatively lower embeddedness in the local context and “pollution” of local experience, which potentially challenge collaboration and coordination. Both factor which dampen the positive association between professional experience abroad and performance. The question remains if this trade-off between local embeddedness and foreign experience is uniform across all types of projects, or if the outcome of the tradeoff depends on project constraints and task characteristics.

Research on firm level shows that diverse experience benefits complex projects more than less complex projects (Rosenkopf & Nerkar, 2001). And research on team diversity shows that performance effects depend on the complexity of the problems these teams are required to tackle (Bercowitz & Feldman, 2013). These findings demonstrate that project characteristics and the associated task complexity is a moderating condition for the costs-benefits tradeoff of diverse and local experience at the aggregate level. We now turn to the question of whether this tradeoff also manifests at the individual level.

The film industry is global, and hence local film clusters such as the Danish, compete directly with international films for release dates, program slots and ticket sales in the domestic market and abroad. The combination of massive competition from big budget Hollywood productions and the modest
production and marketing budgets offered by small language areas, forces local film clusters to focus on other selling points than global stars, big budgets, and special effects. Compared to Hollywood, the majority of (if not all) film production in the Danish film industry would be characterized as “independent” or “art house”, and artistic values drive the generation and election of creative ideas. This is reflected by the fact, that almost all Danish films are produced with substantial subsidy. One exception is films made for the children/family segment of the market. Though most Danish films targeted the children/family segment also rely on subsidies, this is the one market segment for which it is possible to produce films without subsidy. Children/family films differ from other feature films in two significant ways: They are more constrained by considerations beyond artistic, and consequently tasks are characterized by a lower degree of artistic experimentation and a higher degree of routine than for other projects. The artistic focus is challenged by other concerns, e.g. with respect to storyline and censorship, but also complexity levels must be lower and less ambiguous, and casts are generally smaller and include child actors. Production time tends to be shorter and productions schedules more compressed. Industry professionals explained that the productions time of a full-length film for the children/family market was typically half of that of a standard feature film. All these factors affect the production process and the final product, in the sense that other factors than artistic values shape the tasks professionals undertake and the products they create for this market segment. As one industry professional explains:

“\textit{In these films [mainstream children/family films], there is a producer with a very clear vision of the final product, because it has to earn so and so much, then they don’t care if it is poor style or kitsch. There you can step on a banana peel and fall, and then everybody laughs. We might say that this could be done with more effort, but the kids laugh and everybody is happy and buys popcorn.}”

Inevitably, task characteristics vary across the different roles involved in production, but they vary also across projects. Similar to organizations, local contexts that rely heavily on network collaboration tend to develop standards and routines. Tasks can be more or less routinized, and the degree of task routinization varies with project characteristics. Filmmakers will find it harder to exploit professional experience from abroad executing largely predefined or routine tasks. Less routinized and open-end
tasks leave room for interpretation and autonomy, which is necessary to explore diverging ideas. Highly routinized tasks are typical of projects with a constrained setup. For pedagogical reasons, film projects targeting the children/family market tend to have smaller casts, simpler storylines, and more explicit and unidimensional characters and communicating clear and simple sentiments, which require little interpretation. Straightforward story lines relying on simple and well-known solutions tend to have lower task complexity because problems can be anticipated and broken down into less complex tasks. For instance, coordinating a scene involving two actors working in a studio will tend to be less complex than coordinating a similar scene involving five actors on location. Similarly, orchestrating a scene with a subtle feel of underlying threat tends to be more complex than the slapstick comedy typical of Danish films aimed for the children/family market segment.

In projects aimed at the children/family market, factors of no artistic relevance constrain professionals’ effort in the production process. One industry participant describes these considerations of non-artistic issues to be inherent to the production process:

“Already in the scriptwriting we think about censoring... we know what the different censure levels require. E.g. it has to end well, cannot be scary for too long, it has to be clear who is good and bad, and the sound cannot be too shocking. There are pointers.”

This focus on pedagogy and censor ratings, constrain projects and reduces the room for artistic perspectives and the problem-solving space. Godart et al. (2015) found professionals experience abroad to benefit development of creative innovations in the high-end fashion industry, a market segment largely free of constraints. The high-end fashion shows evaluated in Journal de Textiles (the measure of creative innovation used by Godart et al., 2015) are displays of the technical abilities of the fashion houses, demonstrations of the brand, and the designer as an artist. In high-end fashion shows, creative innovations must aim for attention catching expressions and display the technical abilities of the fashion house (Catry, 2003; Crane, 1997). These shows focus on “Media Spectacular” and “Shock and Spectacle” rather than commercial viability (Majima, 2008). For most fashion houses, the real business lays in much more accessible goods such as designer handbags, ready to wear items,
and accessories (Catry, 2003; Crane, 1997). Consequently, designs for the shows of high-end fashion houses primarily consider artistic values and face few constraints. Film projects differ in artistic orientation and budget and financial framework, and each project must aim to be financially viable based on the terms given by investors and subsidizing organizations. Professionals working on projects, which subscribe to the art-focus typical of Danish film face terms similar to the artistic pieces of clothing designed by high end fashion houses for show purposes. And like these creations of fabric, they are likely to benefit from professionals’ experience abroad. But, for professionals working on projects facing multiple constraints the room for foreign perspectives is limited.

