Labor, Risk and Uncertainty in Global Supply Networks – Exploratory Insights

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Abstract

Arising from widespread outsourcing and, in particular, offshoring, goods and services are increasingly provided by supply networks that rely on global logistic systems. While the risks and uncertainties involved in this strategy have been widely acknowledged in the literature on inter-organizational networks and supply chain management, labor conditions and labor relations – and related human resource management issues – have thus far been neglected. Starting from a perspective that takes into consideration that global supply networks are not only confronted with calculable risks but also genuine uncertainties, we explore the conditions under which labor may constitute a source as well as a means for dealing with risk and uncertainty. The study is based on a review of the relevant inter-organizational network and supply chain management literature and is informed by an investigation of International Framework Agreements (IFAs) in ten European corporations and their supply networks. IFAs – in addition to unilateral codes of conduct – could be used to detect and cope with labor-related risk and uncertainties. However, our findings reveal that this is not the case. This leads to some tentative theoretical conclusions and implications for dealing with risk and uncertainty in global supply networks.

Keywords: Interorganizational Networks; Global Production Networks; Supply Chains; Supply Chain Risks Management; Employer-Employee Issues; Labor Relations; Risk; Uncertainty.

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INTRODUCTION

There was no need to wait for the financial crisis or the problems that Foxconn/Apple and Toyota faced in China in 2010 and the protests following the burning of apparel factories in Bangladesh in 2012 to acknowledge the vulnerability of global production and supply networks. A much earlier and often reported event in this respect was a strike at a company supplying brakes to General Motors (GM) that idled workers at 26 of that company's assembly plants for 18 days in 1996 and caused a reduction of US $ 900 million in quarterly earnings; and this although GM already then opted for a dual sourcing strategy that allowed some buffering in supply chains for catastrophic supply disruption (Meena et al. 2011).

The abundant literature on risk and uncertainty in supply chains (e.g., Waters 2007) or, more generally, inter-organizational networks (e.g., Beckman et al. 2004) has contributed significantly to our understanding of this problem. For example, some studies have tried to clarify how risk and uncertainty are perceived, interpreted and eventually managed and what this may imply for a focal firm's operating performance and shareholder value (cf. Zsidisin and Wagner 2010). At the same time, sub-disciplines like "supply chain risk management" (e.g., Paulsson 2004), more recently extended to "global supply chain risk management" (e.g., Manuj and Mentzer 2008a, b) have developed, focusing for understandable reasons more on calculable risks than on fundamental uncertainty. This is also true for the first handbooks that helped to assess and manage supply chain risks (e.g., Zsidisin and Ritchie 2008). Nevertheless, this research provides not only important insights into potential sources of risk and uncertainty but also some useful distinctions such as demand versus supply side risks, operational versus catastrophic risks, and between cause- and effect-oriented approaches to risk management (Wagner and Bode 2008).

A noteworthy feature of this literature is that it largely neglects the role of labor as a potential source of risk and uncertainty or as a potential means to cope with them. This is surprising

given that labor conditions and labor relations, at least for the more relational forms of global production and supply networks (Golicic and Mentzer 2005; Rinehart et al. 2004; Nyaga and Whipple 2011), are essential for smooth functioning of inter-organizational systems where risk and uncertainty surrounding labor issues can neither be eliminated nor managed by simply switching suppliers of goods or services in a market-like fashion. The neglect of labor in the research on supply chain risks management (SCRM) or uncertainty in networked constellations of organizations is particularly surprising because the availability of cheap and/or qualified labor is an important driver of investment/divestment and outsourcing/offshoring decisions (e.g. Cooke 2001; Lewin et al., 2006). Consequently, the organization of production in global supply chains or networks makes such practices an important (additional) source of risk and uncertainty and a relevant 'object' for monitoring and control.

In this paper we aim to explore the dual role of labor as a source of risk and uncertainty and as problems means of coping with associated in global supply chains/networks. As a first step, we define global supply chains or networks as inter-organizational arrangements of contractors and subcontractors that span several continents whose products and services contribute to the final product or service of a focal firm. Starting from a perspective that strictly differentiates between risk and uncertainty (Knight 1921), also with regard to such arrangements, we argue for a view that regards these as endpoints of a continuum. We then explore the conditions under which labor may constitute a major source of supply risk or uncertainty and inquire into the extent to which labor and labor-related issues feature as major supply problems for transnational corporations' (TNCs). More precisely, our guiding research question comprises two elements: First, *under what conditions is labor considered a source of risk or uncertainty?* Second, *how should firms organize global supply networks to deal with labor issues?*

