Understanding the Unwritten Rules of the Game
Government Work Experience and Salary Premiums in Foreign MNC Subsidiaries

Sofka, Wolfgang; Grimpe, Christoph; Kaiser, Ulrich

UNDERSTANDING THE UNWRITTEN RULES OF THE GAME – GOVERNMENT WORK

EXPERIENCE AND SALARY PREMIUMS IN FOREIGN MNC SUBSIDIARIES

Wolfgang Sofka (corresponding author)
Copenhagen Business School
Dept. of Strategy and Innovation
Kilevej 14A, 2000 Frederiksberg, Denmark
Phone: +45-38152502
Email: ws.si@cbs.dk

University of Liverpool Management School, Strategy, International Business and Entrepreneurship Group (SIBE), Chatham Street, L69 7ZH, United Kingdom

Christoph Grimpe
Copenhagen Business School
Dept. of Strategy and Innovation
Kilevej 14A, 2000 Frederiksberg, Denmark
Phone: +45-38152530
Email: cg.si@cbs.dk

ZEW – Leibniz Centre for European Economic Research, Dept. Economics of Innovation and Industrial Dynamics, L 7, 1, 68161 Mannheim, Germany

Ulrich Kaiser
University of Zurich
Dept. of Business Administration
Affolternstrasse 56, 8050 Zurich, Switzerland
Phone: +41-44-634-2916340
Email: ulrich.kaiser@business.uzh.ch

Copenhagen Business School, Dept. of Strategy and Innovation,
Kilevej 14A, 2000 Frederiksberg, Denmark

ZEW – Leibniz Centre for European Economic Research, Dept. Economics of Innovation and Industrial Dynamics, L 7, 1, 68161 Mannheim, Germany

IZA Institute of Labor Economics, Schaumburg-Lippe-Straße 5–9, 53113 Bonn, Germany

UNDERSTANDING THE UNWRITTEN RULES OF THE GAME: GOVERNMENT WORK

EXPERIENCE AND SALARY PREMIUMS IN FOREIGN MNC SUBSIDIARIES

ABSTRACT

Understanding government institutions in a host country is crucial for MNC subsidiaries. This is challenging, as host-country institutions not only relate to formal institutions, such as laws and regulations, but also to informal institutions, like traditions and beliefs. We study the hiring of employees with government work experience as a channel through which foreign MNC subsidiaries can better understand host-country institutions. Government work represents a context in which employees have opportunities to accumulate knowledge about how formal and informal institutions shape government procedures, and to develop political connections. Drawing from strategic human capital theory, we hypothesize that foreign MNC subsidiaries pay these employees salary premiums vis-à-vis domestic firms because they expect them to offer unique value. We find support for this hypothesis using data for 9,698 former government employees in Denmark. Salary premiums increase with government saliency in the industry and with seniority in the government. Our results shed light on how certain types of human capital can create value for foreign MNC subsidiaries, inform career choices of government officials and suggest that future research should explore other types of host-country work experiences that could create value for foreign MNC subsidiaries when they are hiring.

Keywords: Government work experience, informal institutions, human capital, subsidiary hiring, liability of foreignness

INTRODUCTION

I don't believe it has to be "once politics, always politics." I was finance minister in an administration that implemented many changes and reforms. I can use those experiences in another context. I also have experience in managing a society like the Danish society, and I want to use that experience.[1]

Former Danish Minister of Finance Bjarne Corydon after joining McKinsey's Center for Governance in Copenhagen as a consultant in 2015

The ability of multinational corporations (MNCs) to access localized resources in various host countries is central to theories of international business (Dunning, 1998; Mudambi, et al., 2018). While a physical presence is often necessary to participate in a host country's resource flows, it is rarely sufficient (Tallman and Chacar, 2011a; b). Instead, MNC subsidiaries need to acquire knowledge about the host-country institutions that govern access to resources. This is challenging, as this need for knowledge relates not only to formal institutions, such as laws and regulations, but also informal institutions, like traditions and beliefs. Knowledge about informal host-country institutions is typically path-dependent, embedded, tacit, and sticky in nature (Tallman and Chacar, 2011b), and therefore almost exclusively acquired in practice over time (Ingram and Clay, 2000). This makes the hiring of former government officials, such as Bjarne Corydon, salient for foreign MNC subsidiaries, as these individuals accumulate extensive knowledge about the inner workings of a country's institutions while working for the government, which they can then transfer to MNCs. However, the extant research is largely silent about this particular type of hiring and how these individuals can help MNCs overcome the liability of foreignness (notable exceptions include Mezias and Mezias, 2010, and Distel, et al., 2019).

In this article, we focus on the hiring of employees who have worked for the host-country government as a mechanism by which foreign MNC subsidiaries can increase their understanding of host-country institutions. Government officials are uniquely positioned to observe informal government institutions, such as procedures related to enacting, discarding, curtailing, or enforcing formal laws and

---

[1] Quoted from an interview published in the Danish newspaper *Berlingske* on December 22, 2015.

regulations, as well as how traditions, customs, and beliefs enter decision processes (e.g., the appropriateness of using bribes; Krammer, 2019; or personal networks; Keupp, et al., 2009). They observe the governmental procedures in which formal and informal institutions jointly affect the boundaries of formal institutions or their enforcement (North, 1990), spot inefficient institutions or trigger changes (Williamson, 2000; Chacar, et al., 2018), and experience the discussions or bargaining processes that occur when institutions are enacted, replaced, or eliminated (Nee and Ingram, 1998).

Our theoretical reasoning integrates institutional theory's views on the interplay between formal and informal government institutions in a host country (Ingram and Clay, 2000; Chacar, et al., 2018) with a model of strategic human capital that is transferable across organizational contexts (Campbell, 2013; Grimpe, et al., 2019; Sofka, et al., 2014). We reason that foreign MNC subsidiaries will pay salary premiums when hiring former government officials because of the superior value that they expect from the transfer of: (a) procedural knowledge about the interplay of formal and informal government institutions, and (b) the political connections that such employees can provide to decision makers in the government. In practice, these two effects are likely to overlap over time, and we use contingencies in which one or the other mechanism can be assumed to be dominant to demonstrate the presence of both effects. More precisely, we hypothesize that salary premiums will be comparatively higher in industries in which government interaction is particularly salient and when the newly hired employees were senior officials at government agencies.

We test our hypotheses using data covering all employers and employees in Denmark between 1999 and 2004. Our empirical strategy relies on coarsened exact matching (CEM) to identify comparable pairs of employees with government work experience who started working for either a foreign MNC's subsidiary or a domestic firm. Our sample encompasses 9,698 former government officials, of which about 16% joined a foreign MNC subsidiary. The results of subsequent wage regressions support all of our hypotheses. In addition, we conducted a number of semi-structured interviews with former employees of government agencies as well as recruiters and managers of foreign MNC subsidiaries to inform our theoretical reasoning.

Our results are relevant for two dimensions of academic research. First, the extant literature in international business increasingly emphasizes informal institutions as a central determinant for formal institutions as well as performance outcomes (Chacar and Hesterly, 2008; Chacar, et al., 2010, 2018). As informal institutions are particularly difficult for foreign MNC subsidiaries to evaluate and interpret, these units face liabilities of foreignness (Calhoun, 2002), making a comprehensive understanding of both formal and informal institutions in a host country salient for MNC decision making. However, we know comparatively little about how MNC subsidiaries can enhance their understanding of government procedures in a host country, which are shaped by both formal and informal institutions. We address this gap in the extant research by focusing on the hiring practices of foreign MNC subsidiaries as a channel for acquiring procedural knowledge and political connections. We develop a theoretical model that draws on mechanisms from the strategic human capital literature on the transferability of valuable human capital across organizational contexts and its salary effects (Campbell, 2013; Grimpe, et al., 2019; Mackey, et al., 2014; Sofka, et al., 2014). This model can serve as a basis for theorizing about other hiring decisions (e.g., from advocacy groups) that enable MNCs to deal with the complexities of multiple institutional demands in various host countries.

Second, we extend the research stream on hiring decisions in MNC subsidiaries, which has largely focused on choices between expatriate and host-country management (Belderbos and Heijltjes, 2005; Collings, et al., 2009). We know relatively little about heterogeneity among newly hired employees from the host country, and how their particular backgrounds or experiences shape value-creation opportunities in MNC subsidiaries (notable exceptions include Mezias and Mezias, 2010, and Distel, et al., 2019). In this study, we focus on a particular type of work experience and provide a theoretical logic for how these new hires can affect foreign MNC subsidiaries. Future studies can use this theoretical model and explore other sources of host-country work experience that may be valuable for MNCs.

THEORY AND HYPOTHESES

Our theoretical reasoning aims to explain the difference between the salaries of employees with government work experience who are hired by foreign MNC subsidiaries and those hired by domestic

firms. In the following, we start by discussing how formal and informal institutions jointly affect

government processes and procedures. Subsequently, we develop hypotheses for how government work

experience becomes valuable for hiring firms, especially foreign MNC subsidiaries.

Government's role in formal and informal institutions

North (1990) introduced the notion of institutions as establishing the "rules of the game." His definition

of institutions, which is fairly broad, includes the formal (e.g., regulations, laws) and informal systems

(e.g., behavioral norms, conventions) that organize interactions within a country (North, 1990). We adopt

the definition found in Hargrave and van de Ven (2006), who define the term as arrangements (not actors

or entities) of "humanly devised schemas, norms, and regulations that enable and constrain the behavior

of social actors and make social life predictable and meaningful" (p. 866). Hence, institutions provide

boundaries for the choice sets of actors, sanction certain behaviors, establish incentives for others, and

reduce uncertainty in social exchange (Ingram and Clay, 2000). From an economic perspective,

institutions are particularly relevant, as they provide or restrain access to resources by, for instance,

altering transaction costs (Jackson and Deeg, 2008).

Our focus is on the government as a major institutional actor. Governmental institutions differ from

institutions that are created by private parties in terms of the degree to which they are centrally created,

codified, and enforced (Ingram and Clay, 2000). Governmental institutions are important for a country's

economic activity because they govern many transactions between private parties (e.g., property rights),

curtail government intervention (e.g., for failing companies), define the degree to which governments can

appropriate economic value (e.g., through taxation), and affect the distribution of economic returns in the

economy (e.g., by providing rights to unions) (Ingram and Clay, 2000). These features could suggest that

governmental institutions are mainly formal in nature. However, governmental institutions have an

important informal component, which shapes governmental procedures (e.g., when rules and regulations

are designed, changed, enforced, or discarded). Formal and informal institutions can be additive and

interdependent in nature (Nee and Ingram, 1998), and changes in informal institutions can trigger changes

in formal institutions and vice versa (Chacar, et al., 2018). North (1990) describes this additive

relationship between formal and informal institutions as informal institutions being "extensions, elaborations, and modifications of formal rules" (p. 40).

But formal and informal institutions are also interdependent. Nee and Ingram (1998) suggest that organizations and economies can maximize their performance when formal and informal institutions are closely coupled. They can mutually reinforce one another, allow for efficient enforcement, and reduce uncertainty. Pattit, et al. (2012) describe such a complementary relationship among institutions in their examination of the decisions of US firms to increase investments in R&D in the first half of the twentieth century based on changing informal beliefs about the merits of scientific discovery and emerging formal intellectual property laws. Conversely, divergence between formal and informal institutions creates uncertainty among economic actors about which transactions can and should be reliably conducted (Nee and Ingram, 1998). In sum, a comprehensive understanding of a country's governmental institutions requires consideration of the interactions between formal and informal institutions.