Creativity research has traditionally viewed constraints negatively, as decreasing the potential for creative innovation (Amabile, 1983; Amabile, Conti, Coon, Lazenby, & Herron, 1996), but more recent research demonstrates that the type and degree of constraint determine whether it actually impedes or increases creativity (Rosso, 2014). This line of research distinguishes between process constraints (e.g. deadlines and team subgroups in the production process) and product constraints (e.g. market preferences such as dominant categories). Generally, constraints up until a certain level can facilitate creativity, but when constraints become too tight, creativity suffers. Also, process constraints tend to impede creativity more than product constraints (Rosso, 2014). In the context of film projects, projects aimed for the children/family market segment face more constraints than do feature films in general. In the production phase, process constraints such as pedagogical considerations regarding storyline, characters and scenes constrain the tasks undertaken by the involved professionals. Considerations regarding participating child actors also constrain the production process. Furthermore, industry professionals often face the process constraint of very compressed recording schedules, industry participants assess production time of a full-length children/family film production to be half the length of a standard feature film. Children/family productions also face more process constraints in the form of censorship and fever and more clearly defined dominant categories. Taken together, children/family productions face more constraints and especially more process constraints than do other productions, which reduces the value of professionals’ diverse experience input.
Professional experience abroad is likely to benefit professionals less in the case of projects facing many non-artistic constraints. Also, the efficiency facilitated by shared routines and embeddedness in the local context is likely to be more beneficial to projects facing many constraints and especially time constraints. Non-artistic constraints limit the number and scope of potential solutions to problems arising in the innovation process. Hence the wide search landscape facilitated by diverse inputs (Hong & Page, 2001; Page, 2007) hold little value for this type of creative innovation. Variations across market segments lead to variation in project constraints and task characteristics, and professionals’ experience abroad is not likely to benefit all types of projects equally. This leads to hypothesis 2:

Hypothesis 2: The positive relationship between professionals’ experience abroad and the likelihood of contributing to high performing creative innovations is negatively moderated when professionals contribute to projects characterized by a high level of constraints.

The size of the negative moderating effect proposed in hypothesis 2 may depend on more than project constraints. Team members’ openness to foreign input based on professional experience abroad may matter too. If other team members also have professional experience abroad, project efficiency may already be challenged by multiple perspectives and weak embeddedness in the local context, and the team is likely to be characterized by a general openness towards diverse perspectives. Furthermore, the costs of ignoring contributions rooted in professional experience abroad increases with the number of team members who hold this experience. Teams are limited in terms of size and resources, and simply put, the manpower of each team member is needed to complete tasks and the cost of ignoring non-local perspectives increases with the number of team members holding such experience (Hoogendoorn, Laursen & Van Praag, 2017). This moderating effect is described as a three-way interaction in hypothesis 3:

Hypothesis 3: The negative interaction effect between project constraints and professionals’ experience abroad decreases with the number of team members with professional experience abroad.
3. DATA AND METHOD

The hypotheses are tested with data from the Danish film industry. In this industry, projects are generally initiated by the director, or by the director and the producer jointly, following this initial phase, actors, cinematographers, composers and editors are hired. The industry is heavily subsidized: 98.2% of all Danish films produced in the analyzed period were subsidized; 58.6% received subsidy based on an assessment of their artistic merit; and 39.6% were awarded subsidy based on an assessment that the revenue was likely to cover at least 40% of the production costs. The industry primarily focuses on artistic value, and consequently, most projects aim for a high level of creative innovation. This is reflected in the impressive amount of international recognition, nominations and awards bestowed on Danish films. Within the film industry in general, projects fall into different genres, but boundaries are often blurred and though some genres appeal more to particular sub-segments of the market, most projects aim for the general market segment of adult moviegoers. However, the genre of children’s and family films target a market segment distinct from all others, namely children and their accompanying adults. Within this particular market segment, the dominant product categories differ substantially from those in the market segment of adult moviegoers. Constraints of this distinct market segment include pedagogical considerations, simplified characters and narratives and explicit communication of sentiments and intent, rather than leaving room for wide interpretation. The distinctiveness of this particular market segment is reflected in the fact that children/family films compete for awards and festival recognition in separate contests, while films in all other genres compete against each other.

3.1. Data

The empirical analysis considers the population of professionals with leading roles in the film making process, namely actors (the first five mentioned in ranked credits), directors, producers, screenwriters,
cinematographers, composers, and editors in the Danish film industry in the period 1995 to 2008. Films are defined as Danish, based on the production company's nationality, this includes cross country collaborations with substantial Danish participation and financing. The Danish film industry provides an interesting setting to study the performance effects of professional experience abroad. The film industry is itself a good setting to study effects of professional experiences abroad. Several studies utilize collaboration data from the film industry to analyze effects of knowledge flows and collaboration in settings that demand high rates of new product development and differentiation (see e.g. Cattani & Ferriani, 2008; Cattani, Ferriani, Negro, & Perretti, 2008; Ferriani, Cattani, & Baden-Fuller, 2009; Andersen, 2013). Project based organization provides an excellent context for studying collaboration networks and collaboration outcomes (Faulkner & Anderson, 1987), and the creative industries are characterized by short product life cycles and constant consumer demand for product differentiation (Caves, 2002). This results in an industry structure consisting of freelancers who shift continuously between projects, which promotes industry clustering (Grabher, 2002a, b; Malmberg & Power, 2005). The Danish film industry is quite small with annual production of between 25 and 30 feature films, which leads to frequent repeat collaborations, and high internal clustering. This high level of clustering increases the importance of distinguishing between local experience and non-local experience, and the potential impact of professional experience abroad. Many Danish filmmakers (just less than half of the observations prior to matching) have professional experience abroad via participation in non-Danish film projects. Professional experience abroad is the ‘treatment effect’ in this quasi-experimental setup, and due to the high tendency for clustering in the industry, the remaining population of filmmakers with no professional experience abroad is well suited to serving as a control group (when matched on characteristics influencing the probability of gaining professional experience abroad).

