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# BI Norwegian Business School – Master Thesis

# The spillover effect of companies' brands in B2B relationships: the role of governance form choice

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#### **Abstract**

In marketing literature there is a large gap in understanding the importance of brands and brand management in interorganizational relationships. This thesis aims to extend the existing B2B branding literature by analyzing the spillover effect of companies' brands in interorganizational relationships. The current paper suggests that relational governance form should be positively related to brand spillover effect on both focal and partner companies. Additionally, this thesis is testing whether the relationship between reputation, resources and contracting capabilities with brand spillover effect is strengthened (weakened) while moderated by governance forms. These ideas are examined using a sample of 86 Ukrainian B2B managers. By means of hierarchical regression analyses it is found that (1) there is a significant positive relationship between relational governance form and the extent of spillover effect of brands in B2B relationship for partner firm; (2) the relationship between contracting capabilities and brand spill-over effect for partner firm is weakened while moderated by formal governance; (3) the direct relationship between reputation of a partner firm with brand spillover effect for a focal company is positive; and (4) positive relationship between reputation of a focal firm with brand spill-over effect for a partner company is strengthened while moderated by the relational governance form. Based on the results theoretical and managerial implications are provided.

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#### 1.0 Introduction

Brand spillover is an important consequence of product and corporate brands relationships. Spillover effects are "potential costs and benefits to a firm that extend beyond an individual transaction" (Mayer 2006, p. 69). In particular, brand spillovers are positive or negative externalities which occur when brand of one company increases another company's interest, profits, awareness, reputation etc. through the influence on another company's brand (Goldman 2009, Lei, Dawar and Lemmink 2008, Simmonin and Ruth 1998 and others).

In marketing research, spillover effects were studied within brand alliance (e.g. due to M&A), brand extension (sub-brands introduction) and brand choice topics (e.g. Aaker 1990, Keller and Aaker 1992, Simmonin and Ruth 1998, Janakiraman, Sismeiro and Dutta 2009, Lei, Dawar and Lemmink 2008, Balachander and Ghode 2003 and many others). However, brand alliance and brand extension literature highlights only *consumer* evaluation of mainly *product* brands (Keller and Aaker 1992, Sullivan 1990, Suh and Park 2009). In this thesis, I am willing to draw attention to existing *exchange partners*' evaluation of *corporate* brands spillover resulting from particular business-to-business relationships.

To my knowledge, there are no particular studies of brands spillover effect in B2B relationships. Presumably, by establishing relationship with exchange partners, companies' corporate brands may "act" in the same way as during brand alliances and co-branding. The latter means that while entering B2B relationships, some linkages between brands of two parties may be created. Those linkages may result in increase of marketing efficiency, extension of positive or negative corporate brand associations and perceptions (e.g. among existing or potential buyers and suppliers), increase/decrease of image, brand equity etc. Additionally, the level and direction of spillover in B2B may depend on the perceived fit and brand strength, which is in line with brand extension findings (Völckner and Sattler 2006; Jaju, Joiner and Reddy 2006). Considering abovementioned, examining brand spillover effect within B2B context might become an efficient extension of branding literature.

Positive brand spillover may generate benefits for both sides of the dyad and can increase brand perception among potential partners (buyers and suppliers) or

competitors. Companies' managers should realize that dealing with a partner with well-known corporate name and high brand equity might not only guarantee better quality and safety of B2B relationship. It can also be quite beneficial and can bring competitive advantages. Therefore, good management of brand spillovers in business market relationships may create advantages for B2B companies.

The lack of research on brand spillover effect in B2B markets may be caused by the overall underestimation of brand management in B2B relationships. Business companies frequently fail to realize that brands play important part not only in consumer markets, but in B2B markets as well (Keller and Kotler 2012). Customers in interorganizational relationships well know all product offerings (including those of the competitors'), defining B2B markets as a "specialty" or commodity markets. Those markets are supposed to be rational (relies on rational decision making). Hence, they do not include any non-rational behavior like brand loyalty or brand attachment (Kotler and Pfoertsch 2006). Such assumptions lead to a conviction that brand management is not supposed to be an issue in managing B2B relationships, resulting in a small amount of its research (e.g. compared to branding on consumer markets).