Government work experience and its value for firms

The interactions between formal and informal institutions are important for our reasoning, as they materialize in government procedures. In contrast to fact-based knowledge, organizations such as government agencies have procedural memories about "how things are done" (Cohen and Bacdayan, 1994). Procedural knowledge encompasses the set of routines that organizations apply, can apply, or combine (Moorman and Miner, 1998). It is often script-like in nature, guides behaviors among the members of an organization, and enables them to make sense of the behaviors of others (Gioia and Manz, 1985). Hence, procedures make organizational behaviors predictable, and individuals with procedural knowledge can foresee organizational behaviors and outcomes even when they are no longer part of that organization. Such procedural knowledge is typically tacit in nature and largely unarticulated (Cohen and Bacdayan, 1994; Kyriakopoulos and de Ruyter, 2004) even though it guides substantial parts of organizational behavior (Gioia and Manz, 1985). The dominant way to acquire procedural knowledge is through personal experience in practice (Gioia and Manz, 1985).

Government employees are exposed to governmental procedures in various ways. According to the OECD's Public Governance Review, government work provides individuals with knowledge and skills in four broad areas: (a) policy advice and analysis, as individuals work with elected officials to inform policy development and integrate policy-relevant research with a multitude of citizen perspectives; (b) service delivery and citizen engagement, as individuals work directly with citizens and users of government services; (c) commissioning and contracting, which requires skills in and knowledge about designing, overseeing, and managing contractual arrangements with other organizations; and (d) managing networks, as individuals must work across organizational boundaries to address complex challenges (OECD, 2017). Relatedly, Richards and Duxbury (2015) argue that government work exposes individuals to a wide variety of stakeholders, which allows them to develop knowledge about activities and practices acceptable to stakeholders and society at large. In that sense, government employees experience the process by which formal institutions are crafted, modified, and enforced, not merely its outcome (e.g., a published law). They experience the bargaining processes underlying new formal institutions, the modification of existing institutions, and the enforcement of institutions, which is typically driven or constrained by the informal beliefs and norms in a country. Hence, we argue that government work experience creates deep procedural knowledge and personal connections with governmental decision makers.

The extant literature has highlighted several organizational contexts in which individuals develop human capital that can be beneficial in other work contexts, such as start-ups (Campbell, 2013; Distel, et al., 2019), MNC subsidiaries (Sofka, et al., 2014), and advocacy groups (Grimpe, et al., 2019). Mackey et al. (2014) provide a useful theoretical model based on matching theory from economics (Abowd, et al., 2009; Mortensen, 2005). Within this model, scarce human capital of individuals can be complementary to resources with which firms are heterogeneously endowed (Mackey, et al., 2014). Assuming an efficient labor market, the price of human capital is likely to approximate the value it creates for the hiring firm (Barney, 1986).

Given this rationale, we argue that there are two mechanisms through which government work experience becomes valuable to firms. First, former government employees possess unique procedural knowledge about informal institutions that they can transfer to hiring firms. Second, they have political connections. With respect to the first mechanism, we suggest that acquiring such knowledge allows firms to better understand and interpret informal cues provided by the government, business partners, and customers, and provides them with knowledge about how to conduct business without triggering resistance or open protests. Moreover, former government employees understand the boundaries in the enactment or enforcement of formal institutions. Whether or not to indict firms for violation of laws (formal institutions) lies with the judgement of government prosecutors, which is not only a legal but also a political judgement (informal institutions). MNC subsidiaries may understand the laws, but they may still not know when those laws will be judged to be (sufficiently) violated (Mezias, 2002). Former government officials may help with the understanding of those judgements. They also have experience with the discussions, priorities, and tradeoffs that government officials consider when they design and enforce formal institutions. These tradeoffs become particularly relevant when formal and informal institutions diverge, as they create uncertainty about acceptable behavior (Ingram and Clay, 2000). This is consistent with the view that a senior manager of a pharmaceutical company shared with us:

> *We recently hired two people from the Danish Medicines Agency. They help us to understand issues related to regulation and safety concerns. It is critically important for us to have experienced people in this area.*

With respect to the second mechanism, we argue that hiring individuals with government work experience provides firms with opportunities to become politically connected. The extant literature defines political connectedness as the extent to which a firm has access to political actors and government entities (Sojli and Tham, 2017), and identifies several channels through which connections can be established, such as the political affiliations of large shareholders, CEOs, or board members (e.g., Fan, et al., 2007; Chen, et al., 2010; Sojli and Tham, 2017); campaign contributions; lobbying; and the hiring of government officials (e.g., Akey, 2015). Akey (2015) finds that hiring former government officials acts as a partial substitute for spending money on lobbying. Overall, these studies suggest that political

connections pay off for firms in both developing economies (e.g., Chen, et al., 2010) and developed

economies, such as the US (Akey, 2015). Through political connections, firms can actively try to

influence the institutions that constrain them (Ingram and Clay, 2000), and obtain early information about

institutional changes and the bargaining processes driving such changes. Therefore, employees with

government work experience can provide hiring firms with access to policymakers and individual

government officials as well as foresight on political agendas and influencers. We argue that the

expectations for value creation explain salary premiums for newly hired employees.[2]

The value of human capital acquired in government work for foreign MNC subsidiaries

Salary premiums for new hires emerge in firms that have particularly strong expectations for value

creation from complementarities between an individual's human capital and firm resources (Mackey, et

al., 2014). In the following, we argue that government work experience differs in its value for foreign

MNC subsidiaries and domestic firms because of liabilities of foreignness. We suggest that the perceived

value of government work experience is higher for foreign MNC subsidiaries than for domestic firms.

When operating in foreign markets, MNCs face high social and economic costs that arise from

unfamiliarity as well as cultural, political, and economic differences, which are commonly referred to as

"liabilities of foreignness" (Kindleberger, 1969; Hymer, 1983; Zaheer, 1995). Given the structural,

relational, and legitimacy disadvantages of foreign MNC subsidiaries in a host country, foreign MNC

subsidiaries typically experience more frequent delays, risks, and errors than domestic competitors (Lord

and Ranft, 2000). For example, Mezias (2002) documents how the HR practices of Japanese MNCs result

in more frequent labor lawsuits for subsidiaries in the US. Domestic firms operate efficiently and

---

[2] Hiring individuals with government work experience would not be necessary if firms could find similar services on efficient, well-defined factor markets (Ployhart, et al., 2014). In our setting, specialized lawyers, consultancies, or lobbyists could provide services and interpretations of institutions, or create connections with political decision makers. If these services were sufficient for firms, we would not expect salary premiums for new hires with government work experience. However, such homogeneous services are insufficient for most firms, as they have a "commodity" character (Ployhart, et al., 2014), are too easily transferable to rival firms (Campbell, et al., 2012), or are unreliable in the value that they provide (Holburn and Zelner, 2010; Akey, 2015). Expectations for value creation from hiring human capital are based on its resource character—the degree to which it can be combined with other firm resources to achieve parity with the performance of competitors or even a sustained competitive advantage (Ployhart, et al., 2014).

effectively in the host country, as their repeated and continuous interactions with the host country's requirements allow them to adapt (Baum and Oliver, 1991; Mezias, 2002). Hence, while local firms benefit from information and legitimacy advantages in their home countries, foreign MNCs must deal with the complexity emerging from operating in multiple countries. Zaheer and Mosakowski (1997) describe this challenge as follows: "The implications of the complexity of this process for organizational legitimacy become particularly apparent in the MNE, since in this case both the organization and the legitimating environment may lack the information and the cognitive structures required to understand, interpret, and evaluate each other" (p. 67).

The hiring of individuals with government work experience in the host country can be useful for foreign MNC subsidiaries wishing to overcome liability of foreignness by (a) acquiring deep procedural knowledge about the host country's informal institutions and (b) gaining political connections. In that sense, we suggest that the complementarity effects between the human capital of government employees and firm resources are higher in the case of hiring by an MNC subsidiary than in the case of hiring by a domestic firm, and that this difference will translate into higher earnings for the individual.

First, former government employees can transfer tacit, procedural knowledge about the informal institutions that govern processes, such as how regulations are normally designed or applied, procurement preferences, or the likelihood of sanctions and rule enforcement. This addresses a particular need of foreign MNC subsidiaries, which often struggle to absorb and interpret host-country information flows (West and Graham, 2004) or to gain access to relevant knowledge sources (Schmidt and Sofka, 2009). In this regard, Calhoun (2002) describes how knowledge about the interplay of formal and informal institutions in a host country is consequential: "Yet, the success of the MNE's actions will be determined, at least in part, by the degree of the MNE's understanding of the informal/unwritten cultural values, norms, and ideologies. These tacit elements will influence the interpretation of laws and will infect the actual results of more formal practices" (p. 307). The HR consultant of a German MNC described this logic to us:

> *When I screen CVs and compare applicants, such a [government work] position looks valuable to me. It is not only about the contacts that this person may have. He or she has knowledge about processes and what actions may be acceptable.*

Second, foreign MNC subsidiaries suffer from a lack of legitimacy when compared with domestic firms that can fully adapt to local societal and governmental requirements. The hiring of employees with government experience is a way for foreign MNC subsidiaries to gain political connections, which may allow those subsidiaries to engage in an exchange in order to appear acceptable and appropriate in the host country as well as to exert an influence on the institutions themselves (Nee and Ingram, 1998). Keupp, et al. (2009), for example, document how access to the networks of government officials in China (*guanxi*) enables foreign firms to more efficiently enforce intellectual property rights. In this regard, access to opportunities constitutes a "political resource," as it provides MNC subsidiaries with contact to political actors as well as groups that influence their decision making (Holburn and Zelner, 2010). A senior manager from the foreign subsidiary of a pharmaceutical company stated:

> *When you hire people from the government, you often pay for the network, for the people they know in the government, or for access to important stakeholders.*

Taken together, we conclude that foreign MNC subsidiaries have higher value-creation expectations for job applicants with government work experience than domestic firms. Consequently, foreign MNC subsidiaries likely pay these individuals higher salaries based on the specific value that they provide when compared with local firms. Our first hypothesis thus reads:

> *Hypothesis 1: Newly hired employees with government work experience earn more in*
>
> *foreign MNC subsidiaries than comparable individuals in domestic firms.*

Disentangling the effects of knowledge transfer and political connections

Hypothesis 1 suggests two reasons why foreign MNC subsidiaries perceive government work experience as more valuable than domestic firms and, consequently, pay higher salaries: individuals possess deep procedural knowledge, and they can facilitate political connections with government officials and entities. These mechanisms likely overlap when firms make hiring decisions, which is why we explore two contingencies in which we expect one of the two mechanisms to be more pronounced. Hence, we argue

that procedural knowledge will be perceived as particularly valuable when hiring firms operate in an industry in which the government sector is a major customer. Moreover, we suggest that hiring firms attach value to political connections when they can hire individuals who were senior government officials.

We begin by examining the effect of a hiring firm's industry and the extent to which the government constitutes a major customer. Industries in which the government is a major customer are typically those related to public services offered by the government and to sovereign responsibilities of public administration. They include utilities, defense, and health services as well as information and communication technologies. In these industries, public procurement is prevalent. Two types of public procurement can be distinguished (Aschhoff and Sofka, 2009). The first entails the purchase of products and services that are highly standardized, such as office supplies or cleaning services. The second revolves around technology procurement, which refers to the purchase of novel technologies, products, and services. For the latter, the government typically defines the functional requirements, while the concrete realization and design are left up to the supplier (Edler and Georghiou, 2007). The intention with this type of public procurement may be to improve the supply and quality of public services, to stimulate innovation, or to meet political goals in such areas as sustainability and energy efficiency (Aschhoff and Sofka, 2009).