The individual level database combine data on Danish film production provided by the Danish Film Institute (DFI), with data on award nominations available on official festival web sites, personal CV’s of all filmmakers in the population sourced from IMDb.com, professionals’ private websites and resumes, the Danish Film School’s student records, and lists of awards and nominations for major
awards. This setup enables control for project input and team dynamics. Team level controls are important, because filmmaking relies on team production, and the quality of team members greatly affects professionals’ probability of achieving excellence. Controlling for the ability level and access to resources of team members adds to isolating the effects of individual characteristics such as professional experience abroad. Since all production companies and distributors are legally obliged to report to the DFI, only 3.8% of the feature films produced in the studied period are omitted from the study due to lack of data. Table 1 shows an overview of the data used in the analysis.

Some film projects include professionals who are based outside the local context. For example, Pierce Brosnan plays the leading male character in the Danish feature film “The Bald Hairdresser”. These international guest stars were manually removed from the data to reduce noise. This was done in a two-step process involving first, manual identification of all non-Danish sounding names, and second, manual checking of CVs of individuals with non-Danish sounding names. Individuals residing outside of Denmark and participating in only one Danish production were removed from the sample.

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<th>Table 1. Data overview</th>
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<td>Projects</td>
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3.2. Matching procedure

To identify whether professional experience abroad affects professionals’ probability of highly creative innovations, they are compared with a control sample consisting of comparable professionals without professional experience abroad. The sample was identified with a combination of propensity score and exact matching. The objective was to build a control sample of professionals without professional experience abroad with similar career paths in terms of activity level and performance, to the professionals with professional experience abroad. The propensity score matching technique is based on the likelihood that an observation has professional experience abroad conditional on observables (Rosenbaum and Rubin, 1983, 1984). I used a logistic regression specification to estimate
the conditional probabilities of treatment, in this case professional experience abroad, and ran the procedure with replacement to allow filmmakers without professional experience abroad to be matched with multiple filmmakers with professional experience abroad. The propensity score matching method works best if a limited number of regressors are employed (Dehejia and Wahba, 2002). To ensure that the treated and untreated observations were comparable in relation to activity and success in the industry, the sample is obtained based on professionals’ structural position in the local industry network, their previous commercial success in the domestic market, and their previous commercial success in foreign markets. In addition to the propensity score matching procedure, two exact matching criteria are applied: The professionals’ role in the project and the timing of the film's release. The matching on roles ensures that professionals were comparable regarding the costs and benefits that potentially could be extracted from professional experience abroad (e.g. producers tend to rely more on local networks than screenwriters do). Matching on the time period of the film's release ensures comparability in terms of degree of industry internationalization and environmental factors. I use the three periods demarked by changing, politically defined subsidy schemes. A filmmaker is considered to be a suitable match only if the particular role was comparable to the treated observation in a project released within the same time period. The matching procedure identified one match for each filmmaker with professional experience abroad. The treated group and control group do not vary with respect to likelihood of professional experience abroad and the matching process is considered successful (see appendix A).

3.3. Variables

Observations from 1995 to 1999 (both years included) are used to create each filmmaker’s track record of prior project characteristics, collaboration, and performance, and the analyses are based on data from 2000 to 2008.
3.3.1. Dependent variable

The dependent variable in the analysis is professionals’ contribution to projects nominated for prestigious awards or included in contests at prestigious international festivals (both called nominations). The selected nominations are the American Academy of Motion Picture Arts and Sciences awards (Oscar), and the Sundance, Cannes, Berlin and Amsterdam Film Festivals. Nominations for any of these prestigious honors are a hallmark of a highly creatively innovative film. Other studies of the film industry focus on commercial performance in term of increase in ticket sales or revenue (Andersen, 2013; Sorenson & Waguespack, 2005; Ferriani, Cattani & Baden-Fuller, 2009); but in this paper the focus is on top performance rather than mean values. Identification of the most creative innovations is in itself interesting, but especially so, when analyzing effects of professional experience abroad (Godart et al., 2015). However, using nomination for awards presents a dilemma: domestic nominations are awarded to individual professionals, but the number of awards is quite high and constant each year. This means that in a small film producing industry such as the Danish, a large share of professionals receives national nominations, and hence nomination for domestic awards is not the hallmark of highly creative performance. Also, the number of awards is fixed and the number of nominations also relatively fixed, meaning that in years with fewer good films even mediocre productions may receive nominations, while in years with many highly creative films, not all will be nominated. Using international nominations resolve these issues, however it presents the concern that these nominations are bestowed at the team level. E.g. the Oscar for Best Foreign Language Film. This is addressed in two ways: first by including controls for team member ability, and second by robustness checks only including the professionals initiating the project. The variables capturing team member dynamics are described below.