However, there are several studies dedicated to corporate brands; brand equity in industrial markets; significance of brands for B2B companies; and brand management in B2B markets (Kotler, Pfoertsch 2006, Keller and Kotler 2012, Webster and Keller 2004, Bendixen, Busaka and Abratt 2004, Mudambi 2002, Hutton 1997, Erevelles et al. 2008, Glynn, Motion and Brodie 2007, Aspara, Tikkanen 2008 and others). Most of these studies underline the slow development of brands research in business-to-business marketing.

The question of whether branding plays the same part in B2B purchasing as in consumer purchasing is raised, while discussing the overall importance of corporate brands and B2B brand management. Keller and Kotler (2012) argue that branding in B2B is of the same importance as branding in B2C. Although, the authors acknowledge that many B2B companies simply ignore the opportunities which can emerge from developing and managing corporate brands.

In this thesis I suggest that as brand spillover might occur in B2B markets, companies should learn how to create and use opportunities from it as well. In particular, it is important to know the mechanisms of managing brand spillovers

and study the role of predictors, which might have direct or indirect relationship to it.

Specifically, each company operating in B2B market has its own 'portfolio' of exor potential partners. To create interorganizational relationships with those partners, a company has to go through a set of steps, including the actual choice of a partner and the choice of governance forms. Those governance forms could be defined as "the formal and informal rules of exchange" (Gosh and John 1999). They will guide partners' business relationship.

In line with previous argument, Poppo and Zenger (2002) suggest that B2B managers make choices of a governance form in response to all exchange hazards. In particular, they define whether to craft a formal contract (with different levels of complexity) or to develop relational governance (e.g. based on solidarity, flexibility, information sharing and trust). Despite of a quite common perception of both governance forms as substitutes, Poppo and Zenger (2002) argue that they might be complements. Therefore, in this thesis governance form choice is analyzed through two factors: formal and relational governance form; which appear in this study simultaneously.

Governance form choice influences the course of the relationship between two companies. It might not only define future legal enforcement of the relationship (Masten 2000), but also influence the actual way companies cooperate, e.g. whether it is more formal or more based on trust (Poppo and Zenger 2002); and the consequences and side effects of that cooperation. In line with this I assume that governance form choice relates to the level of brand spillover effect for exchange partners. Therefore, in this study the direct and indirect relationship between governance form choice – relational and formal – and brands' spillover effect will be analyzed.

In this thesis I suggest that there are some other factors that might have a link to corporate brands' spillover and should be considered by companies' managers prior to establishing B2B relationships. For example, analysis of potential exchange partner's history of previous relationships, level of partners' corporate brand awareness, image, and brand equity may become valuable assets while deciding upon whether to start business relationship. Hence, in this study I argue that there might also be a relationship between B2B brand spillover effect and a

set of other factors, including companies' reputation (in line with Rao and Ruekert 1994, Mayer 2006 etc.), companies' resources (Gosh and John 1999; 2012) and capabilities (Argyres and Mayer 2007, Weber and Mayer 2005). This relationship should be moderated by the actual governance form choice as all interorganizational relationships are managed through the "exchange rules". Thus, different governance forms may strengthen or weaken the correlation between brand spillover and analyzed factors.

This thesis tends to contribute to existing B2B branding literature in several ways. First, it aims to extend the current analysis of brands in B2B relationships by including the topics of brand spillover and governance form choice. Second, it aims to create insights of how to develop advantages for corporate brands from B2B partnership; how can corporate brands be efficiently managed; and what may influence focal firm's and partner's brand spillover. Third, this thesis tends to contribute to the existing analysis of B2B market in Ukraine by choosing this country as a topic of interest. Considering that, the overall *research questions* of this study are:

How does the governance form choice influence the extent of brand spillover effect between the companies in B2B relationships? How can governance form choice moderate the relationship between companies' resources, contracting capabilities and reputation of both focal and partner firm and corporate brand spillover effect?

As there are at least two parties in one particular B2B exchange relationship, <u>two</u> dependent variables will be analyzed: *brand spillover effect on focal firm* and *brand spillover effect on partner firm*.

This thesis is structured in the following way. First, the theoretical background of brand spillover effect, governance forms, company's resource base, reputation and contract design capabilities will be discussed. Based on the literature review, research hypotheses are developed. Further, the applied methodology is described, including all methods and measurements. Prior to presenting results of a theoretical model testing, data examination analyses with all relevant conclusions are provided. Thesis is completed with discussion of the obtained results, suggestions for theoretical and managerial implication, discussion of study limitations and opportunities for future research.