Since this is a first attempt that we are aware of to address the issue of labor-related risks and uncertainties in global supply, it is not possible to build on prior theoretical or empirical research. Nevertheless, by referring to a unique data set on the conclusion and implementation of International Framework Agreements (IFAs), we are able to explore some practices that may have been developed by management, perhaps with unions and other organizations, to detect and cope with labor-related risk and uncertainty problems. Such agreements are negotiated and signed by TNCs and global union federations' (GUFs) in order to afford mutual recognition and to secure minimum labor standards (cf. Hammer 2005; Fichter et al. 2011). Involving management *and* labor, these bilateral agreements are potentially more effective than unilateral codes of conduct because they are based on a collaborative, problem-solving approach that may be uniquely placed to manage risk and uncertainty across global supply chains. Our investigation of IFAs, especially TNC managements' and GUFs' motives in concluding such agreements, indicates their potential to control, or at least mitigate risks associated with quality and on-time delivery of inputs into final goods and services. These agreements could potentially represent an approach to deal with labor-related related risk and uncertainty, especially when the tool is embedded in a bundle of suitable human resource management (HRM) and corporate social responsibility (CSR) practices comprising a commitment HRM system. However, thus far labor-related SCRM has ignored the potential of this instrument. We discuss possible reasons for this and conclude with implications for management practice and research. Towards this end we formulate three propositions. The first addresses the potential of IFAs to deal with labor-related risk and uncertainty in global supply networks, while the second concerns the present over-reliance on market rather than relational control, exchanging labor-related risks for additional selection uncertainty. The third proposition claims a general lack of reflexivity regarding these issues, on the part of management and labor. But before proceeding we take a closer look at risk and uncertainty in global supply networks.

RISK AND UNCERTAINTY IN GLOBAL SUPPLY NETWORKS

Stimulated by the 9/11 catastrophe, risk and uncertainty have received considerable attention in the two academic discourses relevant to our research question. The management literature on inter-organizational networks focuses in more or less abstract categories on risk and uncertainty in such inter-organizational arrangements (e.g., Beckman et al. 2004; Gereffi et al. 2005; Sydow et al. 2013); while under the label of SCRM supply chain operations analysts (e.g., Brindley 2004; Waters 2007; Narasimhan and Talluri 2009) adopt a more managerial and increasingly global perspective to address practical problems. This growing interest in both streams of research mirrors the development of complex webs of supply arrangements – where competitor firms may sometimes use the same suppliers and indeed the same parts – leading to competitive and collaborative overlapping inter-dependencies among firms in the network.

However, as shown below, much of this research fails to address genuine uncertainty in these arrangements and is silent on the sources of these uncertainties, especially regarding labor both as a source of risk or uncertainty and as a remedial 'instrument'. This also applies to the literature on inter-organizational networks (Sydow et al., 2013). Before summarizing the insights from these two streams of research, we elaborate further on the meaning of global supply networks and demonstrate the neglect of labor conditions and labor relations in this literature.

Global Supply Networks and the Neglect of Labor

The notion of networks is widely used in the management literature and increasingly also in research on supply chains and logistics management. It represents an analytical perspective or is conceptualized as a governance structure of economic activities (Grabher and Powell 2004). In the latter case, a network is typically viewed as a social system in which the activities of at

least three formally independent organizations, such as contractors and subcontractors, are coordinated repeatedly in time-space. In other words, there is a reflexively agreed-upon inter-organizational division of labor and cooperation among the organizations that comprise the network (Sydow and Windeler 1998; Provan and Kenis 2008). More often than not this is under the guidance of a lead firm like Apple or H&M (e.g. Jarillo 1988; Müller-Seitz 2012). Usually network organizations are connected to one another, or at least to the lead firm, with the help of bi- or multilateral contracts and informal contacts (Berends et al. 2011). Thus, from a governance perspective, *global* supply networks comprise organizations from different countries that seek economic advantage from the international division of labor (in particular by means of offshoring) and, because of cultural and/or institutional differences, require additional coordination efforts (e.g., Ernst and Kim 2002; Henderson et al. 2002; Bair 2008).

Research on global supply networks rarely refers to labor issues. This is not only true for the discourse on SC(R)M that at least from time to time mentions labor and labor-related issues as "drivers" of risk or uncertainty (e.g., Jüttner 2005 and below) but also for research on inter-organizational networks more generally (see Borgatti and Foster 2003 or Provan et al. 2007 for recent reviews). This is surprising because labor conditions and labor relations including pay, training and opportunities for participation in decision-making, are strongly affected by this organizational form where negative feedback may endanger its functioning (see, Marchington et al. 2005 and Flecker and Meil 2010). The related discourse on "global production networks" (mainly among economic geographers, sociologists and political scientists) at least pays some attention to labor, though mainly either as victims of globalization or as sources of value creation and/or resistance (e.g., Frenkel 2001; Coe et al. 2008; Bair 2008; Levy 2008; Rainnie et al. 2011; Selwyn 2012; Coe and Hess 2013). .