Nominations for foreign awards is positively correlated (significant at the 0.05 level) with receiving a foreign award (0.5701), receiving a domestic nomination (0.2624), receiving a domestic award (0.1929), and ticket sales (0.0466).
3.3.2. Explanatory variables

Professional experience abroad: For the purpose of this study, professional experience abroad is defined as filmmakers having contributed significantly to film projects undertaken outside of the local context of Denmark and with no significant ties to the Danish film industry (e.g. co-financing). Professional experience abroad was assessed by manual checking of resumes and publicly available records on all filmmakers active in the Danish film industry in the analyzed period. This procedure ensures that the estimated relationships between professional experience abroad and performance are based on a conservative assessment of what constitutes professional experience abroad. Professional experience abroad is measured on an ordinal scale, where 0 denotes no professional experience abroad, 1 denotes professional experience from the neighboring Scandinavian countries, and 2 denotes professional experience from other countries, more distant both geographically, language wise, and culturally. The choice of an ordinal scale reflects that while national boundaries create a challenge for knowledge transfer, distance exacerbates it. Robustness checks employ a binary measure of professional experience abroad, as well as a measure of professional experience abroad with four categories to distinguish between no professional experience abroad, professional experience from Scandinavia, form Continental Europe and from Anglo Saxon countries. Minor participations in foreign projects are not acknowledged as professional experience abroad\(^1\). No time dimension is added to the recording of professional experience abroad because collaboration events are perceived as realizations of existing interpersonal ties.

Project constraints: Project constraints are operationalized as high or low depending of the aimed for target market. Though films aiming for each target market differ in terms of project constraints and though some overlap in the degree of project constraints is likely to exist, the general tendency for children/family films to face more constraints persists. Any overlap in terms of project constraints across the two categories will only serve to reduce the magnitude and significance of the estimated effects.

\(^1\) Examples of professional experience abroad not recorded are end credit editing and Danish projects filmed on location in other countries. Contribution to Danish productions or coproduction on location abroad is not recorded as professional experience abroad.
Team professional experience abroad: The value of professional experience abroad and the difficulty of integrating diverse knowledge in projects could vary with the number of team members with professional experience abroad. Therefore, the variable team level professional experience abroad is a count measuring the number of team members with professional experience abroad.

Interaction term of professional experience abroad and project constraints: This interaction term is added to identify differences in the effects of professional experience abroad across the market segments with varying levels of project constraints.

Interaction term of team professional experience abroad and project constraints: The interaction term between team level professional experience abroad and project constraints is included to isolate the effects of professional experience abroad across the identified target markets from team level effects.

Three-way interaction of professional experience abroad, team professional experience abroad and project constraints: Professionals with professional experience abroad contributing to projects with varying levels of project constraints may face different barriers to utilizing their diverse experience and different payoff of their professional experience abroad depending on the remaining team members’ professional experience abroad. I therefore include the three-way interaction term of professional experience abroad, contribution to projects aiming for the children/family market and the share of team members with professional experience abroad.

3.3.3. Matching variables

The variables used in the matching procedure (embeddedness, commercial success in foreign and domestic markets, role in the production team and time period of release) are included as control variables in the logit models predicting the probability of nomination. Significance should not be interpreted, but primarily be attributed to variations within the treatment categories.
3.3.4. Control variables

New entrant: Filmmakers new to the industry might receive disproportionate attention from critics and the media (Cattani & Ferriani, 2008). First-time entrants may attract attention, or if entering from related industries (e.g. theatre), may have foreign but relevant experience. To account for this possible effect we include a dummy denoting industry entrant. Production budget: Following Sorenson and Waguespack (2005), production budget data are included in the analyses to control for available resources. Type of subsidy: In the highly subsidized Danish film industry, 98% of all productions depend on one of two types of financial support from the DFI; subsidy granted based on the artistic merits of the proposed project, or subsidy granted based on expected ticket sales. The type of subsidy received is an indication of the original intent of the film project in which the filmmaker participated, and projects aiming for subsidy based on artistic merit are more likely to be nominated. To capture this variation, I use a dummy for contribution to productions receiving artistic subsidies. English: A dummy for contribution to English language projects is employed to account for the international orientation of these projects, which could affect the probability of nomination. Sequel: Sequels are able to capitalize on the interest created by the original/previous film; however, sequels rarely have sufficient novelty to achieve nominations. Following previous research (Cattani & Ferriani, 2008; Cattani, et al., 2008; Ferriani, Cattani, & Baden-Fuller, 2009; Ravid, 1999) the variable identifying sequels is included as a control. Type of distributor: Major distributors can offer more (monetary) and higher quality (professional skills) resources (Ferriani, Cattani, & Baden-Fuller, 2009; Litman, 1983). This could affect both project development and promotion to those industry critics which influence nominations. I identify three types of distribution companies: national companies, regional Scandinavian/Nordic companies, and international companies (including companies in exclusive alliances with international companies). Year of release: Year dummies are included to control for variations in the industry, and trends in industry internationalization, demand, and popularity (Ferriani, Cattani, & Baden-Fuller, 2009).
Controls for team member quality and team assignment processes: Team level controls are included in the models, and measures are calculated for all team members involved in the focal production except the focal agent. Team average revenue: For each observation, I aggregate the average revenue (domestic and international) of team members during a three-year window with a one-year time lag. Team summed nominations: For each observation, I count the number of international and domestic nominations of team members during a three-year window with one-year time lag. Team member maximum embeddedness: Although the focal observation may not enjoy a privileged local industry network position, a team member with a central position in the industry can affect performance levels. Consequently, I control for normalized maximum eigenvector centrality of team members.
### Table 2. Descriptive Statistics