### 2.0 Literature review and hypotheses

#### 2.1 Corporate brands in B2B markets

Branding in interorganizational relationships literature is defined as a psychological phenomenon, a valuable intangible asset, which specifically is a name, logo, sign or symbol that identifies the product or service offerings of one firm and helps differentiate this particular firm from competitors (Webster and Keller 2004, Keller and Kotler 2012). In one of the early studies of brands in an organizational-buying context, Hutton (1997) gives the definition of brand equity. He suggests that it could be interpreted as a buyers' willingness to pay price premium for their favorite brand, recommend that brand and "extend" from the brand to other products with the same brand name.

Further, Mudambi (2002) provides an explanatory research of B2B branding. The author concludes that branding plays an important role in B2B decision making. However, she argues that branding is not equally important to all companies or in all situations. In particular, she found that buyers are most likely to select well-known brands of office equipment and supplies in the following situations: if product failure will create serious problems for the buyer's company; if the product requires high service and support; if the product is complex; and if there are time and resource constraints.

In addition, Bendixen et al. (2004) suggest that brand equity in B2B exists in a form of willingness to pay price premiums. The authors show that leading corporate brand name can reach a price premium of 6.8% over the average corporate brand and 14% over a new-entry brand. They conclude that B2B companies will benefit from investing into building a likeable, strong and positive brand image among stakeholders in the same way as companies on consumer markets do.

The returns business companies gain from managing their corporate brand equity are also discussed and analyzed in terms of value creation. Ackerman (1998) argues that corporate brands are "a comprehensive discipline for clarifying, humanizing, organizing, and communicating how the company creates value." Therefore, business managers should acknowledge it as a significant tool for competitive advantage.

Additionally to price premiums and value creation communication, strong corporate brands may result in an increased demand in cooperation with particular company; higher brand extension opportunities; better trade leverage; potentially higher margins from operations; increased companies strategic vision and organizational culture etc. (Hague and Jackson 1994, Hatch and Schultz 2003, Keller 2008, Aaker 1996, Wood 2000, Bendixen et al. 2004, De Chernatony, McDonald and Wallace 2011, Balmer 2001).

However, Aspara and Tikkanen (2008) argue that marketing literature tend to confuse product brands roles and definitions with corporate ones. These misinterpretations partially explain the reasons, why branding in B2B markets is perceived less important than branding on consumer markets. Nevertheless, business companies tend to estimate, value and make buying decisions based on perceptions related to supplier (seller) itself (its *corporate brand*) rather than its product brands. Hence, B2B managers should consider that business partners' trust, repeated purchases and loyalty, future referrals and commitment are likely to depend on *corporate brand* management strategies, specific images and perceptions that are the outcome of those strategies (Aspara and Tikkanen 2008).

In context of discourse about brands in B2C and B2B markets, Keller and Kotler (2012) argue that branding is much more focused on the consumers' market. Therefore, brands are often neglected in B2B relationships. Corporate firms assume that manufacturers' brand names are not significant for influencing purchase agents' decisions. Still, the authors suggest that branding is B2B has the same importance as that in B2C markets. It simplifies the process of making decisions and reduces risks while evoking trust and safety in interorganizational relationships.

Webster and Keller (2004) mention that some of the most valuable and powerful brands in the world belong to B2B companies. Homburg, Klarmann and Schmitt (2010) also support the idea of high brand importance in interorganizational relations and suggest that brand awareness significantly drives market performance in B2B environments.

Thus, after arguing the significance of managing corporate brands in B2B markets, the discussion of brand spillover effect (particularly in B2B relationships) will be presented in the following section.

#### 2.2 Brand spillover effect

Spillover can be defined as costs and benefits that exceed individual transaction (Mayer 2006); positive externalities that occur when customer interest in some particular brand increases the profits to the third party only related to that brand (Goldman 2009); and reciprocal benefits from brand extension (Balachander and Ghose 2003). In some marketing studies, brand spillover effect is also interpreted as a brand-equity "halo effect" meaning that good and bad brand evaluations (or "brand goodwill") can be transferred from one category, product or company to another one (Hutton 1997, Bendixen et al. 2004).