Public procurement is a distinct sales opportunity for firms, as it reduces market risks due to guaranteed sales and the potential role of the government as an early adopter or lead user. However, success in the competitive process that leads to the awarding of a procurement contract requires an intimate understanding of the government's procurement practices, rules and regulations, political agendas, and policy objectives. Moreover, public procurement processes, especially those directed at procuring less standardized products and services, often involve consultations and interactions between the government and potential contractors in order to clarify the requirements. Hence, in industries in which public procurement is prevalent, knowledge and skills relevant for succeeding in procurement competitions become salient. Such knowledge and skills not only allow for a comprehensive

understanding of formal rules but also a correct interpretation of informal cues. Hence, liabilities of foreignness are particularly challenging for MNC subsidiaries in these situations.

While all firms are likely to benefit from the expertise that former government employees can bring to procurement processes, we suggest that foreign MNC subsidiaries benefit considerably more than domestic firms. Foreign MNC subsidiaries may be particularly disadvantaged in interpreting informal cues, policy priorities, and unwritten preferences or traditions, and they lack the tacit knowledge to make judgements about how formal institutions are likely to be interpreted and enforced. The senior manager of a foreign MNC subsidiary explained his experience with a government procurement competition like this:

> *There was a huge gap in our understanding of what was important and how to penetrate the governmental bureaucracy. [The foreign MNC subsidiary] eventually lost because we focused on what we thought was important, but it turned out that [the competitor] was much better at decoding the signals from the government.*

In that sense, former government employees can bring their human capital to foreign MNC subsidiaries, which allows them to fine-tune their offers and to extract comparatively more value from that knowledge than domestic firms, which have a better understanding of the informal institutions from the outset. In other words, the human capital of government employees is more complementary to MNC subsidiaries' resources than to domestic firms' resources. Accordingly, foreign MNC subsidiaries are likely to offer higher salaries to new hires with government work experience than domestic firms. Our second hypothesis therefore reads:

> *Hypothesis 2: The salary premium enjoyed by newly hired employees as a function of their*
>
> *government work experience in foreign MNC subsidiaries relative to comparable individuals*
>
> *in domestic firms is higher when the government is a major customer in the hiring firm's*
>
> *industry.*

Next, we focus on a condition in which the political connection mechanism underlying Hypothesis 1 is likely to be dominant. While all individuals with government work experience can potentially facilitate political connections with government officials and entities to a certain degree, we focus on the subgroup of senior government officials that is particularly likely to provide such opportunities. Accordingly, work

experience as senior officials in a government agency should result in higher salaries for these employees when joining foreign MNC subsidiaries compared with the average government employee.

Senior government officials perform tasks similar to those of top managers of private firms. The extant literature has studied the direct, positive human capital effect of top management's experience. Top managers learn to process complex information, motivate a workforce, and deploy resources (Finkelstein, et al., 2009). Given our purposes, we focus on the moderating effect of senior officials' positions on the perceived value of government work experience for salary decisions at foreign MNC subsidiaries. We reason that former senior officials can provide access to key contacts in the government because their position comes with a status that has symbolic value (Higgins and Gulati, 2003). This, in turn, helps MNC subsidiaries reduce the liability of foreignness because they can establish political connections in the host country, which have been shown to increase firm value and improve access to foreign markets (Sojli and Tham, 2017). As former government employees can provide hiring firms with access to policymakers as well as foresight about political agendas and influencers, MNC subsidiaries can rely on those employees to affect the institutions that constrain them (Ingram and Clay, 2000). Moreover, senior government officials are more likely to possess information about coalitions discussing institutional changes and the bargaining processes driving those changes. The informal contacts and networks of senior officials are likely helpful in facilitating such changes. In this regard, a senior manager from the foreign subsidiary of a pharmaceutical company stated:

> *When we work with the government, we do so in a more collaborative way. Given the set of rules, how can we pursue our interests? For example, how can we influence the government to set aside funds for certain diseases that are not currently in the policy spotlight?*

In addition, the willingness of high-status actors to interact is characterized by reciprocity (Podolny, 1993). In other words, a high-status actor can advance his or her own status by interacting with other high-status actors. Just like top managers, senior government officials have preferential access to important stakeholders (Lester, et al., 2006). In our context, foreign MNC subsidiaries can therefore gain access to important stakeholders, such as politicians or regulators. Other employees with government work experience may also have such contacts but they are more likely to actively engage when

approached by a former senior official of a government agency. A manager from the foreign subsidiary of a pharmaceutical company argued:

> *Staff members with government work experience typically help more senior managers establish a dialogue with the relevant people from the government.*

In conclusion, foreign MNC subsidiaries can expect to gain access opportunities by hiring employees with government work experience. Given that the likelihood of these opportunities is particularly high for former senior government officials, the hiring foreign MNC subsidiary expects the potential value creation to also be comparatively higher, which justifies offering the employee higher salaries. This leads to our third hypothesis:

> *Hypothesis 3: The salary premium enjoyed by newly hired employees as a function of their government work experience in foreign MNC subsidiaries relative to comparable individuals in domestic firms is higher when those employees were senior government officials.*

DATA AND METHODS

Data

We test our theoretical predictions using employer-employee data for Denmark. Our theoretical model predicts differences in salaries between employees with government work experience who join a foreign MNC subsidiary and those who join a domestic firm. We condition on individuals who were employed in public administration but switch from the public to the private sector by joining either a foreign MNC subsidiary or a domestic firm. Specifically, we use NACE (Rev. 1.1) code 75 (Public administration and defense; compulsory social security) to identify government employees. As this is an inclusive definition, we expect our results to be conservative. Indeed, a robustness check that uses a narrower definition (excluding, e.g., the police and firefighters as well as activities less relevant to our theoretical reasoning) generates substantially larger salary premiums for former government employees.[3]

---

[3] Our narrow definition includes NACE (Rev. 1.1) codes 75.11 (General public service activities); 75.12 (Regulation of the activities of agencies that provide health care, education, cultural services, and other social services, excluding social security); 75.13 (Regulation of and contribution to more efficient operation of business); 75.14 (Supporting

We focus on the population of individuals moving from the government to the private sector to keep our data homogenous with respect to individuals' decisions to join and later leave government employers. This enables us to avoid problems with possible non-random selection into government employment. Another potentially non-random selection that we deal with is the decision to join a private-sector employer subsequent to a spell in government employment. We address this problem using a matching approach, which we describe in more detail below.

We use register data provided by Statistics Denmark on all wage-employed individuals who switched from the government sector to the private sector between 1999 and 2004.[4] We restrict the sample to government officials who are classified as holding a professional or managerial position[5]. The matched employer-employee dataset is well established in the social sciences (e.g., Kaiser, et al., 2015, 2018; Lyngsie and Foss, 2017). We restrict our data to individuals in the age bracket of 20 to 65 who are not retired. We only consider individuals who left government work to join either a foreign MNC subsidiary (our "treatment group") or a domestic firm (our "control group")—that is, individuals who switched from a governmental employer to a private employer between t-1 and t. We find 15,350 cases of former government employees switching to private firms. Due to the matching procedure, we obtain an estimation sample of 9,698 observations, of which 1,580 joined foreign MNC subsidiaries.

We base our definition of foreign MNC subsidiaries on data provided by Experian A/S, which collects information on foreign ownership submitted by firms to the Danish Business Authority. We match that data with the Danish register data. Such combinations of ownership information from Experian with the register data have frequently been used in prior literature (e.g., Bennedsen, et al., 2007). Consequently, we define a dummy variable that takes a value of one in case of any direct or second-tier indirect ownership by a person or legal entity registered with an address outside of Denmark. The

---

service activities for the government as a whole); 75.21 (Foreign affairs); 75.231 (Courts); and 75.30 (Compulsory social security activities).
[4] Statistics Denmark compiles the data at the end of November each year.
[5] One-digit codes 1, 2, and 3 as defined by the Danish version of the International Standard Classification of Occupations (DISCO). This restriction rules out individuals at lower hierarchical levels, such as "ordinary" firefighters.

decision to allow for indirect ownership reflects the presence of foreign-owned Danish holding

companies. These firms would have been classified as domestic if we had not checked for indirect foreign

ownership. As a robustness check, we define the foreign ownership variable based only on direct

ownership, which produces even stronger results. Our main definition hence constitutes a lower bound.

We find that 16.3% of the government employees start working for an MNC subsidiary, which aligns

well with the share of foreign firms in Denmark (21%) reported by the Danish government.[6] The

deviation may be explained by the fact that we only consider mobile workers who leave government

employment and by the fact that we restricted our sample to professionals and managers.

Measures

Dependent variable. The dependent variable in our regressions is price-index-adjusted gross annual

income earned by employees newly hired by a firm in the year t in which they are hired. Following

Carnahan, et al. (2012) and Campbell (2013), we use the natural logarithm to account for the skewness of

the data.

Explanatory variables. To test Hypothesis 1, we use a dummy variable, which indicates whether the

focal employee was hired by a foreign MNC subsidiary or a domestic firm. We test our interaction

hypotheses (Hypotheses 2 and 3) using two variables that we interact with the foreign MNC employer

dummy. To determine whether the new employer is in an industry in which the government is a major

customer (Hypothesis 2), we take yearly input-output statistics from Statistics Denmark, which show the

aggregate supply of an industry to the government as a share of the total supply. We use the natural

logarithm to account for skewness in this variable. For Hypothesis 3, we construct a dummy variable

based on the occupation (DISCO) codes. This variable takes a value of 1 if the individual was a senior

official in public administration at t-1.

We control for a number of factors that have been used in prior literature in regressions explaining

employee salaries as well as for other relevant variables (e.g., Carnahan, et al., 2012; Campbell, 2013;

---

[6] See https://em.dk/media/9253/oekonomisk-tema-om-internationale-virksomheder.pdf.

Sofka, et al., 2014). A key conditioning variable is an individual's prior income, as it reflects a wide variety of human capital variables, like work experience, age, and education, which are likely to affect both income and selection to a foreign MNC subsidiary. For example, Baltagi, et al. (2009) document the effect of previous income on current income, while Akerlof, et al. (1988) show that previous income is a major determinant for job switching. We measure income at the previous employer as the income decile in which a mobile individual was previously positioned. We use within-organization salary deciles rather than levels, as government employees may receive systematically lower salaries than private-sector employees, even when taking comparable qualifications into account. The latter, in turn, may cause downward-biased estimates, as an individual's previous income may not fully reflect his or her human capital. Additional standard wage regression conditioning variables include gender (e.g., Brown and Medoff, 1989), education and work experience (e.g., Mincer, 1958), and occupation (e.g., Rosenfeld, 1992).[7]

In addition, we include two dummies for the lower and upper tertiles in the overall age distribution (i.e., young (less than 31) and old (older than 45)); a dummy variable for Danish citizenship; and a dummy variable for parenthood to account for possible discrimination in the labor market (Brown and Medoff, 1989). In addition, we follow Hill (1979) and include marital status (dummy variable for being single or married with being widowed, divorced, or cohabiting with a same-gender partner as a comparison group).

Moreover, we account for several characteristics of the hiring firm. In that regard, we include firm age, measured as years since first establishment in Denmark, to control for potential liabilities of newness separately from liabilities of foreignness (Zaheer and Mosakowski, 1997). We include the share of Danes on the top management team to control for the degree to which management consists of third-country

---

[7] We measure education using a set of education dummies that combines the length and type of education (primary school, high school, high school plus some vocational training, vocational training, short continuing education, bachelor-level education, medium-length continuing education, long continuing education, and research education). An individual's current occupation is measured using dummy variables indicating whether he or she is a top management team member at the new employer, and whether his or her work requires knowledge at the highest or intermediate levels. Work experience is measured as the total number of years an individual has been employed.

nationals or expatriates (Collings, et al., 2009).[8] To control for firm size, we include the natural logarithm of the total number of employees. Furthermore, knowledge intensity and competence-creating mandates in MNC subsidiaries have been identified as important sources of heterogeneity (Mata and Portugal, 2000). To account for this, we use the ratio of R&D employees to total employees as our R&D intensity measure. We define R&D employees as individuals with a master's degree or a PhD in the technical, natural, veterinary, agricultural, or health sciences fields who are holding a professional or managerial position (Kaiser, et al., 2015, 2018). This measure also serves as a proxy for whether a foreign MNC subsidiary has an exploratory mandate as opposed to an exploitative mandate (Sofka, et al., 2014).