|                                | Mean | SD  | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    |
|--------------------------------|------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. Prof experience abroad      | 0.90 | 0.94|       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 2. Project constraints         | 0.29 | 0.45| -0.21*|       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 3. Team max embeddedness       | 11.68| 14.35| 0.04 | -0.03|       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 4. Team experience abroad      | 13.55| 6.38 | -0.34*| 0.30* | 0.09*|       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 5. Team performance            | 2.394,287| 4,042,294| -0.16*| 0.34* | -0.12*| 0.47*|       |       |       |       |       |       |       |       |       |       |       |       |       |
| 6. Team no. of nominations      | 6.01 | 12.54| -0.29*| -0.02 | -0.03 | 0.28* | 0.21*|       |       |       |       |       |       |       |       |       |       |       |       |
| 7. Embeddedness                | 3.87 | 8.45 | 0.00  | 0.04  | 0.59* | 0.08* | -0.06*| 0.01  |       |       |       |       |       |       |       |       |       |       |       |
| 8. Industry entrant            | 0.29 | 0.46 | -0.12*| -0.01 | -0.15*| -0.05*| -0.01 | -0.04 | -0.30*|       |       |       |       |       |       |       |       |       |       |
| 9. Production budget (1,000 ddk)| 18.729| 15.083| 0.05* | -0.00 | -0.03 | -0.01 | 0.45* | -0.00 | -0.03 | -0.02 |       |       |       |       |       |       |       |       |
| 10. Dfi artistic subsidy       | 0.59 | 0.49 | 0.15* | -0.25*| -0.14*| -0.14*| 0.01  | 0.13* | -0.14*| 0.04  | 0.00  |       |       |       |       |       |       |       |       |
| 11. English language production| 0.05 | 0.21 | 0.04  | -0.04 | -0.15*| 0.03  | 0.41* | -0.02 | -0.09*| 0.07* | 0.56* | 0.13*|       |       |       |       |       |       |       |
| 12. Sequel                     | 0.13 | 0.33 | -0.13*| 0.48* | -0.05*| 0.22* | 0.12* | -0.08*| -0.03 | -0.06*| -0.39*| -0.09*|       |       |       |       |       |       |       |
| 13. Regional distributor       | 0.60 | 0.49 | 0.08* | -0.01 | 0.15* | -0.18*| -0.16*| -0.04 | 0.09* | -0.03 | -0.12*| 0.08* | -0.09*| -0.07*|       |       |       |       |
| 14. International distributor  | 0.24 | 0.43 | -0.10*| 0.15* | -0.11*| 0.25* | 0.07* | 0.04  | -0.08*| 0.05* | -0.07*| -0.10*| 0.02  | 0.22* | -0.69*|       |       |       |
| 15. Previous domestic revenue  | 179470| 103.714| -0.04 | 0.21* | 0.17* | 0.26* | 0.25* | 0.04  | 0.13* | -0.14*| 0.09* | -0.26*| -0.06*| 0.32* | -0.11*| 0.13*|       |       |       |
| (in 1,000 ddk)                 |     |     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 16. Previous foreign revenue   | 96998| 225.807| 0.04 | 0.12* | -0.09*| 0.11* | 0.64* | 0.11* | -0.08*| 0.01  | 0.44* | 0.15* | 0.44* | -0.03 | -0.07*| -0.03 | 0.15*|       |       |       |
| (in 1,000 ddk)                 |     |     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 17. Front role in production   | 0.43 | 0.50 | 0.01  | -0.02 | -0.01 | 0.00  | -0.01 | -0.03 | -0.06*| 0.07* | -0.01 | 0.05* | 0.01  | -0.07*| 0.05* | -0.03 | -0.01 | 0.01  |       |       |

*** p<0.001, ** p<0.05, * p<0.1

1860 matched observations, 930 with and 930 without professional experience abroad
3.4. Econometric techniques

This individual level study is aimed at explaining the likelihood that a given professional contributes to a project nominated for an international award and employs a logit model specification. Professional experience abroad is measured with a categorical variable, project specific constraints is measured with a dummy variable and team members’ professional experience abroad is measured as a count variable. The model also includes interactions between professional experience abroad, target market and team members’ professional experience abroad and can be written as:

\[
Pr(\text{contribution to high performing projects} = 1 | e, k, t e^*k e^*k^*t, c, \beta)
\]

where the probability of contribution to high performing projects depends on the measure of professional experience abroad labeled \( e \), the project constraints dummy labeled \( k \), team members’ professional experience abroad labeled \( t \), the interaction terms, and a vector of the controls denoted \( c \). A binary dependent variable suggests either a probit or a logit model specification. Overall, I found no differences in the results from these models. The logit model results are presented below. Co-variation is an issue within both projects and the careers of individual filmmakers’ contributions to multiple projects; I control for both issues by clustering. Following state-of-the-art examples (Cameron, Gelbach, & Miller, 2011; Dahlander & McFarland, 2013; Kleinbaum, Stuart, & Tushman, 2013) I employ clustering at the project and individual levels simultaneously. However, this technique does not allow for estimations with robust standard errors. This is adressed by a robustness check, which estimate all the reported models clustered by project using a Huber-White sandwich technique to correct for heteroskedasticity. The results are comparable to the presented models.