Brand spillover effect is also seen as a cognitive process (Lei, Dawar and Lemmink 2008). In particular, spillover is a combination of two actions: the retrieval of related nodes and their updating. The first action occurs when brand node (origin brand or one of the corporate brands) is primed and activated by some external information (e.g. news report). Thus, associations about this exact brand are triggered. This activation, in turn, spreads to the related brand nodes (partner brands) through associative network linkages. These linkages might appear as a result of cooperation between two brands. Moreover, the strength of associations between brands (or brand relatedness) defines the probability of brand retrieval and the following level of triggering partner brand associations (Nedungadi 1990, Lei, Dawar and Lemmink 2008). The second action – updating – is an actual measure of spillover effect. It occurs when evaluation of a partner brand is "updated" by triggering in memory the connection to the origin brand through the influence of associations' network.

#### 2.2.1 The effect of intra- and interorganizational brand spillover

In branding literature spillover effect is discussed within analyses of brand extensions (Aaker 1990, Aaker & Keller 1990; Park et al. 1991; Broniarczyk and Alba 1994, Balachander and Ghose 2003, Völckner and Sattler 2006), cobranding (Erevelles et al. 2008, Kalafatis et al. 2012), brand merges and acquisitions and brand alliances (Simonin and Ruth 1998; Levin, Davis and Levin 1996, Jaju et al. 2006, Suh and Park 2009, Rao, Qu and Ruekert 1999, Park, Jun and Shocker 1996 and others). It is possible to distinguish that brand spillover may occur either within the company (e.g. "intraorganizational" effect in brand extensions and sub-branding, when brand associations stretch from one product of

a parent brand to another) or between two companies (e.g. "interorganizational" effect of co-branding or brand alliances, when two companies decide to mutually brand the same product). I assume that intraorganizational brand spillover may also occur as a consequence of M&A activities. When two companies merge into one, former corporate brand associations and brand evaluations of their products can be stretched to the new merged company creating spillover effect already within one new company.

Several brand spillover definitions can be placed within the *interorganizational* spillover effect discussion. Sullivan (1990) argues that spillovers occur in the cases when information about one company can influence the demand for other companies' products (service) offerings.

While analyzing spillover effects of *brand alliances*, Simonin and Ruth (1998) prove that the evaluation of brand alliance itself has a spillover effect on subsequent attitudes of each partner's brand. Additionally, this positive interorganizational spillover effect is significantly moderated by brand familiarity.

Co-branding is a type of brand alliances. Interorganizational brand spillover can be discussed as a part or consequence of co-branding. Co-branding means presenting two or several independent brand names jointly on the same product or service (Erevelles et al. 2008). Indeed, some firms may tend to mention the name of their supplier or partner on their product, if their partner's brand has a high value.

Erevelles et al. (2008) suggest in their article that suppliers and manufacturers are both interested in co-branding, which presumes brand spillover effect. The authors empirically prove and support by real life examples that suppliers' profits are higher with co-branding relationships than without it. Specifically, authors argue that co-branding and brand spillover effect can act as a safeguard for suppliers from possible entry of competitors with unobservable costs. At the same time, manufacturers expect to reach lower prices as a result of co-branding with suppliers (ibid.).

Among other co-branding (and thus, interorganizational spillover) benefits, Erevelles et al. (2008) specify relationship benefits, when companies get some particular advantages from mutual co-operation, from becoming endorsers of each other's offerings, sharing knowledge, capabilities, risks, experience and

generating trust. Moreover, suppliers may lower costs as a consequence of longterm relationships through economies of scale. Finally, benefits from interorganizational spillover effect may emerge when suppliers support the advertisement of co-branded product or service offerings.

Further, spillover effect (intra- and interorganizational) is discussed in marketing literature from both positive and negative angles. Essentially, brand extensions, alliances, sub-branding or co-branding may trigger different associations and evaluations of the buyer-supplier partnership.

Regarding the spillover effect in brand alliance and brand extension studies, Keller and Aaker (1992) were measuring how customers evaluate brand extension and a core brand. They have found that *successful* extension increases consumer evaluation of a core brand and the extension itself in case when this particular core brand has either high or moderate quality. In other words, it has *positive* spillover. At the same time *unsuccessful* extensions decrease evaluation of core brand if it is of a high quality (negative spillover). However, it does not have any spillover effect if the core brand has average quality.

Suh and Park (2009) have studied the *negative* spillover effect on a host brand due to the cognitive responses. Initially they proved that high-favorability host brand can benefit from alliance with moderate partner brand due to greater (fewer) positive (negative) cognitive responses. Nevertheless, when two brands with high favorability cooperate, initial negative cognitive responses will generate negative interorganizational spillover effect of brand alliance.