We also control for whether the hiring firm is experienced in hiring government employees, which may have an influence on new hires from the government. Specifically, we calculate the total number of government employees hired by a focal firm in the past five years (i.e., between t-1 and t-5). In order to avoid measuring mere size effects, we scale this variable by the total number of individuals currently working at the focal firm. We use lags in order to avoid double counting, as we only consider individuals who join a focal firm. In addition, we account for systematic pay differences between domestic and foreign firms by including the ratio of median salaries in foreign firms to median salaries in domestic firms, which we also calculate at the two-digit NACE level. Finally, we include a full set of sector and year dummies as well as a set of dummy variables indicating the region in Denmark in which the firm is located.

Estimation approach

All individuals in our data switched from government employment to private-sector employment. In order to control for non-random selection into an MNC subsidiary versus domestic employment, we match treatment and control-group individuals based on their observed characteristics. To further strengthen our identification of causal effects, we run log annual earnings quantile regressions on the dummy variable for government work experience and our other set of explanatory variables on the matched data. We use

---

[8] This variable is missing in 16% of the cases. To account for that, we include a dummy variable that is coded 1 if the share of Danes in top management is missing (and zero otherwise) while we set the missing variable to zero.

quantile regressions, as they generate outlier-robust estimates and are widely used in labor economics (e.g., Angrist, et al., 2006).

We match individuals in the treatment and control groups using coarsened exact matching (CEM) (Iacus, et al., 2012; Grimpe, et al., 2019). The basic idea of CEM is to allocate observations into different strata based on a set of conditioning variables (i.e., to "coarsen" the data). CEM subsequently matches treatment and control observations within these strata and generates weights, which we use in our regression analysis. These weights take a value 0 if an observation remains unmatched and they are positive if an observation is matched. The better the match, the higher the weight an observation receives. Therefore, better matches have higher importance in our regressions. Unmatched observations are discarded. An advantage of the CEM approach relative to other matching models is that it provides exact matches between treatment- and control-group observations. The downside of the CEM approach is that it completely discards observations that cannot be matched well. However, this is unproblematic for our data due to the ratio of treatment observations to control observations—only 133 out of a total of 6,357 treated individuals remain unmatched.

The set of conditioning variables in the matching procedure needs to affect both the selection (i.e., government work experience) and the outcome variable (Dehejia and Wahba, 1999). We identify these conditioning matching variables by running auxiliary selection and income regressions for which we use the entire set of explanatory variables. These auxiliary regressions indicate that the income decile at the previous employer, years of working experience, education, and gender are variables that significantly affect both selection into foreign MNC subsidiary employment and annual income.

Moreover, in the matching, we wish to control for the possibility that foreign MNC subsidiaries may generally pay higher salaries than domestic firms. For this purpose, we exactly match on our treatment (i.e., MNC subsidiary) and control (i.e., domestic firm) observations to ensure that they are in the same salary bracket in the same industry. In the main model, the salary bracket is calculated as the 95%

confidence interval around the median domestic salaries at the NACE two-digit level.[9] The use of salary brackets ensures that the annual salaries of an MNC subsidiary are not very different from the median salaries of domestic firms. To tighten the salary brackets, we also consider, first, differences of ±10% and, second, a single standard deviation (instead of a factor of 1.96) in a robustness check. The CEM approach generates weights for each individual in our data. We use these weights in the second step of the analysis where we estimate augmented Mincer-type income regressions (e.g., Bhuller, et al., 2017; Carnahan, et al., 2012; Mincer, 1958) by applying the CEM weights. These regressions control for our complete set of explanatory variables.

RESULTS

Table 1 displays the means and standard deviations of our dependent and explanatory variables for the entire sample as well as for individuals hired by a foreign MNC subsidiary or a domestic firm after matching the treated observations with the control observations. The table contains a few cells labelled "n/a" to indicate that the number of individuals in those cells is less than 13, which prevents us from displaying descriptive statistics for data-protection reasons. Most importantly, Table 1 shows that employees hired by foreign MNC subsidiaries and domestic firms differ substantially. Individuals joining a foreign MNC subsidiary earn more on average than those joining a domestic firm, they are more likely to join firms in industries with above-average sales to the government, and they are more likely to work for firms in industries with higher median MNC salaries relative to domestic firms' median salaries. They have lower levels of formal education and slightly fewer years of work experience. Individuals hired by a foreign MNC subsidiary are comparatively more likely to be a member of the top management team at the new employer and more likely to have been among the best paid individuals at their former government workplace. Moreover, they are less likely to be female, and they tend to join younger and smaller firms as well as firms with a higher share of Danes on the top management team. Overall, there is

---

[9] Let Y^m denote domestic median annual salary, $SD(Y)$ denote the corresponding standard deviation, and Y^{mi} denote median annual salaries at the firm level. The salary bracket is then calculated as $[Y^m-1.96*SD(Y); Y^m+1.96*SD(Y)]$.

considerable heterogeneity among and across these different types of mobile individuals, which we control for using the CEM approach and quantile regressions.

Table 2 shows the pairwise correlations of the variables used in our main models. The correlations among the variables is low. Moreover, the mean variance inflation factor is 3.69 for our most general model, which is well below the critical value of 10 suggested by Belsley, et al. (1980).

[Insert Table 1 about here]

[Insert Table 2 about here]

Table 3 displays the abridged results of the test of Hypothesis 1 using quantile regressions. Model (1) does not apply any matching weights, and estimates an income differential between those joining foreign MNC subsidiaries and domestic firms of 3.15% (exp(0.031)-1). Accounting for CEM weights leads to a wage differential of 3.25% in Model (2). Both models generate highly significant coefficient estimates. Consequently, we find support for Hypothesis 1.

Table 4 tests the moderation hypotheses (Hypotheses 2 and 3). Model (3), which tests Hypothesis 2, contains the interaction with the average share of industry sales to the government. The interaction term is highly significant and positive, which lends support to Hypothesis 2. Former government employees who join a foreign MNC subsidiary in an industry with large sales to the government sector earn significantly more than (i) individuals who join a domestic firm and (ii) individuals who join an MNC subsidiary with low sales to the government sector.

Model (4) includes the interaction effect with the senior official dummy to test Hypothesis 3. The estimated coefficient is positive and statistically significant. Individuals who were senior government officials and then join a foreign MNC subsidiary earn, on average, 14.2% (exp(0.029+0.104)-1) more than individuals who join a domestic firm and have not previously served as senior officials. This effect is highly significant. Therefore, Hypothesis 3 is supported by the data. Both interaction terms are included in Model (5), and they remain positive and statistically highly significant as well as similar in size. The results indicate that the economically and statistically highly significant effect in the model without the interaction terms is driven by individuals who either have a background as senior officials or who join a

23

firm in an industry where sales strongly depend on the public sector. Appendix A details the calculation of relative salary effects.

[Insert Table 3 about here]

[Insert Table 4 about here]

Robustness checks. We have thus far only considered quantile regressions based on CEM weighed observations. Table 5 displays estimation results for our robustness checks. First, we assess the robustness of our results by defining only those firms that have direct foreign ownership as MNC subsidiaries (compared to both direct and indirect foreign ownership in our main regressions). Model (6) shows the results, which indicate more than a doubling of the main effect. The point estimate is 0.079, which translates into a salary difference of 8.2% between former government employees who switch to an MNC subsidiary and those who switch to a domestic firm. The effects are also stronger than in our main regression if the definition of an MNC subsidiary is based on indirect majority MNC ownership (Model 7) or indirect 100% MNC ownership (Model 8).

Next, we use the narrow definition of government employment based on the NACE (Rev. 1.1) four- and five-digit levels as described above (Model 9). This narrower definition leads to a point estimate of 0.054, which also remains highly significant. As expected, our initial broader definition constitutes a lower bound on the true effect size. In Model 10, we match on the previous workplace of the individual (i.e., the workplace of the former government employee before switching to the private sector). Matching on the previous workplace leads to large and highly significant effects for employment at a foreign MNC subsidiary despite the substantial reduction in sample size.

In Models (11) and (12), we tighten the definition of another important variable—the income bracket. While the main model forces matched firms to pay wages within the 95% interval of domestic firms, Model (11) requires them to be within the ± 1 standard deviation range and Model (12) requires them to not deviate from median domestic wages by more than 10%. The foreign MNC subsidiary coefficient estimated in these models is again substantially larger than in the main model. This indicates

that our estimation results do not depend on how much focal firm salaries differ from industry-level domestic firm salaries.

[Insert Table 5 about here]

Moreover, our hypotheses predict differences in salary premiums for government work experience between domestic firms and foreign MNC subsidiaries. This implicitly assumes that all hiring firms have some value expectations when hiring former government officials. We explore this assumption by repeating the matching and wage regression approaches of our main models using government work experience as the treatment. The results indicate that government work experience per se is not significantly different from the salary premiums for comparable (matched) new hires with other career histories. Hence, there is no indication of a general salary penalty from government work experience.

Finally, we probe deeper into the origins of salary premiums for former government officials as new hires of MNC subsidiaries. We start by assessing the possibility that foreign MNC subsidiaries may generally pay higher salaries than domestic firms and find this to be the case for an estimation in which we use the hiring by MNC subsidiaries as treatment for a sample of all new hires, i.e. with or without government work experience. Subsequently, we test and support salary penalties for new hires of domestic firms compared with the average new hire. Taken together, these additional estimations indicate that domestic firms discount government work experience of new hires presumably because of lower expectations for value creation while such experience carries value for foreign MNC subsidiaries in line with our theorizing. The estimation tables for these additional analyses are available from the authors upon request.

DISCUSSION

We conduct this study with the aim of explaining how government work experience influences the salaries of newly hired employees of foreign MNC subsidiaries. For this purpose, we conceptualize government agencies as an organizational context in which employees develop specific, procedural knowledge about the intersection of the formal and informal government institutions of a host country and networks with the government decision makers who shape institutions. This unique work experience

makes former government officials valuable to firms, especially foreign MNC subsidiaries. The focus on the organizational context in which individuals experience and absorb the informal institutions of a host country allows us to integrate mechanisms from theory on the interplay between formal and informal institutions into strategic human capital theory that explains the transferability of valuable human capital from one organizational context to another (Campbell, 2013; Sofka, et al., 2014; Grimpe, et al., 2019). More specifically, we reason that government work experience creates human capital in the form of procedural knowledge about how formal and informal institutions in a host country interact owing to opportunities to observe policy discussions as well as the design, implementation, and enforcement of policy measures. These processes also enable government officials to develop networks with government decision makers, which new employers can later use to gain access. Given the relational and legitimacy deficits of foreign MNC subsidiaries (Zaheer, 1995), we conclude that they expect to create the most value from hiring employees with government work experience, resulting in comparatively higher salaries for these individuals. We test and support this theoretical prediction for a large dataset of former government employees in Denmark.

Our theoretical reasoning rests on two mechanisms by which foreign MNC subsidiaries can perceive job applicants with government work experience as particularly valuable. On the one hand, government work experience allows employees to accumulate knowledge about the interplay between formal and informal institutions, such as the tacit and procedural aspects of the design of policies and regulations as well as their administration and communication (OECD, 2017). On the other hand, the hiring of former government employees provides foreign MNC subsidiaries with political connections—opportunities to access government decision makers in order to shape discussions or provide inputs. Both mechanisms overlap in reality, and we test the presence of each mechanism by considering conditions in which one or the other mechanism can be expected to dominate.