Risk and Uncertainty in Inter-organizational Networks and Supply Chain Management

Unlike the subject of labor, both research streams mentioned above take risk and uncertainty seriously although they do not distinguish between these concepts. This is a weakness because, as we explain below, risk and uncertainty may require different management approaches. *Uncertainty* is the inability of an (individual or collective) actor to predict or anticipate the future. Following Knight (1921), uncertainty is unfathomable and unpredictable and is therefore not insurable (cf. Froud 2003: 572). In the extreme, dealing with uncertainty includes managing the unexpected (Weick and Sutcliffe 2007). By contrast, *risk* is concerned with the expected (the "known unknown") and often associated with potential losses. Risk, in stark contrast to uncertainty – the "unknown unknown" – is assumed to be calculable in terms of probabilities and as such is often incorporated into cost benefit or net present value calculations. In this respect, some, but not all uncertainty, can effectively become "organized" (Power 2007) and thereby translated by management into 'risks'. As such, it is assumed, rightly or wrongly, to be manageable. Rather than viewing risk and uncertainty as distinct concepts, each can be regarded as endpoints on a continuum of calculability, especially because the literatures on interorganizational networks and SCRM treat the notion of risk in a broader sense to include some uncertainty (see below and, more generally, Renn 2008).

There is considerable research on risk and uncertainty in *inter-organizational networks* (Das and Teng 1996, 2001; Beckman et al. 2004; Huxham and Vangen 2000; cf. Sydow et al. 2013 for a recent review). Useful distinctions introduced by this literature include those between (external) general market uncertainty and (intra-network) partner uncertainty (Mitsuhashi (2002) and between the broadening or deepening of existing network relations in order to deal with uncertainty (Beckman et al. 2004). In a related vein, alliance research (a section of inter-organizational analysis) distinguishes between performance and relational risks (Das and Teng 1996, 2001). From a managerial perspective on alliances/networks Mitsuhashi (2002)

investigated what he called ‘selection uncertainty’ – defined “as ambiguity prior to alliance formation about which partner will serve a firm’s interests best” (p. 114) and concerning three sources of uncertainty: (1) technological competence of the prospective partners, (2) their expected behavior and (3) potential commercial success of the new arrangements. While other authors have also studied the role of risk and uncertainty for partner selection (e.g., Podolny 1994; Gulati and Gargiulo 1999) and even the general uncertainties surrounding network membership (Huxham and Vangen 2000), the conceptual distinction between risk and uncertainty is rarely made, and as in Mitsuhashi’s study, labor as a source of risk or uncertainty goes unmentioned.

A similar point can be made regarding research on *supply chain (risk) management* (SCRM) (e.g., Brindley 2004; Peck 2005, 2007; Waters 2007; Ritchie and Brindley 2007; Zsidisin and Ritchie 2008; Narasimhan and Talluri 2009). Starting with Harland (1996), this more applied research stream has moved from a linear, static and dyadic understanding of supply chains to a more complex and dynamic conception of supply networks. At about the same time, research on SC(R)M overcame its rather narrow focus on modeling and simulating calculable risks (which more or less paralleled statistical process control) and instead incorporated some uncertainty into its analyses (see Paulsson 2004 as well as Manuj and Mentzer 2008a for recent reviews). Nevertheless, the assumption that uncertainty can be “organized” and translated into risks (e.g. with the help of probability estimates based upon simulations) remains central to the SCRM practice (e.g., Paulsson 2004; Jüttner 2005; Kleindorfer and Saad 2005; Trkman and McCormack 2009). However, real uncertainty (at the end of the calculability continuum) remains leaving individual and organizational actors in supply chains vulnerable to significant losses.

SCRM usefully distinguishes between a cause-oriented practice aiming at risk avoidance and an effect-oriented practice aimed at mitigating the effects of supply chain disruption (Wagner

and Bode 2008). Surprisingly, labor is again hardly mentioned in the SCRM literature as a source of risk or uncertainty. Only from time to time does this literature refer to examples like disruptions following strikes or accidents, work-to-rule campaigns, high turnover and absenteeism, or lack of skill, motivation and/or commitment (with resulting supply shortages, quality problems or low productivity) either in supplier firms or logistics providers or in the process of inter-organizational collaboration (e.g., Peck 2005; Chopra and Sodhi 2004; Sheffi and Rice 2005; Sawhney 2006; Waters 2007: 13-14; Ryu et al. 2009). A major reason for neglecting this potential source of risk and uncertainty may be a concentration by supply chain researchers on demand rather than supply or process risks/uncertainties (cf. Peidro et al. 2009). A second reason is the – often implicit, little relational – assumption that most labor issues can be relatively easily addressed by either close monitoring and rectification strategies, or ultimately by terminating and renegotiating supplier contracts, and if necessary, switching suppliers.