4. Results

Prior to the analysis, the procedure for matching comparable filmmakers with and without professional experience abroad needs validation. Appendix A provides a table displaying a logit
model including all matching variables as explanatory variables, and professional experience abroad as the dependent variable, which shows that none of the matching variables have a significant effect on the probability of professional experience abroad. The model's overall validity and explanatory power are very poor; it explains only 0.0028 percent of the total variation related to engaging in labor mobility or not, and the Wald chi-square is insignificant. Since the matching variables are deemed appropriate, it can be concluded that the matching procedure is successful in terms of providing comparable filmmakers without professional experience abroad for the analysis.

The descriptive statistics and correlations among the variables are presented in table 2, which shows that correlations among the independent variables do not raise any general concerns regarding multicollinearity, this is corroborated by low variance inflation factors for all estimated models. Table 3 presents the estimated models. Model 1 includes only the controls, model 2 includes the main effects of the explanatory variables, model 3 includes the interaction term, model 4 extends model 3 by including the controls for team ability and access to resources, models 5 and 6 include the interaction term for team level professional experience abroad and project constraints, and the three-way interaction between professional experience abroad, team level professional experience abroad and project constraints.

Hypothesis 1 that filmmakers with professional experience abroad will have an increased likelihood of contributing to high performance projects is tested in models 2 to 6. In model 2 there is no significant effect, but once the interaction term between professional experience abroad and project constraints is introduced in models 3 to 6, the main effect of professional experience abroad becomes significantly positive.

The second hypothesis suggests a moderating effect of professionals’ contribution to projects characterized by high level of non-artistic constraints on the value of professional experience abroad. It is tested in models 3 to 6 and the effect is significant and negative. Models 5 and 6 also include controls for moderating effects of the interaction between team level professional experience abroad and project constraints. Model 6 shows a significantly positive effect of the three-way interaction
between professional experience abroad, project constraints, and team members’ professional experience abroad, which supports hypothesis 3.

The estimated models show significant effects for some but not all of the control variables. In models 4, 5, and 6 participation in film projects which received artistically motivated subsidies has a significantly positive effect, as does professionals’ previous ticket sales on foreign markets. Agreements with regional distribution companies, and international distribution companies have significant positive effects in models 1 to 3, but no effect in the models including controls for team dynamics. Team member performance at the box office has a significantly negative effect, while team members’ previous nomination has a significantly positive effect. The significance of the matching variables should not be interpreted because it can be caused by within group variation.

The significance level and direction of interaction effects in logit and probit models cannot be directly interpreted as in linear models. The direct and interaction effects for models 3 and 6 are displayed in figure 1 to increase our understanding of the dynamics at play. The effects do not change direction, but are only significant for the middle part of the probability distribution. A few professionals display excellence at a level where professional experience abroad does not significantly increase their already high probability of receiving a nomination, while for other professionals the probability is too low for them to benefit significantly from professional experience abroad. However, for professionals in the middle of the probability distribution, professional experience abroad significantly increases their probability of receiving a nomination.

Robustness checks are conducted with the different measures of professional experience abroad (a binary measure and a four-point scale). The models are also estimated for the sub-sample of only the professionals initiating projects, i.e. screenwriters and directors (producers are too locally bound to benefit fully from mobility). These robustness checks all produce comparable results and are available from the author upon request.
Table 3. Prediction of probability of contribution to high performing creative innovations