With regard to transfers of knowledge about informal institutions resulting from hiring former government employees, we exploit the heterogeneity among industries in terms of the degree to which the government is an important customer. We hypothesize that in industries in which the government

constitutes an important customer, such as healthcare or education (Aschhoff and Sofka, 2009), knowledge about the informal processes, preferences, traditions, long-term goals, and sensitivities will be particularly complementary to MNC subsidiaries' resources and, hence, create higher expectations for value creation. The results of our estimation support this theoretical prediction. The same is true for the contingency hypothesis emphasizing how former government employees provide political connections and opportunities to access decision makers as a dominant mechanism. For this hypothesis, we draw on the literature on the status of top or prestigious managers (Lester, et al., 2006; Bitektine, 2011). We reason that senior government officials have similar potential for creating value at foreign MNC subsidiaries by facilitating access to other high-status actors. In sum, we find consistent empirical evidence suggesting that both mechanisms—knowledge transfers and opportunities for creating access—help explain valuable signals of government work experience when foreign MNC subsidiaries hire new employees.

Our results have implications for both academic research and management practice. On the academic side, our contributions are twofold. First, international business research has devoted increasing attention to the consequences of informal institutions for performance outcomes and for the shaping of countries' formal institutions (Chacar and Hesterly, 2008; Chacar, et al., 2010, 2018). In particular, informal norms, ideologies, or beliefs are an important source of liabilities of foreignness for foreign MNC subsidiaries (Calhoun, 2002). Informal institutions affect formal institutions in the sense that informal institutions set boundaries; reinforce or mitigate formal institutions or their enforcement (North, 1990; Williamson, 2000; Ingram and Clay, 2000); trigger changes (Chacar, et al., 2018); and entail bargaining processes related to the emergence of institutional change (Nee and Ingram, 1998). This makes it particularly important for MNCs operating in multiple countries with diverse institutions to have strategic options for accessing and interpreting the interplay between formal and informal institutions. The extant research implies that foreign MNC subsidiaries have to acquire embedded host-country knowledge over time through local collaborations and networks (Tallman and Chacar, 2011a; b). However, this perspective fails to acknowledge that host-country individuals may have already accumulated such knowledge, which MNC

subsidiaries can acquire by hiring them. In that sense, our research provides new evidence on the hiring of host-country individuals by MNC subsidiaries in order to overcome liabilities of foreignness.

We address this gap in the extant research and provide a theoretical model that describes: (a) an observable organizational context in which individuals accumulate procedural knowledge about the interplay of formal and informal institutions, and develop political connections with decision makers by working for the government, and (b) the hiring of these employees as a mechanism through which foreign MNC subsidiaries can expect to create value from their government work experience. In other words, our model makes foreign MNC subsidiaries active actors in addressing potential challenges from an incomplete understanding of the formal and informal government institutions of a host country. Our reasoning rests on strategic human capital theory, which predicts that work experience in a specific organizational context creates opportunities for value creation in other organizational contexts, thereby allowing job applicants with this human capital to appropriate some of the superior value through higher salaries (Campbell, 2013; Mackey, et al., 2014; Sofka, et al., 2014). Our theoretical logic can serve as a platform that allows for theorizing about other organizational contexts in host countries that expose employees to the informal institutions of a country and create complementarities with resources of new employers (e.g., engagement with societal stakeholders or advocacy groups; Olsen, et al., 2016). Similarly, work experience in non-governmental settings (e.g., as lawyers, ombudsmen, or private mediators) may also provide opportunities to learn about frictions between formal and informal institutions.

Second, the international business literature emphasizes the hiring decisions of foreign MNC subsidiaries as an important determinant of success (Collings, et al., 2009). However, most of the extant literature focuses on the choice between expatriate versus host-country managers (Belderbos and Heijltjes, 2005). We have little insight into the heterogeneity in human capital that foreign MNC subsidiaries hire from the host country and its consequences for value creation (exceptions include Mezias and Mezias, 2010, and Distel, et al., 2019). Our study focuses on a particular type of work experience (i.e., at government agencies), and provides a dedicated theoretical mechanism for how this particular

type of human capital creates expectations for value creation in the foreign MNC subsidiaries that hire these employees. Our theoretical model has the potential to trigger a broader research stream that examines types of host-country human capital and the organizational contexts in which it can be developed (e.g., technologically leading host-country firms) and develops a theoretical logic by which such human capital can advance subsidiary performance.

Finally, our results have consequences for practice. Most prominently, they inform the career planning of government employees, who can take them into account when comparing potential future employers. Salary differences are arguably a crucial determinant of career decisions. We show that foreign MNC subsidiaries have high expectations for the value that their human capital can create and are willing to pay comparatively higher salaries. The results for our moderating factors show that these career opportunities are particularly favorable to senior officials in government agencies and to firms in industries in which the government is an important customer. Furthermore, our findings can inform foreign MNC subsidiaries about the expected value of this particular type of employee as well as the salary premium that other MNC subsidiaries are willing to pay.

CONCLUSION

We uncover several fruitful routes for future research, which go beyond the boundaries of a single study. First, we establish government work experience as an organizational context in which employees accumulate procedural knowledge about the interplay between formal and informal institutions, and develop networks with government decision makers. However, we treat government agencies as largely homogeneous. We expect that the positive average effect emerges from a variety of human capital that employees can create while working for different government agencies (e.g., regulatory bodies) that are part of federal or local governments. Similarly, we identify the interplay between formal and informal institutions in government procedures as a unique organizational context in which government employees can develop human capital. We suspect that some procedural knowledge about government institutions is more valuable than other types of knowledge (e.g., the mere interpretation of laws and regulations, which

could also be handled by lawyers or consultants). Future studies should utilize research designs that theoretically and empirically delineate these government work experiences and their value components.

Second, we predict salary premiums as an indication of the value creation expected by foreign MNC subsidiaries hiring employees with government work experience. Subsequent studies should focus on the value-creation process after the newly hired employees have joined a subsidiary. Interesting aspects in this regard include both organizational-level mechanisms (e.g., knowledge flows and team composition) and individual career trajectories (e.g., promotions or retentions).

Third, we rely on moderating factors to demonstrate the presence of two mechanisms by which foreign MNC subsidiaries expect to create value by hiring employees with government work experience: transfers of knowledge and access to decision makers. While our empirical tests provide results consistent with these two mechanisms, dedicated studies might be able to identify these mechanisms directly (e.g., in experimental settings).

Fourth, we rely on coarsened exact matching techniques to eliminate potential selection biases as much as possible when we explain salary differences. Future studies may choose the selection process (e.g., government employees exploring outside career options, including foreign MNC subsidiaries) as their primary research question and focus on the drivers for such career choices both theoretically and empirically. Given that the government typically offers stable and reliable employment, investigations of employees' motivations to change career paths should provide an interesting research trajectory.

Finally, we benefit from a rich dataset that tracks employment in Denmark with its formal and informal institutions. We encourage comparative studies from other host-country settings, especially from emerging economies in which institutions are likely to develop much more dynamically (Meyer, et al., 2009). Comparative studies using our theoretical and/or empirical models would allow us to assess the degree to which the findings are country specific.

REFERENCES

Abowd, J. M., Kramarz, F., Pérez-Duarte, S., & Schmutte, I. (2009) A Formal Test of Assortative Matching in the Labor Market, National Bureau of Economic Research Working Paper Series No. 15546.

Akerlof, G., Rose, A., & Yellen, J. 1988. Job Switching and Job Satisfaction in the U.S. Labor Market. *Brookings Papers on Economic Activity*, 19(2): 495-594.

Akey, P. 2015. Valuing Changes in Political Networks: Evidence from Campaign Contributions to Close Congressional Elections. *Review of Financial Studies*, 28(11): 3188-3223.

Angrist, J., Chernozhukov, V., & Fernández-Val, I. 2006. Quantile Regression under Misspecification, with an Application to the U.S. Wage Structure. *Econometrica*, 74(2): 539-563.

Aschhoff, B., & Sofka, W. 2009. Innovation on Demand—Can Public Procurement Drive Market Success of Innovations? *Research Policy*, 38(8): 1235-1247.

Baltagi, B. H., Blien, U., & Wolf, K. 2009. New Evidence on the Dynamic Wage Curve for Western Germany: 1980–2004. *Labour Economics*, 16(1): 47-51.

Barney, J. B. 1986. Strategic Factor Markets. Expectations, Luck, and Business Strategy. *Management Science*, 32(10): 1231-1241.

Baum, J. A. C., & Oliver, C. 1991. Institutional Linkages and Organizational Mortality. *Administrative Science Quarterly*, 36(2): 187-218.

Belderbos, R., & Heijltjes, M. G. 2005. The Determinants of Expatriate Staffing by Japanese Multinationals in Asia: Control, Learning and Vertical Business Groups. *Journal of International Business Studies*, 36(3): 341-354.

Belsley, D. A., Kuh, E., & Welsh, R. E. 1980. *Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*. New York:

Bennedsen, M., Nielsen, K. M., Perez-Gonzalez, F., & Wolfenzon, D. 2007. Inside the Family Firm: The Role of Families in Succession Decisions and Performance. *Quarterly Journal of Economics*, 122(2): 647-691.

Bhuller, M., Mogstad, M., & Salvanes, K. G. 2017. Life-Cycle Earnings, Education Premiums, and Internal Rates of Return. *Journal of Labor Economics*, 35(4): 993-1030.

Bitektine, A. 2011. Toward a Theory of Social Judgements of Organizations: The Case of Legitimacy, Reputation, and Status. *Academy of Management Review*, 36(1): 151-179.

Brown, C., & Medoff, J. 1989. The Employer Size-Wage Effect. *Journal of Political Economy*, 97(5): 1027-1059.

Calhoun, M. A. 2002. Unpacking Liability of Foreignness: Identifying Culturally Driven External and Internal Sources of Liability for the Foreign Subsidiary. *Journal of International Management*, 8(3): 301-321.

Campbell, B. A. 2013. Earnings Effects of Entrepreneurial Experience: Evidence from the Semiconductor Industry. *Management Science*, 59(2): 286-304.

Campbell, B. A., Coff, R., & Kryscynski, D. 2012. Rethinking Sustained Competitive Advantage from Human Capital. *Academy of Management Review*, 37(3): 376-395.

Carnahan, S., Agarwal, R., & Campbell, B. A. 2012. Heterogeneity in Turnover: The Effect of Relative Compensation Dispersion of Firms on the Mobility and Entrepreneurship of Extreme Performers. *Strategic Management Journal*, 33(12): 1411-1430.

Chacar, A. S., Celo, S., & Hesterly, W. 2018. Change Dynamics in Institutional Discontinuities: Do Formal or Informal Institutions Change First? Lessons from Rule Changes in Professional American Baseball. *Business History*, 60(5): 728-753.

Chacar, A. S., & Hesterly, W. 2008. Institutional Settings and Rent Appropriation by Knowledge-Based Employees: The Case of Major League Baseball. *Managerial and Decision Economics*, 29(2/3): 117-136.

Chacar, A. S., Newburry, W., & Vissa, B. 2010. Bringing Institutions into Performance Persistence Research: Exploring the Impact of Product, Financial, and Labor Market Institutions. *Journal of International Business Studies*, 41(7): 1119-1140.

Chen, C. J. P., Ding, Y., & Kim, C. 2010. High-Level Politically Connected Firms, Corruption, and Analyst Forecast Accuracy around the World. *Journal of International Business Studies*, 41(9): 1505-1524.

Cohen, M. D., & Bacdayan, P. 1994. Organizational Routines Are Stored as Procedural Memory: Evidence from a Laboratory Study. *Organization Science*, 5(4): 554-568.