A rare exception is Jiang et al. (2009) who highlight the severe adverse consequences to global supply networks of job dissatisfaction and turnover among Chinese migrant workers. Productivity, product quality, supply delays and shortages constitute operational risks, particularly in a just-in-time environment while reputational risks arise when firms receive media attention for alleged violation of labor standards. For reasons advanced below, there is need for more SCRM research on labor as a source of risk and/or uncertainty in global supply networks.

LABOR AS A SOURCE OF RISK AND UNCERTAINTY IN GLOBAL SUPPLY NETWORKS

In a fundamental way labor has been and continues to be a major source of risk and uncertainty in the production or value creation process (March and Simon 1958; Braverman

1974; Crozier and Friedberg 1980). This is so for four main reasons. First, because product markets are usually competitive, extant employment, pay and conditions cannot be guaranteed. Failure to maintain, let alone improve employment contracts will be challenged by workers on grounds of contractual violation. In response, workers may withdraw effort, challenge management authority or quit. These responses will adversely affect firm performance. A second reason concerns distributive justice: the distribution of net revenues is a matter of continual contestation between employees and management. Third, management's treatment of workers in terms of procedures and/or social relationships may be perceived negatively giving rise to grievances concerning procedural and interactional justice. A fourth reason, which may lead to uncertainty rather than risk, is a change in the external environment such as a major technological change (e.g. from hot letterpress printing to cold computer production), the sudden unavailability of critical raw materials (e.g. rare earths), or political change (e.g. the collapse of communism in East Germany in 1989 and the Arab Spring of 2012). The chief means of mitigating risk arising from labor is through sophisticated HRM systems that may assume forms ranging from relatively coercive high compliance to high commitment systems (see Khatri et al. 2006). Employer groups also lobby governments for favorable policy outcomes intended to provide a more predictable political-economic environment.

Labor, Risk, Uncertainty and Governance

Because inter-organizational global networks typically comprise firms in different sub-sectors across different countries labor-related risk and uncertainty are magnified and at the same time not subject to control by senior management fiat. On the other hand, HR systems at the firm level are complemented by 'network control' based on relatively stable and cooperative inter-organizational relationships that provide normative and ultimately coercive pressure on firms to meet their contractual obligations. This provides firms in the network with a strong

incentive to ensure stable labor relations. Although an individual firm may fail to meet market tests (Farmer, 1989) and so be threatened with elimination from the network, overall collaboration continues through support from the lead firm (Frenkel and Scott, 2002) or reselection of suppliers based on past experience (see Sako and Helper 1998; Rinehardt et al. 2004). This "relationship magnitude" (Golicic and Mentzer 2005) on a strategic level is sometimes complemented on an operational level by "interorganizational citizenship behavior" (Autry et al. 2008), where extra efforts are made by boundary spanning employees of one firm in support of another. Such contributions maintain organizational ties, improve individual firm performance and promote the effective functioning of the network. However, they cannot be relied upon to guarantee orderly, cooperative labor relations in all firms throughout the network.

Finally, two points are worth noting regarding labor and its implications for analyzing risk and uncertainty across global supply networks. First, there is the distinction between direct and indirect labor action. And second, there is the possibility of that position on the continuum of risk and uncertainty changes over time according to contextual changes. Regarding the first point, it is useful to distinguish between the possibility of disruption to product supply and/or quality arising from *direct labor relations*, i.e. relations between management and employees within firms, and disruption arising from *indirect labor relations*. This refers to the role played by workers' formal organizations e.g. trade unions or informal workplace groups. These organizations may develop strategies to mobilize their constituents. Such strategies may either serve to create greater risk (e.g. via strikes) or less risk (e.g. through collective agreements). Regarding the second point, labor in particular countries that provide inputs to a product or service may by relatively strike-free, making it possible to estimate risk of production losses arising from this source across the network. However, if links between unions develop across nations via global unions or GUFs and this leads to

demands and strike threats, or if transnational NGOs campaign in some of the source countries and industries for improved labor standards the probability of operational losses and reputational damage becomes much more difficult to estimate.

One way to reduce this tendency towards uncertainty is to develop an International Framework Agreement (IFA) with the GUF representing various relevant national unions. Such an agreement provides a basis for negotiating changes to employment contracts and limiting strikes across the network. Alternatively, in the case of an NGO campaign, firms in the network may invite examination and certification by an international NGO specializing in labor standard evaluation.[1] Ultimately it is the relationship between management and labor within the network firms that determines the level of risk or uncertainty. That this is conditioned by national legislation and political-economic conditions is widely recognized when speaking about "country risks", although as we have already noted, political change can be comprise a fundamental uncertainty. Thus, with regard to the countries included in our study of IFAs (see below), service providers like Business Monitor International have usually deemed Turkey and the United States to be much higher risk than Brazil and India.