<table>
<thead>
<tr>
<th>Key variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional exp abroad</td>
<td>0.064</td>
<td>0.352**</td>
<td>0.593***</td>
<td>0.532***</td>
<td>0.531***</td>
<td>0.531***</td>
</tr>
<tr>
<td>Project constraints</td>
<td>0.972*</td>
<td>1.892***</td>
<td>2.482***</td>
<td>0.114</td>
<td>0.502</td>
<td>0.531***</td>
</tr>
<tr>
<td>Foreign exp*Project Constraints</td>
<td>-1.136***</td>
<td>-1.254***</td>
<td>-0.970***</td>
<td>-1.609***</td>
<td>(0.195)</td>
<td>(0.198)</td>
</tr>
<tr>
<td>Professional exp abroad <em>Team exp abroad</em> Project constraints</td>
<td>0.045**</td>
<td>(0.019)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team max embeddedness</td>
<td>0.031</td>
<td>0.029</td>
<td>0.028</td>
<td>(0.022)</td>
<td>(0.024)</td>
<td>(0.024)</td>
</tr>
<tr>
<td>Team exp abroad</td>
<td>0.114**</td>
<td>0.056</td>
<td>0.056</td>
<td>(0.049)</td>
<td>(0.066)</td>
<td>(0.065)</td>
</tr>
<tr>
<td>Team performance</td>
<td>-0.000**</td>
<td>-0.000**</td>
<td>-0.000**</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>Team no. of nominations</td>
<td>0.024***</td>
<td>0.029***</td>
<td>0.029***</td>
<td>(0.008)</td>
<td>(0.008)</td>
<td>(0.008)</td>
</tr>
<tr>
<td>Team exp abroad * Project constraints</td>
<td>0.175*</td>
<td>0.154</td>
<td>(0.103)</td>
<td>(0.104)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry entrant</td>
<td>-0.282</td>
<td>-0.272</td>
<td>-0.209</td>
<td>-0.143</td>
<td>0.014</td>
<td>-0.010</td>
</tr>
<tr>
<td>Production budget</td>
<td>-0.000</td>
<td>-0.000</td>
<td>-0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Dfi artistic subsidy</td>
<td>1.690**</td>
<td>1.784***</td>
<td>1.901***</td>
<td>2.393***</td>
<td>2.773***</td>
<td>2.806***</td>
</tr>
<tr>
<td>English language production</td>
<td>-0.340</td>
<td>-0.122</td>
<td>-0.191</td>
<td>0.095</td>
<td>0.368</td>
<td>0.356</td>
</tr>
<tr>
<td>Sequel</td>
<td>-1.231</td>
<td>-1.272</td>
<td>-1.261</td>
<td>-1.269</td>
<td>-1.193</td>
<td>-1.198</td>
</tr>
<tr>
<td>Regional distributor</td>
<td>2.091**</td>
<td>1.946**</td>
<td>1.878**</td>
<td>1.565*</td>
<td>1.240</td>
<td>1.240</td>
</tr>
<tr>
<td>International distributor</td>
<td>1.782*</td>
<td>1.587</td>
<td>1.554</td>
<td>1.260</td>
<td>0.935</td>
<td>0.960</td>
</tr>
<tr>
<td>Pseudo LL</td>
<td>-736.78</td>
<td>-720.27</td>
<td>-699.81</td>
<td>-652.60</td>
<td>-635.43</td>
<td>-633.52</td>
</tr>
<tr>
<td>Wald-Chi2</td>
<td>33.60**</td>
<td>50.11***</td>
<td>108.97***</td>
<td>115.78***</td>
<td>97.19***</td>
<td>92.62***</td>
</tr>
<tr>
<td>Pseudo R2</td>
<td>0.2119141</td>
<td>0.2295693</td>
<td>0.2514519</td>
<td>0.3019512</td>
<td>0.32032</td>
<td>0.3223576</td>
</tr>
</tbody>
</table>

No. of obs: 1.860, matching variables included, **p<0.01, *p<0.1
5. Discussion

The results of the analysis support the hypothesized positive relationship between professionals’ experience abroad and their likelihood of contributing to high performing creative innovations, and further supports the hypothesized moderating effect of project constraints and team experience. Controlling for endogenous personality traits leading to professional experience abroad, as well as for team dynamics, the results support the hypothesis that professional experience abroad endows professionals with valuable diverse experience, which improves their ability to contribute to high performing creative innovations; as long as these projects are characterized by a low level of constraints. The relationship between professional experience abroad and contribution to high performing creative innovations is not just moderated, it is even reversed for projects aimed at the children/family market segment where projects tend to be characterized by a high level of constraints.
An exception is when filmmakers with professional experience abroad join teams of filmmakers with professional experience abroad to work on highly constrained productions.

The cost-benefit trade-off between local and non-local experience differs for an individual versus an organization or team encompassing diverse knowledge. A focus on depth and breadth can be achieved simultaneously within an organization or team by combining professionals with different experiences. However, for the individual professional, the tradeoff is literally embodied. Professionals have to trade off professional experience abroad against embeddedness in the local context. When individuals span different contexts, they sacrifice focus (Roberts, Negro, & Swaminathan, 2013), and lose legitimacy (Cattani & Ferriani, 2009). But though temporary stays of short duration do not allow professionals to gain deep experience, experience breath and distance between home and foreign contexts enhance experience and impacts performance (Godard et al., 2015).

The value of professional experience abroad depends on its scarcity. The estimated models show that the marginal effect of professionals’ experience abroad decreases over time. Concurrently, the industry becomes more international and professional experience abroad becomes more widespread. As professional experience abroad becomes more common, non-local perspectives spread throughout the industry. Since the competitive advantage of boundary spanning positions resides exactly in exclusive access (Burt, 1992; Ryall and Sorenson, 2007), it is not surprising that the effect of professional experience abroad decreases with increasing industry access to professional experience abroad. This is closely related to the effect of distance between the local and foreign context on the value of professional experience abroad. The effect of professional experience abroad increases with increasing distance to the foreign context. The Scandinavian countries have language and cultural similarities, and commuting and labor mobility is frequent between the Danish context and the other Scandinavian countries. Geographical proximity between contexts increases the probability of tie formation (Sorenson and Stuart, 2001, 2008), and a substantial part of the industry’s professional experience abroad are within Scandinavia: 674 observations have foreign links with Scandinavian countries, 382 with the US, 438 with other Anglo-Saxon countries (primarily the UK), and 555 with continental Europe. Considering the size of the film industry in these countries, there is a clear bias
towards Scandinavia. Consequently, professional experience from Scandinavian countries is simply not that different from professional experience acquired in the local context, and hence not as effect-full.