Collings, D. G., Scullion, H., & Dowling, P. J. 2009. Global Staffing: A Review and Thematic Research Agenda. *International Journal of Human Resource Management*, 20(6): 1253-1272.

Dehejia, R. H., & Wahba, S. 1999. Causal Effects in Nonexperimental Studies: Reevaluating the Evaluation of Training Programs. *Journal of the American Statistical Association*, 94(448): 1053-1062.

Distel, A. P., Sofka, W., De Faria, P., Preto, M. T., & Ribeiro, A. S. 2019. Dynamic Capabilities for Hire – How Former Host Country Entrepreneurs as Mnc Subsidiary Managers Affect Performance. *Journal of International Business Studies*, forthcoming.

Dunning, J. H. 1998. Location and the Multinational Enterprise: A Neglected Factor? *Journal of International Business Studies*, 29(1): 45-66.

Edler, J., & Georghiou, L. 2007. Public Procurement and Innovation—Resurrecting the Demand Side. *Research Policy*, 36(7): 949-963.

Fan, J., Wong, T., & Zhang, T. 2007. Politically Connected Ceos, Corporate Governance, and Post-Ipo Performance of China's Newly Partially Privatized Firms. *Journal of Financial Economics*, 84(2): 330-357.

Finkelstein, S., Hambrick, D. C., & Cannella, A. A. 2009. *Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards*: Oxford University Press, USA.

Gioia, D. A., & Manz, C. C. 1985. Linking Cognition and Behavior: A Script Processing Interpretation of Vicarious Learning. *Academy of Management Review*, 10(3): 527-539.

Greene, W. H. 2002. *Econometric Analysis*. New York: Prentice Hall.

Grimpe, C., Kaiser, U., & Sofka, W. 2019. Signaling Valuable Human Capital: Advocacy Group Work Experience and Its Effect on Employee Pay in Innovative Firms. *Strategic Management Journal*, 40(4): 685-710.

Hargrave, T. J., & van de Ven, A. H. 2006. A Collective Action Model of Institutional Innovation. *Academy of Management Review*, 31(4): 864-888.

Higgins, M. C., & Gulati, R. 2003. Getting Off to a Good Start: The Effects of Upper Echelon Affiliations on Underwriter Prestige. *Organization Science*, 14(3): 244-263.

Hill, M. S. 1979. The Wage Effects of Marital Status and Children. *Journal of Human Resources*, 14(4): 579-594.

Hoetker, G. 2007. The Use of Logit and Probit Models in Strategic Management Research: Critical Issues. *Strategic Management Journal*, 28(4): 331-343.

Holburn, G. L. F., & Zelner, B. A. 2010. Political Capabilities, Policy Risk, and International Investment Strategy: Evidence from the Global Electric Power Generation Industry. *Strategic Management Journal*, 31(12): 1290-1315.

Hymer, S. H. 1983. *The International Operations of Nation Firms: A Study of Foreign Direct Investment*. Cambridge, MA: MIT Press.

Iacus, S. M., King, G., Porro, G., & Katz, J. N. 2012. Causal Inference without Balance Checking: Coarsened Exact Matching. *Political Analysis*, 20(1): 1-24.

Ingram, P., & Clay, K. 2000. The Choice-within-Constraints New Institutionalism and Implications for Sociology. *Annual Review of Sociology*, 26(1): 525-546.

Jackson, G., & Deeg, R. 2008. Comparing Capitalisms: Understanding Institutional Diversity and Its Implications for International Business. *Journal of International Business Studies*, 39(4): 540-561.

Kaiser, U., Kongsted, H. C., & Rønde, T. 2015. Does the Mobility of R&D Labor Increase Innovation? *Journal of Economic Behavior & Organization*, 110: 91-105.

Keupp, M. M., Beckenbauer, A., & Gassmann, O. 2009. How Managers Protect Intellectual Property Rights in China Using De Facto Strategies. *R&D Management*, 39(2): 211-224.

Kindleberger, C. P. 1969. American Business Abroad. *The International Executive*, 11(2): 11-12.

Krammer, S. M. S. 2019. Greasing the Wheels of Change: Bribery, Institutions, and New Product Introductions in Emerging Markets. *Journal of Management*, 45(5): 1889-1926.

Kyriakopoulos, K., & de Ruyter, K. 2004. Knowledge Stocks and Information Flows in New Product Development. *Journal of Management Studies*, 41(8): 1469-1498.

Lester, R. H., Certo, S. T., Dalton, C. M., Dalton, D. R., & Cannella, A. A. 2006. Initial Public Offering Investor Valuations: An Examination of Top Management Team Prestige and Environmental Uncertainty. *Journal of Small Business Management*, 44(1): 1-26.

Lord, M. D., & Ranft, A. L. 2000. Organizational Learning About New International Markets: Exploring the Internal Transfer of Local Market Knowledge. *Journal of International Business Studies*, 31(4): 573-589.

Lyngsie, J., & Foss, N. J. 2017. The More, the Merrier? Women in Top-Management Teams and Entrepreneurship in Established Firms. *Strategic Management Journal*, 38(3): 487-505.

Mackey, A., Molloy, J. C., & Morris, S. S. 2014. Scarce Human Capital in Managerial Labor Markets. *Journal of Management*, 40(2): 399-421.

Mata, J., & Portugal, P. 2000. Closure and Divestiture by Foreign Entrants: The Impact of Entry and Post-Entry Strategies. *Strategic Management Journal*, 21(5): 549-562.

Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. 2009. Institutions, Resources, and Entry Strategies in Emerging Economies. *Strategic Management Journal*, 30(1): 61-80.

Mezias, J. M. 2002. Identifying Liabilities of Foreignness and Strategies to Minimize Their Effects: The Case of Labor Lawsuit Judgement in the United States. *Strategic Management Journal*, 23: 229-244.

Mezias, J. M., & Mezias, S. J. 2010. Country Level Corruption as a Liability of Foreignness: Effects on Staffing, Incentives, and Activities. In Devinney, T.M., Pedersen, T., and Tihanyi, L. (eds.), *The Past, Present and Future of International Business & Management*: pp 267-291. Bingley: Emerald Group Publishing Limited.

Mincer, J. 1958. Investment in Human Capital and Personal Income Distribution. *Journal of Political Economy*, 66(4): 281-302.

Moorman, C., & Miner, A. S. 1998. Organizational Improvisation and Organizational Memory. *Academy of Management Review*, 23(4): 698-723.

Mortensen, D. 2005. *Wage Dispersion: Why Are Similar Workers Paid Differently?* Cambridge, MA: MIT press.

Mudambi, R., Narula, R., & Santangelo, G. D. 2018. Location, Collocation and Innovation by Multinational Enterprises: A Research Agenda. *Industry and Innovation*, 25(3): 229-241.

Nee, V., & Ingram, P. 1998. Embeddedness and Beyond: Institutions, Exchange, and Social Structure. In Brinton, M.C.Nee, V. (eds.), *The New Institutionalism in Sociology*: pp 19-45. New York: Russel Sage.

North, D. C. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

OECD. 2017. *Skills for a High-Performing Civil Service*. Paris:

Olsen, A., Sofka, W., & Grimpe, C. 2016. Coordinated Exploration for Grand Challenges: The Role of Advocacy Groups in Search Consortia. *Academy of Management Journal*.

Pattit, J. M., Raj, S. P., & Wilemon, D. 2012. An Institutional Theory Investigation of U.S. Technology Development Trends since the Mid-19th Century. *Research Policy*, 41(2): 306-318.

Ployhart, R. E., Nyberg, A. J., Reilly, G., & Maltarich, M. A. 2014. Human Capital Is Dead; Long Live Human Capital Resources! *Journal of Management*, 40(2): 371-398.

Podolny, J. M. 1993. A Status-Based Model of Market Competition. *American Journal of Sociology*, 98(4): 829-872.

Richards, G. S., & Duxbury, L. 2015. Work-Group Knowledge Acquisition in Knowledge Intensive Public-Sector Organizations: An Exploratory Study. *Journal of Public Administration Research and Theory*, 25(4): 1247-1277.

Rosenfeld, R. A. 1992. Job Mobility and Career Processes. *Annual Review of Sociology*, 18(1): 39-61.

Schmidt, T., & Sofka, W. 2009. Liability of Foreignness as a Barrier to Knowledge Spillovers: Lost in Translation? *Journal of International Management*, 15(4): 460-474.

Sofka, W., Preto, M. T., & de Faria, P. 2014. Mnc Subsidiary Closures: What Is the Value of Employees' Human Capital in New Jobs? *Journal of International Business Studies*, 45(6): 723-750.

Sojli, E., & Tham, W. W. 2017. Foreign Political Connections. *Journal of International Business Studies*, 48(2): 244-266.

Tallman, S., & Chacar, A. S. 2011a. Communities, Alliances, Networks and Knowledge in Multinational Firms: A Micro-Analytic Framework. *Journal of International Management*, 17(3): 201-210.

Tallman, S., & Chacar, A. S. 2011b. Knowledge Accumulation and Dissemination in Mnes: A Practice-Based Framework. *Journal of Management Studies*, 48(2): 278-304.

West, J., & Graham, J. L. 2004. A Linguistic-Based Measure of Cultural Distance and Its Relationship to Managerial Values. *Management International Review*, 44(2): 239-260.

Williamson, O. E. 2000. The New Institutional Economics: Taking Stock, Looking Ahead. *Journal of Economic Literature*, 38(3): 595-613.

Zaheer, S. 1995. Overcoming the Liability of Foreignness. *Academy of Management Journal*, 38(2): 341-364.

Zaheer, S., & Mosakowski, E. 1997. The Dynamics of the Liability of Foreignness: A Global Study of Survival in Financial Services. *Strategic Management Journal*, 18(6): 439-464.

TABLES

Table 1. Descriptive statistics

	All employees		Hired by MNC subsidiary		Hired by domestic firm	
	Mean	Std. dev.	Mean	Std. dev.	Mean	Std. dev.
Current annual income (DKK)	244,394	209,889	286,836	337,523	236,134	173,345
Focal variables						
Employment at foreign MNC subsidiary (d)	0.163	---	1.000	---	0.000	---
Share of sales to the public sector	0.054	0.038	0.068	0.052	0.052	0.034
Senior official in government work (d)	0.023	---	0.026	---	0.022	---
Human capital variables						
Years of work experience	10.701	5.979	10.489	5.802	10.742	6.012
Age < 31 years (d)	0.428	---	0.453	---	0.424	---
Middle age (d)	0.414	---	0.443	---	0.409	---
Age > 45 years (d)	0.157	---	0.104	---	0.168	---
High school+some vocational training (d)	0.040	---	0.063	---	0.036	---
Vocational training (d)	0.142	---	0.156	---	0.140	---
Short continuing education (d)	0.195	---	0.240	---	0.187	---
Medium continuing education (d)	0.060	---	0.103	---	0.051	---
Bachelor (d)	0.171	---	0.120	---	0.181	---
Long continuing education (d)	0.390	---	0.316	---	0.405	---
Research education (d)	n/a	---	n/a	---	n/a	---
TMT member at current employer (d)	0.056	---	0.061	---	0.055	---
Income deciles						
1st decile in earnings distr. prev. empl. (d)	0.373	---	0.303	---	0.386	---
2nd decile in earnings distr. prev. empl. (d)	0.159	---	0.155	---	0.160	---