INTERNATIONAL FRAMEWORK AGREEMENTS AS AN INSTRUMENT FOR DEALING WITH RISK AND UNCERTAINTY IN GLOBAL SUPPLY NETWORKS?

By the end of 2012 85 TNCs had signed an IFA with a GUF. Although there are now corporations on all continents that have concluded an agreement, by far most of them are headquartered in Europe. As a joint statement of commitment, an IFA is intended to secure and transfer organizational practices which ensure compliance with basic labor standards, in

[1] In response to the publicity of its labor-related problems with Foxconn, Apple joint the Fair Labor Association which offers corporations, including lead firms of global supply networks, independent audits of labor conditions at supplier sites (Fair Labor Association 2012).

particular with the core labour standards established by the ILO's (1998) *Declaration on Fundamental Principles and Rights at Work*.[2] Towards this end, most IFAs do not only cite these standards but also contain a formal conflict resolution mechanism; however, only few include terms and conditions that exceed minimum labor standards. Importantly, and very much in contrast to unilateral CSR strategies, no matter whether they are based on comparable standards like the Global Compact or ISO 26000 or whether or not they are considered as formal (legally enforceable) contracts or non-legally binding agreements by both parties, these are binding outcomes of bilateral negotiations. Are these agreements, like some CSR instruments (e.g., Frenkel 2001; Waddock 2008) tools for coping with risk or even uncertainty in global production networks?

Data Collection and Analysis

Our analysis of the motives behind and, to some extent, implementation of IFAs draws on both primary and secondary sources. A sample of 73 agreements (out of the now 85) together with interviews with management and union representatives enabled us to address the above-mentioned questions. In a comprehensive content analysis of these agreements we identified 125 substantive and procedural IFA characteristics which were divided into four general categories: *actors* identified by signatures; *substance* distinguished by ILO standards and itemized topics; *procedures* defined by monitoring bodies and implementation measures; and *scope* which referred to the participating subsidiaries and suppliers. Value statements in the agreement preambles were also reviewed.

Between November 2008 and March 2011 we conducted semi-structured interviews with key actors from TNCs (HR management, works councils) and from unions (GUFs, home-country trade unions) at the HQ level, i.e. with actors directly involved in initiating and negotiating an

[2] The core labor standards refer to the prohibition of child labor (ILO co. 138 and 182) and forced labor (ILO co. 29 and 105), to non-discrimination and equal pay (ILO co. 100 and 111), and to freedom of association and collective bargaining (ILO co. 87 and 98).

IFA. In addition we conducted interviews in our four host countries, again including local actors from both sides. The average duration of these interviews, which contained questions on the motivation as well as the implementation of IFAs, was 45 minutes. With few exceptions, the interviews were recorded and transcribed verbatim. Furthermore, we completed some two dozen background interviews of similar length with representatives from civil society organizations, employer associations, and academic experts on national industrial relations systems, all of whom are indirectly engaged in and familiar with IFA-related processes.

In order to better understand whether organizational and institutional environments facilitated or deterred implementation of IFAs and especially conflict resolution as formally specified in these agreements, we collected and reviewed basic data on TNCs and their operations (including CSR reports) and on GUFs. These data included the institutional environments of home and host countries. Finally, members of the research team participated in several workshops, discussions, and meetings in which union and employee representatives, and managers, either engaged in IFA-related activities or reflected on their approach to IFAs.

Based on 45 and 57 of these interviews in the home and four selected host countries respectively (see Table 1 for details), we conducted a comparative study of ten cases with the aim of understanding such agreements including difficulties of transferring associated practices from headquarters to subsidiaries and, possibly, even suppliers (Fichter et al. 2011). The case studies, summarized in Table 1, were sampled from the 85 corporations that had signed an IFA by the end of 2012. In order to control for broad institutional effects, we focused exclusively on TNCs headquartered in Europe that comprise 85 percent of the firms with an IFA. In addition, two further criteria for inclusion were that corporations should have signed an agreement with one of the four dominant GUFs: the International Metalworkers' Federation (IMF: 19 agreements); the International Federation of Chemical, Energy, Mine and

General Workers' Unions (ICEM: 13); the Building and Wood Workers' International (BWI: 15); and Union Network International (UNI: 28); and the corporations should have subsidiaries in all four countries mentioned earlier. The rationale for the latter criterion is that these are significant economies with either problematic labor conditions (Brazil, India and Turkey) and/or contested labor relations regimes (e.g. India and the US). In all ten cases we were able to interview management and labor representatives; in almost all cases also in the four countries under scrutiny.