The findings in this paper extend our understanding of the costs and benefits of individual professionals’ experience abroad. This paper contributes to the growing literature on knowledge diversity and cross-fertilization among contexts, by examining the conditions moderating the relationship between individual professionals’ experience and high performing creative innovations. The findings extend Godart et al. (2015) by expanding the scope for generalizability. Godart et al. (2015) focused on the top figures of fashion house, namely creative directors. In contrast, this paper provides an analysis of benefits of professional experience abroad further down the hierarchical ladder and in a team based collaborative setting. Furthermore, this study extends our understanding of professional experience abroad by identifying a boundary condition for the benefit. This distinction provides further insights into the costs and benefits individual professionals face when collecting diverse professional experience. Others have addressed the issue of moderating conditions from different perspectives, analyzing the effects of motivation and ability (Reinholt, Pedersen, & Foss, 2011), or situational conditions (Ryall & Sorenson, 2007). This paper analyzes the contingency of project constraints, and finds that the value of foreign experience depends on a low level of project constraints.

From a practitioner perspective, this paper offers insights into issues related to the organization of knowledge intensive team production. Project organization is the predominant form of organization of innovative activities within many industries as well as within firms. Project characteristics affect the cost-benefit trade-off from professional experience abroad, and proximity – or distance – matters for the impact of foreign perspectives. This suggests that knowledge management is important for orchestrating team productions, and that professionals endowed with foreign experience as well as their managers should consider project constraints when deciding about which projects will benefit the most from professionals’ diverse experience.
5.1. Limitations

This analysis does not propose ways to increase mean performance but rather focuses on factors affecting the probability of reaching the highest levels of creative innovation. Future research should analyze contingencies for the relationship between professional experience abroad and continuous performance measures. Another limitation of the results presented here is the lack of data on mobility event timing or intensity. For practical reasons, across-context mobility is measured as a binary variable but in reality, it is a continuum of across-context interactions of varying intensity. The mobility event is often a manifestation of established social ties (which also transfer knowledge between contexts), rendering professional experience abroad both an indication and a reinforcement of social capital extending across contexts. Further, this study views the focal industry as isolated from related industries (other studies that adopt this perspective include (Cattani & Ferriani, 2008; Cattani et al., 2008; Ferriani, Cattani, & Baden-Fuller, 2009; Sorenson & Waguespack, 2006; Uzzi & Spiro, 2005). Lack of data on inter-industry connections excludes the possibility of including across industry knowledge exchange. Instead, the analysis controls for industry entrance and within-industry network positions to compensate for lack of data on inter-industry connections. Future research should address effects of professional experience across industry boundaries. Finally, the contributions of individual professionals to team production performance fall into two categories. First, a selection mechanism matches professionals and projects when industry participants create or are invited (and accept) to participate in a project. Second, a recombination mechanism is at work when each professional collaborates and contributes to the team production. Disentangling these two mechanisms would be very interesting and highly relevant but is not possible within the scope of this study. To ensure that the findings are not driven only by the selection mechanism, robustness checks include limiting the sample to the professionals initiating the projects, namely directors and screenwriters (producers rely in very local networks). The results confirm the findings in the presented models. Consequently, the findings must result from either the recombination mechanism or from a mixture of selection and recombination. Future research should design studies aimed specifically at disentangling these effects.
6. Conclusion and implications

The findings from this analysis imply that professionals benefit from professional experience abroad only if they engage in projects characterized by low constraints and non-routine tasks. One notable exception is when professionals join teams rich in professional experience abroad. For professionals, these findings should serve to indicate to which types of projects they should apply their foreign experience in order to contribute to highly innovative projects. For managers, these findings should inspire through consideration of how to match team member experience and project characteristics to maximize the value derived from the experience of professionals.
7. References


Appendix A. Test of Match on Professional experience abroad

<table>
<thead>
<tr>
<th>Matching variables</th>
<th>Dep. var.: Diverse experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local network position</td>
<td>-0.0003</td>
</tr>
<tr>
<td></td>
<td>(.0135)</td>
</tr>
<tr>
<td>Average domestic revenue</td>
<td>-1.09e-06</td>
</tr>
<tr>
<td></td>
<td>(8.15e-07)</td>
</tr>
<tr>
<td>Average foreign revenue</td>
<td>2.70e-07</td>
</tr>
<tr>
<td></td>
<td>(4.07e-07)</td>
</tr>
<tr>
<td>Front role type</td>
<td>-0.0051</td>
</tr>
<tr>
<td></td>
<td>(.1572)</td>
</tr>
<tr>
<td>Period 1</td>
<td>-0.0039</td>
</tr>
<tr>
<td></td>
<td>(.2443)</td>
</tr>
<tr>
<td>Period 2</td>
<td>0.0052</td>
</tr>
<tr>
<td></td>
<td>(.2126)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.1716</td>
</tr>
<tr>
<td></td>
<td>(.2223)</td>
</tr>
<tr>
<td>Wald chi</td>
<td>2.06</td>
</tr>
<tr>
<td>Pseudo R2</td>
<td>0.0028</td>
</tr>
</tbody>
</table>

Note. Std. Err. In brackets. N=1860, 930 with and 930 without mobility