	All employees		Hired by MNC subsidiary		Hired by domestic firm	
	Mean	Std. dev.	Mean	Std. dev.	Mean	Std. dev.
3rd decile in earnings distr. prev. empl. (d)	0.067	---	0.076	---	0.065	---
4th decile in earnings distr. prev. empl. (d)	0.040	---	0.062	---	0.035	---
5th decile in earnings distr. prev. empl. (d)	0.032	---	0.045	---	0.030	---
6th decile in earnings distr. prev. empl. (d)	0.037	---	0.054	---	0.033	---
7th decile in earnings distr. prev. empl. (d)	0.048	---	0.055	---	0.047	---
8th decile in earnings distr. prev. empl. (d)	0.058	---	0.058	---	0.058	---
9th decile in earnings distr. prev. empl. (d)	0.064	---	0.075	---	0.062	---
10th decile in earnings distr. prev. empl. (d)	0.123	---	0.116	---	0.124	---
Other personal characteristics						
Female (d)	0.375	---	0.293	---	0.391	---
Danish citizen (d)	0.964	---	0.969	---	0.963	---
Married (d)	0.366	---	0.347	---	0.369	---
Single (d)	0.613	---	0.628	---	0.610	---
Children (d)	0.646	---	0.621	---	0.651	---
Current employer characteristics						
Public sector hiring experience	0.032	---	n/a	---	n/a	---
Firm age	0.318	0.200	0.276	0.179	0.326	0.203
Share Danes in TMT	0.818	0.367	0.886	0.278	0.805	0.380
Ln(# of employees)	6.093	2.677	5.963	1.953	6.118	2.796
R&D employees/all employees	0.072	0.120	0.066	0.105	0.073	0.123
MNC/domestic salary ratio at industry level	0.893	0.357	1.106	0.177	0.851	0.368
Region 1 (d)	0.420	---	0.450	---	0.415	---
Region 2 (d)	0.040	---	0.016	---	0.045	---
Region 3 (d)	0.033	---	0.023	---	0.035	---
Region 4 (d)	0.028	---	0.022	---	0.029	---
Region 5 (d)	0.008	---	n/a	---	n/a	---
Region 6 (d)	0.074	---	0.068	---	0.075	---
Region 7 (d)	0.031	---	0.022	---	0.033	---
Region 8 (d)	0.037	---	0.035	---	0.037	---
Region 9 (d)	0.053	---	0.067	---	0.051	---
Region 10 (d)	0.040	---	0.035	---	0.041	---
Region 11 (d)	0.134	---	0.125	---	0.136	---
Region 12 (d)	0.024	---	0.013	---	0.026	---
Region 13 (d)	0.077	---	0.123	---	0.068	---
Agriculture, hunting, forestry and fishing (d)	0.006	---	n/a	---	n/a	---
Manufact. of food, tobacco and paper (d)	0.011	---	0.016	---	0.010	---
Manufact. of chemicals and metal (d)	0.046	---	0.104	---	0.035	---
Electricity, gas and water supply (d)	0.018	---	0.032	---	0.015	---
Construction and trade (d)	0.075	---	0.173	---	0.056	---
Services (d)	0.105	---	0.240	---	0.079	---
Wholesale and retail trade (d)	0.087	---	0.020	---	0.100	---
Other sector (d)	0.652	---	0.413	---	0.699	---
Year 2000 (d)	0.182	---	0.212	---	0.176	---
Year 2001 (d)	0.228	---	0.241	---	0.225	---
Year 2002 (d)	0.145	---	0.141	---	0.146	---
Year 2003 (d)	0.094	---	0.093	---	0.094	---
Year 2004 (d)	0.160	---	0.139	---	0.164	---
Number of observations	9,698		1,580		8,118	

(d) dummy variable; n/a: not available due to data protection.

Table 2. Pairwise correlations (*n* = 9,698)

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(1)	Employment at foreign MNC subsidiary (d)	1.00																
(2)	Sales share to public sector	0.16	1.00															
(3)	TMT member at previous employee (d)	0.01	0.00	1.00														
(4)	Years of work experience	-0.02	0.03	0.21	1.00													
(5)	Age < 31 years (d)	0.02	-0.03	-0.12	-0.72	1.00												
(6)	Age > 45 years (d)	-0.06	-0.02	0.23	0.56	-0.37	1.00											
(7)	High school+some vocational training (d)	0.05	0.02	-0.02	-0.04	0.05	-0.01	1.00										
(8)	Vocational training (d)	0.02	-0.01	-0.05	-0.34	0.33	-0.15	-0.08	1.00									
(9)	Short continuing education (d)	0.05	0.03	-0.03	0.14	-0.06	0.10	-0.10	-0.20	1.00								
(10)	Medium continuing education (d)	0.08	0.05	-0.02	0.03	-0.04	-0.01	-0.05	-0.10	-0.12	1.00							
(11)	Bachelor (d)	-0.06	-0.10	0.03	0.14	-0.12	0.12	-0.09	-0.18	-0.22	-0.11	1.00						
(12)	Research education (d)	0.00	0.00	-0.01	0.06	-0.03	0.05	-0.01	-0.01	-0.02	-0.01	-0.02	1.00					
(13)	TMT member at current employer (d)	0.01	-0.01	0.34	0.17	-0.11	0.15	0.02	-0.03	0.02	-0.02	0.02	-0.01	1.00				
(14)	1st decile in earnings distr, prev, empl, (d)	-0.06	-0.07	-0.10	-0.42	0.39	-0.19	0.06	0.20	-0.11	-0.01	0.00	-0.03	-0.11	1.00			
(15)	2nd decile in earnings distr, prev, empl, (d)	0.00	-0.04	-0.04	-0.13	0.10	-0.07	-0.01	0.06	0.04	-0.01	-0.04	-0.01	-0.05	-0.34	1.00		
(16)	3rd decile in earnings distr, prev, empl, (d)	0.02	-0.01	-0.02	-0.02	-0.02	-0.01	-0.01	-0.03	0.08	0.05	-0.04	-0.01	-0.01	-0.21	-0.12	1.00	
(17)	4th decile in earnings distr, prev, empl, (d)	0.05	0.03	-0.03	0.00	-0.02	-0.02	0.01	-0.02	0.08	0.07	-0.02	-0.01	-0.01	-0.16	-0.09	-0.05	
(18)	5th decile in earnings distr, prev, empl, (d)	0.03	-0.01	-0.02	0.02	-0.02	-0.02	-0.01	-0.05	0.06	0.04	0.00	-0.01	0.01	-0.14	-0.08	-0.05	
(19)	6th decile in earnings distr, prev, empl, (d)	0.04	0.02	0.00	0.04	-0.04	-0.02	-0.02	-0.04	0.04	0.04	-0.02	-0.01	0.00	-0.15	-0.08	-0.05	
(20)	7th decile in earnings distr, prev, empl, (d)	0.01	0.04	-0.02	0.04	-0.08	-0.03	-0.02	-0.06	-0.01	0.00	-0.03	-0.01	0.00	-0.17	-0.10	-0.06	
(21)	8th decile in earnings distr, prev, empl, (d)	0.00	0.02	-0.03	0.15	-0.16	0.03	0.00	-0.07	0.02	-0.03	-0.01	-0.01	0.00	-0.19	-0.11	-0.07	
(22)	9th decile in earnings distr, prev, empl, (d)	0.02	0.02	-0.01	0.20	-0.19	0.08	-0.02	-0.09	-0.01	-0.03	0.04	0.13	0.01	-0.20	-0.11	-0.07	
(23)	Female (d)	-0.07	-0.08	-0.07	-0.02	-0.04	-0.05	-0.10	-0.08	0.08	-0.03	0.02	-0.03	-0.10	0.05	0.05	0.02	
(24)	Danish (d)	0.01	0.01	0.01	0.09	0.03	-0.01	0.02	0.01	0.01	-0.01	0.01	-0.01	0.00	-0.02	-0.01	-0.01	
(25)	Married (d)	-0.02	0.00	0.12	0.51	-0.49	0.30	-0.03	-0.22	0.07	0.03	0.09	0.02	0.12	-0.26	-0.08	0.01	
(26)	Single (d)	0.01	-0.01	-0.12	-0.49	0.48	-0.30	0.03	0.22	-0.06	-0.03	-0.08	-0.03	-0.12	0.25	0.08	0.00	
(27)	Children (d)	-0.01	0.00	0.02	0.32	-0.43	-0.06	-0.02	-0.18	0.01	0.03	0.07	0.02	0.06	-0.18	-0.06	0.01	
(28)	Public sector hiring experience	-0.09	0.02	0.09	0.14	-0.12	0.09	-0.02	-0.07	-0.02	-0.04	-0.01	0.00	0.04	-0.09	-0.03	-0.01	
(29)	Firm age	-0.09	-0.08	0.00	0.03	-0.04	0.03	-0.02	-0.03	-0.04	0.03	0.04	0.01	0.01	-0.02	-0.01	-0.01	
(30)	Share Danes in TMT	0.08	-0.01	0.04	0.05	-0.04	0.00	-0.02	-0.01	-0.02	0.01	0.06	0.02	0.10	-0.05	-0.01	0.01	
(31)	Ln(# of employees)	-0.14	-0.15	-0.02	0.01	0.01	0.01	-0.02	0.02	-0.06	-0.05	0.07	-0.01	-0.02	0.03	0.01	-0.01	
(32)	R&D employees/all employees	-0.02	0.09	0.02	0.05	-0.07	0.02	-0.07	-0.09	-0.14	0.02	-0.08	0.06	-0.04	-0.03	-0.04	-0.01	
(33)	MNC/domestic salary ratio at industry level	0.26	0.30	0.00	-0.02	0.05	-0.04	0.06	0.03	0.09	0.07	-0.17	0.01	0.08	-0.06	-0.03	0.02	

		(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)
(18)	5th decile in earnings distr, prev, empl, (d)	1.00															
(19)	6th decile in earnings distr, prev, empl, (d)	-0.04	1.00														
(20)	7th decile in earnings distr, prev, empl, (d)	-0.04	-0.04	1.00													
(21)	8th decile in earnings distr, prev, empl, (d)	-0.05	-0.05	-0.06	1.00												
(22)	9th decile in earnings distr, prev, empl, (d)	-0.05	-0.05	-0.06	-0.07	1.00											
(23)	Female (d)	0.05	0.01	0.00	-0.01	-0.06	1.00										
(24)	Danish (d)	0.00	0.01	-0.01	0.01	0.02	-0.01	1.00									
(25)	Married (d)	0.03	0.03	0.03	0.08	0.11	0.01	0.04	1.00								
(26)	Single (d)	-0.03	-0.04	-0.03	-0.08	-0.11	0.00	0.16	-0.96	1.00							
(27)	Children (d)	0.04	0.02	0.04	0.07	0.08	0.08	0.03	0.52	-0.49	1.00						
(28)	Public sector hiring experience (d)	-0.01	0.00	0.03	0.02	0.06	0.01	0.00	0.08	-0.08	0.05	1.00					
(29)	Firm age	0.01	0.00	0.02	0.01	0.00	0.03	0.01	0.01	-0.01	0.03	-0.04	1.00				
(30)	Share Danes in TMT	0.01	0.01	0.00	0.03	0.01	0.00	0.01	0.03	-0.03	0.04	-0.07	0.17	1.00			
(31)	Total # of employees (log)	-0.01	-0.01	-0.01	0.00	-0.02	0.05	0.02	-0.02	0.02	-0.02	-0.09	0.11	0.23	1.00		
(32)	R&D employees/all employees	-0.01	-0.01	0.04	0.03	0.04	0.01	-0.01	0.01	-0.02	0.03	0.04	0.03	0.00	0.02	1.00	
(33)	MNC/domestic salary ratio at industry level	0.01	0.04	0.03	0.00	0.02	-0.15	0.03	-0.02	0.03	-0.05	0.01	-0.07	-0.19	-0.29	0.01	1.00

Table 3. Main results for salary in new employment (abbreviated)

	Model (1) No matching	Model (2) CEM matching
Employment at foreign MNC subsidiary (d)	0.031	0.032
	[0.007]	[0.001]
Public sector hiring experience	0.112	-0.019
	[0.000]	[0.415]
Female (d)	-0.075	-0.080
	[0.000]	[0.000]
Danish citizen (d)	0.145	0.164
	[0.000]	[0.000]
Firm age	0.001	0.023
	[0.944]	[0.106]
Share Danes in TMT	-0.053	0.023
	[0.357]	[0.643]
Ln(# of employees)	0.008	0.0001
	[0.000]	[0.862]
R&D employees/all employees	0.278	0.301
	[0.000]	[0.000]
MNC/domestic salary ratio at industry level	0.034	0.043
	[0.100]	[0.013]
Tests for joint significance by group of vars.		
Human capital, Work experience, Age, Education, Income decile previous employer, Current employer characteristics, Gender and citizenship, Family status, Year dummies	p=0.000	p=0.000
Number of observations	15,350	9,698
Pseudo R^2	0.3082	0.2328

p-value in brackets; (d) dummy variable.