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In this particular study we were mainly interested in the motivation of TNC management and GUF representatives to negotiate and sign an IFA. Semi-structured interviews followed a guideline that started with gathering some background data and then turned to motivation and implementation issues. No attempt was made to explicitly encourage responses regarding any particular motive, including SCRM or dealing with uncertainty with regard to labor and labor relations more generally. The reconstruction of the motives (and sequences of events or actions in the process) allows insights into the process unattainable by a detailed review of IFA documents alone. In particular, interviews with management and labor representatives in the ten cases enabled us to capture the possibly different perspectives of the actors involved. Multiple sources of information, including earlier studies of IFAs (e.g., Hammer 2005; Davies et al. 2011; Papadakis 2011a; Niforou 2012), also allowed data analysis triangulation (Jick 1979). Moreover, we received valuable feedback on the results of our case study research from representatives of management and unions in workshops organized in the four afore-mentioned countries.

Complex Motives, Difficult Implementation

Two motives dominate unions' desire to sign IFAs: (1) securing minimum pay and acceptable working conditions for employees, in particular union members, and (2) institutionalizing a formal conflict resolution process as a means to obtaining union recognition, in particular by GUFs. By contrast, the TNCs' management motives are more complex. These have been recently categorized as coercive, anticipative and consequential (reflecting societal pressure) (Papadakis 2011b). This three-fold classification of motives proved useful in analyzing our interview data: (1) *Coercive motives* concern regulatory obligations (like the EU directive on European Works Councils that in several cases have cosigned IFAs) as well as cultural expectations, notably in the home country of the TNC (internal to the company as well as the wider industrial relations culture in the country). With regard to the latter, the role of the lead firm in a buyer- vs. producer-driven supply chains (cf. Gereffi et al. 2005) seems to matter more. In the former case, the pressure to comply appears to be stronger, not least because of the danger of losing reputation and brand value. TNCs' management motive, then, is to comply with these demands and, thereby gain, retain or defend organizational legitimacy. For instance, several manager interviewees emphasized that they wanted to demonstrate that their companies were responsible and attractive employers. (2) *Anticipatory motives* refer to ensuring enterprise stability and profitability and minimizing social risks that may even become a source of competitive advantage. The central argument is that in societies where corporations are increasingly aware of reputational damage caused by association with goods or services produced under exploitative conditions, it makes sense for such firms to develop a risk avoidance capability with the added advantage of attracting and retaining highly motivated and appropriately qualified employees (Greening and Turban 2000). (3) Consequential *civil society motives* comprise reactive, counter responses by management to information and mobilization campaigns by trade unions and NGOs. Examples of the latter are the recent UNI organizing campaigns which targeted providers of global cleaning and security services.

Two cases, OfficeCorp and FurnCorp, both family-owned and from the jurisdiction of the BWI, do not seem to fit in either of the three categories. Their signing of an IFA seems rather to be motivated by a long corporate tradition of caring for employees; a policy that is, in face of globalization, extended to subsidiaries in foreign countries and even suppliers and is institutionally supported by putting quality control (rather than HR) in charge of these issues within the HQ.

All the cases of 'anticipatory motives' may be oriented toward dealing with uncertainty or to practicing SCRM, comprising measures to identify risk sources, estimate potential consequences, and reduce or mitigate risk in the supply network. However, we found little evidence from the IFAs and interviews that managing risk and uncertainty was a prime motive. Only some risk management motivation was evident related to the idea of organizing global supply chains/networks with the help of standards (Brunsson and Jacobsson 2000). In these cases, however, more often than not management envisaged something other than labor standards (e.g., standards regarding product quality and safety or HRM practices). For illustrative purposes we refer to those cases, in which the theme of managing risk and uncertainty along the supply chain is addressed more or less explicitly, in some detail:[3]

- A senior manager of RubberCorp, a diversified company in the chemical industry, referred repeatedly to the IFA signed with ICEM as a "license to operate". This meant that the decentralized way operations and work are organized by this firm around the globe requires acceptance by the relevant "communities", including local and global consumers, NGOs, national and global unions and state and supra-state agencies. An IFA legitimizes the organization in the eyes of key stakeholder groups and reduces reputational risks. The same manager, however, emphasized that the agreement itself does not provide any new social or labor standards for this family-owned enterprise with a long history of

[3] It should be noted that under different circumstances (e.g., ongoing disputes) labor is more likely to be mentioned in the cases.

CSR/HRM.[4] In sharp contrast to this issue of legitimation, the rationale of developing and maintaining strong and stable relationships with employees was not mentioned.

- BuildCorp, a service-focused construction company that acquired similar companies and organized its activities in a network around the globe, resembles RubberCorp regarding its heterarchical (Hedlund 1986) structure. This firm has signed an IFA and the Global Compact arguing in a similar vein to RubberCorp that a proactive CSR policy already implies socially responsible monitoring of operations in 'problematic' countries. The signing of the IFA – initiated, by the way, by the national building workers' union, not the BWI – makes little difference to this risk-oriented approach that is guided by the auditing department. In fact, measures to implement the agreement organization-wide (e.g., management training, inclusion of sub-contractors, and the creation of a CSR council) have only been undertaken quite recently, i.e. eight years after the conclusion of the IFA. The most important motives in signing the agreement were the company's intentions to continue co-operative industrial relations relationships at HQ level and to avoid reputational damage by keeping alleged violations of labor standards from external (i.e. government and mass media) scrutiny. That the agreement is taken seriously by the lead firm and the supplier network is illustrated by two examples. One is from the United States where collective bargaining rights of workers at a supplier to the local subsidiary had been violated. In this case, the contract with the sub-contractor was terminated. A similar case was reported in Germany where a supplier illegally employed workers from Eastern Europe without paying the obligatory minimum wage. Again, the contract with the supplier was terminated.

- The management of MetalCorp, a leading European car manufacturer, is well aware of the fact that labor conditions and labor relations are a potential threat to the smooth operation of the supply chain and to the company's reputation. According to management interviewees this problem does not exist at the level of first-tier suppliers but rather at the periphery of global supply networks. At the same time, management acknowledges that it is not easy to regulate companies that are the most likely sources of labor-related risks and uncertainties. The same argument is advanced by a European car manufacturer that signed an IFA a few years after MetalCorp. Interestingly, the potential of IFAs as a risk management practice is also explicitly acknowledged in a statement by the management

[4] The same point is emphasized by the management of a chemical corporation that has not signed an IFA whose management argued that pursuing a proactive CSR/HRM policy means there is no need to sign an IFA.

of a European bank that refuses to sign an IFA. Management's argument is that a global labor standard does not fit the decentralized corporate approach which permits subsidiaries to adapt their labor policies to the specific circumstances of the local institutional environment.

- According to the communication manager of OfficeCorp, risk management considerations played a role when the firm signed the IFA. However, this was not a central issue because of the firm's long tradition of positive labor relations which includes employee representation on the executive and supervisory boards although not legally required. The head of the works council, who initiated the process at OfficeCorp, confirmed this view and made no mention of the IFA having any relevance for dealing with labor-related risks and uncertainties.

- The final case is ServiceCorp, one of the world's largest cleaning and security service providers. Management emphasized repeatedly that, consistent with their image of a caring global employer, they value a conflict resolution procedure organized by a global union. This is intended to avert disruption by resolving disputes with employees. This argument recognizes labor process risk mitigation in lieu of switching suppliers which, in any case, may not be a viable strategy in this labor-intensive service business.

In sum, the cases studied (and a few cases without an IFA we looked at for comparison) demonstrate that management, in obvious contrast to union representatives, does not see many advantages in IFAs as a complement to corporate CSR/HRM policies. At best, IFAs are seen by management as an additional tool to guarantee – substantively and/or symbolically – global minimum working conditions and, less frequently, a formal means of resolving conflict. More importantly in the specific context of this paper, IFAs are not viewed by managers or labor representatives as a cause- or an effect-oriented tool for SCRM or for limiting operational risk and uncertainty regarding labor-related issues. If IFAs matter at all in this regard, their main role seems to be to mitigate reputational risk.

While the literature on SCRM seems to neglect labor-related risk and uncertainty because of its concentration on demand rather than supply or process uncertainties (cf. Peidro et al.

2009), the initiation, termination and renegotiation of supplier contracts is in practice often left to the purchasing department without any participation of a CSR/HR (or auditing) unit. This organizational division of labor is likely to hinder a more wholistic or integrated approach to CSR that enables participation of labor relations and HR experts. On the other hand, these very experts may lack the competence for evaluating and framing unsatisfactory working conditions and contested labor relations in terms of risks and uncertainties as they are typically unfamiliar with this frame of reference and accompanying analysis.