Table 4. Interaction models for salary in new employment, using CEM matching

	Model (3)	Model (4)	Model (5)
Employment at foreign MNC subsidiary (d)	-0.005	0.029	-0.003
	[0.753]	[0.002]	[0.863]
Employment at foreign MNC subsidiary (d)	0.547		0.484
* share of sales to the public sector	[0.005]		[0.010]
Employment at foreign MNC subsidiary (d)		0.104	0.122
* senior official in government work (d)		[0.063]	[0.042]
Share of sales to the public sector	0.682		0.747
	[0.000]		[0.000]
Senior official in government work (d)		0.178	0.180
		[0.000]	[0.000]
Public sector hiring experience (d)	0.007	0.000	0.033
	[0.784]	[0.992]	[0.163]
Female (d)	-0.076	-0.078	-0.072
	[0.000]	[0.000]	[0.000]
Danish citizen (d)	0.151	0.167	0.158
	[0.000]	[0.000]	[0.000]
Firm age	0.031	0.023	0.041
	[0.040]	[0.084]	[0.005]
Share Danes in TMT	0.025	0.023	0.032
	[0.631]	[0.623]	[0.521]
Ln(# of employees)	0.002	0.001	0.003
	[0.142]	[0.320]	[0.027]
R&D employees/all employees	0.312	0.310	0.318
	[0.000]	[0.000]	[0.000]
MNC/domestic salary ratio at industry level	0.028	0.036	0.031
	[0.123]	[0.025]	[0.074]
Tests for joint significance by group of vars.			
Human capital, Work experience, Age, Education, Income decile previous employer, Current employer characteristics, Gender and citizenship, Family status, Year dummies	p=0.000	p=0.000	p=0.000
Number of observations	9,698	9,698	9,698
Pseudo R^2	0.236	0.236	0.234

p-value in brackets; (d) dummy variable.

Table 5. Results of the robustness checks

	Model (6) Direct MNC ownership	Model (7) Majority MNC ownership	Model (8) 100% MNC ownership	Model (9) Narrow NACE definition	Model (10) Match on previous workplace	Model (11) Narrow income bracket	Model (12) Narrowest income bracket
Employment at foreign MNC subsidiary (d)	0.079	0.051	0.068	0.054	0.120	0.065	0.054
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Public sector hiring experience	0.074	0.064	-0.011	0.058	-0.236	0.143	-0.019
	[0.063]	[0.133]	[0.562]	[0.037]	[0.000]	[0.000]	[0.512]
Female (d)	-0.104	-0.097	-0.098	-0.083	-0.139	-0.102	-0.098
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Danish citizen (d)	0.076	0.065	0.308	0.391	0.415	0.210	0.126
	[0.014]	[0.057]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Firm age	0.039	0.032	0.008	-0.044	0.065	0.060	-0.011
	[0.097]	[0.192]	[0.569]	[0.003]	[0.002]	[0.000]	[0.548]
Share Danes in TMT	0.020	-0.059	0.046	0.096	0.161	-0.076	0.098
	[0.783]	[0.441]	[0.318]	[0.063]	[0.021]	[0.170]	[0.091]
Ln(# of employees)	0.004	0.005	0.001	-0.012	0.011	0.001	0.011
	[0.055]	[0.061]	[0.274]	[0.000]	[0.000]	[0.473]	[0.000]
R&D employees/all employees	0.265	0.247	0.321	0.220	-0.122	0.227	0.323
	[0.000]	[0.000]	[0.000]	[0.000]	[0.001]	[0.000]	[0.000]
MNC/domestic salary ratio at industry level	-0.108	-0.035	0.335	0.627	-0.042	0.357	0.384
	[0.000]	[0.235]	[0.000]	[0.000]	[0.008]	[0.000]	[0.000]
Tests for joint significance by group of vars.							
Human capital, Work experience, Age, Education, Income decile previous employer, Current employer characteristics, Gender and citizenship, Family status, Year dummies	p=0.000	p=0.000	p=0.000	p=0.000	p=0.000	p=0.000	p=0.000
Number of observations	6,553	6,741	7,664	6,031	1,932	9,012	7,705
Pseudo R^2	0.260	0.260	0.230	0.234	0.281	0.230	0.238

p-value in brackets; (d) dummy variable.

APPENDICES

Appendix A: Relative salary effects

While the relative salary change due to former government employment in the main model is simply given by exp(α)-1, where α is the coefficient of our treatment dummy variable, the interpretation of the interaction of our treatment dummy with the natural logarithm of the sales share to the public sector in the sector does not lend itself to such a straightforward and simple interpretation.

We estimate the following log-linear salary regression

$$\ln(Y) = \alpha\,D + \beta\,D\,TMT + \gamma\,D\,SP + \Omega\,SP + Z\delta + \varepsilon,$$

In which D denotes our treatment dummy, TMT the TMT membership dummy, SP the sales share to the public sector in the industry, Zδ the set of other control variables and their corresponding coefficient estimates and ε is and error term. The relative difference between former government employees (D=1) and the control group (D=0) is

$$\Delta \ln(Y) = \ln(Y_{D=1}) - \ln(Y_{D=0}) \approx \frac{Y_{D=1} - Y_{D=0}}{Y_{D=0}} = \alpha + \beta\,TMT + \gamma\,SP.$$

The relative difference from a change in the sales share to the public sector in the focal firm's industry makes it a function of the sales share itself which is best visualized by a figure (Hoetker, 2007). In addition, former government officials (TMT) shift the relative difference plot upwards (but leave its shape unchanged). We calculate the corresponding confidence intervals using the "delta" method (Greene, 2002). The variance of the relative difference is calculated by

$$(1,1,SP)V[\alpha,\beta,\gamma](1,1,SP)',$$

in which V[α,β,γ] denotes the variance-covariance matrix of the coefficient estimates involved. Vector (1,1,SP) denotes the partial derivatives of $\Delta \ln(Y)$ with respect to these coefficients. Figure 1 displays the relative salary differences between former government employees and the control group as a function of the sales share to the public sector in the hiring firm's industry. The shaded area is the 95 percent confidence interval. The left panel corresponds to individuals who were not senior government officials while the right panel displays the same relationship for former top government officials. Both

figures show an increase in salary differences with increasing sales shares to the public sector in the

sector and that the salary differences are positive for both former top government officials as well as

others. They are statistically significant at the five percent level for former government officials and

above a sales share of 0.05 for former non-top government officials, respectively.

Figure 1: Relative salary differences of former government employees as a function of sales shares to the

public sector in the industry
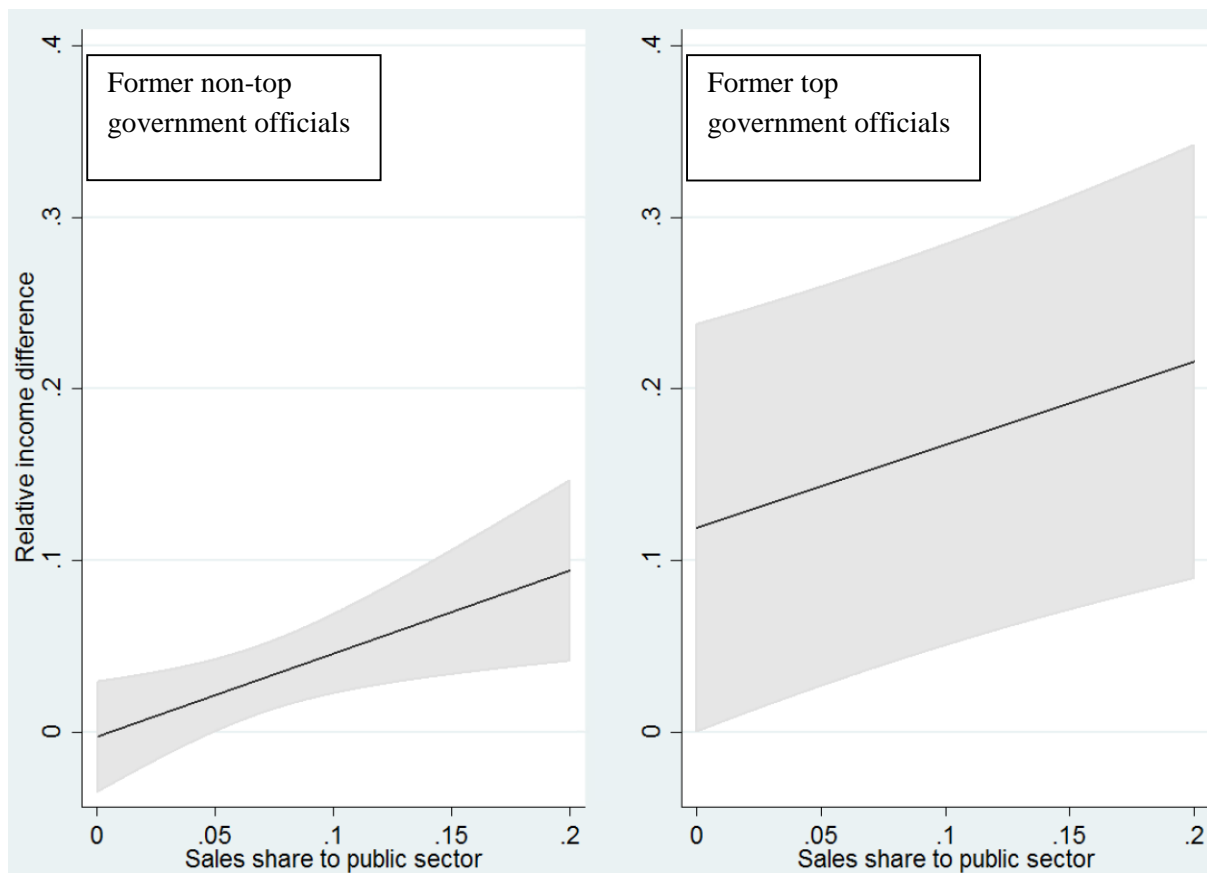
BIOGRAPHICAL SKETCH

Wolfgang Sofka is a Professor for Strategic and International Management at the Department of Strategy and Innovation of Copenhagen Business School. In his research he focusses on how firms acquire knowledge and how they capture its economic value. He is especially interested in how these mechanisms are influenced by the internationalization of firms and markets.

Christoph Grimpe is a Professor of Innovation and Entrepreneurship at the Department of Strategy and Innovation of Copenhagen Business School. His research is concerned with firm innovation strategies and the importance of human capital for firm innovation and competitiveness.

Ulrich Kaiser is a Professor and Chair at the University of Zurich in Switzerland, a Professor of Strategic and International Management at the Department of Strategy and Innovation of Copenhagen Business School and a research fellow at both ZEW – Leibniz Centre for European Economic Research, Mannheim and the IZA Institute of Labor Economics, Bonn. He conducts mainly empirical research in Innovation, Entrepreneurship Economics and Business Strategy.