DISCUSSION, CONCLUSION AND IMPLICATIONS

Like unilateral approaches, IFAs concluded between TNCs and GUFs seem first of all to fit into the general reputational concerns of management, i.e. legitimating corporate behavior and ensuring that expert institutional assessment bodies endorse corporate CSR-related practices (cf. Doh et al. 2010). However, these agreements *could* be regarded by management and labor representatives as a cause-oriented practice aimed at avoidance or reduction of risks and uncertainties, as well as an effect-oriented practice seeking to mitigating risks and uncertainties arising from labor-related supply network disruption (Wagner and Bode 2008). But this potential risk management function of IFAs passes unmentioned in texts of the respective agreements as well as in the interviews with managers and, even more surprisingly, union representatives involved in negotiating and implementing IFAs. One of the main reasons for this may be because TNCs, as lead firms of global supply networks, have been able to choose institutional environments where the supply of labor is plentiful and quality acceptable, in particular at the periphery of their networks. This has meant that labor-related problems have so far, despite the examples given in the introduction of this paper, not been significant compared to other issues like the disruption of energy supply or logistic systems. This situation, however might change:

Proposition 1: *IFAs are likely to address labor-related risks and uncertainties in global supply networks when the supply of appropriately qualified labor ceases to exceed demand and as a result workers begin to express dissatisfaction with extant contractual terms and conditions.*

Two other possible proximate causes of a neglect of IFAs as a risk and uncertainty tool are first, a low degree of general "risk reflexivity" by management (Power 2007) in organizing and managing global supply networks with regard to these issues, particularly because of the strict division of respective responsibilities between purchasing departments, CSR/HR managers and "uncertainty experts" (Arena et al. 2010) such as internal auditors, management accountants or risk specialists in other functional areas. A recent inquiry into supervisory boards of leading German firms in the automotive and machine-building industry in the aftermath of the Tsunami/Fukushima catastrophe seems to confirm this view (Müller-Seitz and Sydow 2012). Second, because of this orientation management tends to rely ultimately on terminating supply contracts as a mechanism for dealing with labor-related problems in the supply network. In this way labor-related risks are traded for additional "selection uncertainty" (Mitsuhashi 2002). These considerations lead to the following proposition:

Proposition 2: *In lieu of IFAs as a relational or commitment-oriented approach for dealing with labor-related risks and uncertainties in global supply networks, management continues to rely on market rather than relational control (through IFAs), trading labor-related risks for additional selection uncertainty.*

Although a market-based approach that includes terminating or renegotiating supply contracts under competitive conditions to deal with labor-related problems has thus far been sufficiently successful to avoid serious practical challenges, the weakness of this system will be revealed

where labor is able to exert some bargaining strength either through unions or by high labor turnover. Under these conditions the probability of a labor-related network disruption will be higher than where an IFA is able to facilitate worker representation, collective bargaining, monitoring of labor conditions, and/or conflict resolution in order to ensure stable labor relations for an agreed period. Hence the following propositions:

Proposition 3a: *Where a stronger labor market facilitates workers' improved bargaining power, IFAs will be re-negotiated or re-interpreted to assist in adjusting employment contracts to the emerging circumstances;* and

Proposition 3b*: IFAs will be more frequently used as instruments to limit labor-related risks and uncertainties and to address problems arising from such disruption.*

On an even more optimistic note, we would like to conclude with some observations concerning how IFAs *could* act as an important tool in building a high commitment approach to labor in contrast to the traditional compliance-based model (Locke et al. 2009). These advantages include the following, particularly where unions have developed adequate training facilities to ensure representational and administrative effectiveness:

- working with unions enables (inter-) organizational change and attendant risks and even uncertainties to be handled more effectively as there is a partner to represent the often divergent interests involved;
- unions at the supra-national and national levels may provide useful information on impending or actual changes in global, regional and national institutional environments enabling management within the supply network to better plan and adjust their strategies;
- at the local level unions may act to effectively monitor agreements on employee pay, conditions, productivity and well-being whilst promoting employee skill development in order to ensure that the workforce within the supply network is both protected and efficient. This will depend on co-ordination by unions which can be assisted by

management providing reasonable facilities for union representatives to contact colleagues.

An IFA-based approach may even foster inter-organizational citizenship behavior (Autry et al. 2008) as employees in firms within the network build and maintain inter-firm relationships through regular exchange of information, and engagement in joint training and innovation projects. This would assist in developing relational forms of governance in supply networks which would include labor as a stakeholder (Frenkel 2001; Locke et al. 2009). The relational form appears to be growing and deepening (Ring and Van de Ven 1994; Rinhart et al. 2004; Trkman and McCormack 2009) and in time may come to replace market-based or transactional approaches as the prime means of reducing supply chain risks and addressing consequential problems. Towards this end, research on SCRM nowadays recognizes the importance of information-sharing within the supply network for managing demand uncertainties (e.g., Ryu et al. 2009; Datta and Christopher 2011). And more generally, it emphasizes cooperative approaches that foster engagement, loyalty and learning from other members of the supply network (e.g., Ritchie and Brindley 2007; Manuj and Mentzer 2008b; Nyaga and Whipple 2011). In sum, the ground has been prepared for a more relational approach that would include labor through IFA or similar mechanisms.

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