Most of the discussed studies, however, focus on *consumer* evaluation of *product/service brand* combinations and resulting brand extensions. In this thesis I will analyze the B2B partners' evaluation of *corporate brands spillover*. Thus, this will extend interorganizational brand spillover discussions with introduction of business-to-business context.

#### 2.2.2 Brand spillover effect in B2B relationships

Brands have ability to stretch either to new line products; to sub-companies which were acquired by the parent brand or were involved in brand alliance etc. It happens due to the close cooperation between firms and consequential stretch of associations. However, similar effects were not studied in B2B marketing

research. In this thesis I assume that in B2B relationship, information about business exchange with a particular buyer can increase or decrease demand for seller's products and services among potential partners. The same logic can be applied to buyers – information about business relationship with a seller who has strong corporate brand may increase perceptions of potential partners. Thus, the ability of a corporate brand to stretch to (in other words, to be passed to) another partnering company will be further referred to as *the brand spillover effect*. I argue that some corporate brands may become stronger or more well-known due to B2B relationship with another famous company with a strong brand. Hence, the possibility of positive brand spill-over effect in B2B will be analyzed.

In this thesis I suggest that while negotiating B2B relationships, companies first choose their potential partners (e.g. according to the available information on their reputation, brand favorability, resource base etc.), choose governance form of their future relationship and then start cooperation. During such exchange relationship, the *corporate brands* of two partner companies might act in the same way as brands during alliances, brand extensions or co-branding, since brands of the exchange partners will appear simultaneously in connection to one another and might be perceived as "partnering brands". The latter makes all the findings discussed above relevant to this particular B2B research.

Further, I assume that among the main differences between spillover studies in brand extension or brand alliances (M&A's) literature and brand spillover effect in B2B are the following issues. First, during interorganizational relationships brands are not actually merged or aligned. Thus, B2B brand spillover will be placed within *interorganizational* (not intra-) discussion with small structure difference. Second, while studying B2B spillovers only corporate brands (not product ones) will be analyzed. Finally, the level of cooperation and consequential spillover in B2B may be influenced by other factors related to interorganizational relationship only. For example, each B2B relationship is governed by some particular "rules of exchange". Thus, B2B managers make choices of relational or formal governance to guide this exchange and define its consequences. I expect brand spillover effect in interorganizational relationship to be a side-effect rather than a goal. However, this side-effect might be directly or indirectly influenced by the governance form choice.

#### 2.3 Governance form choice

Governance form is defined as the institutional form a company chooses in order to manage a particular transaction in accordance with transaction costs analysis (Ghosh and John 2012). Moreover, governance structure can be interpreted as "the institutional framework within which the integrity of transaction is decided, [...] negotiated and executed." (Williamson 1979, p. 235).

Williamson (1979) suggests that there are two main governance form alternatives – market and hierarchies. Later, to avoid polarization of governance form a hybrid one was also introduced (Williamson 1991). He finds that the governance forms depend on the nature of transaction, meaning that for the simple contractual relations, the simple governance structures should be implied, while complex governance should be prioritized for complex relations. Such ways of guiding transactions will save managers from spending extra costs during transaction.

Moreover, Williamson (1991) points out that there are three main distinctions between governance forms: "contracting law" (each form of governance should be supported by a different form of contracting law), adaptability and the use of incentives and control mechanisms.

In line with Williamson's findings (1979, 1991), Ghosh and John (1999) suggest that governance form is split into three components: market, hierarchical and relational. In their study, *market governance* is the framework which "describes the rules of arm's-length market exchanges". Market governance gives partner companies considerable autonomy and incentives, which increases the ability to receive benefits from new opportunities, thus, to create value. Moreover, the authors argue that market governance relies on complex contingent contracts which specify burdens on the partnering firms. On the other hand, *hierarchical governance* gives the framework of vertical integrated exchange. It has lower level of incentives for value creation; still, it is less vulnerable to opportunism in value claiming stage than market governance (ibid.). The third form defined by Ghosh and John (1999) – *relational governance* – combines the element of previous two forms. If companies choose this type of governance, they rely on relationship-specific investments and social norms in the process of value claiming.

Further, in a framework developed by Ghosh and John (1999) governance form appeared to be a part of governance value analysis (GVA). The authors suggest that GVA included four basic components: exchange attributes, governance form, positioning and resources. In this context governance form is described as a part of classical transaction costs analysis. Additionally, in their study authors analyze the impact of governance structures and firm resources, including brand equity, on the outcomes of a business relationship. Taking that into account, I assume that the choice of governance form, or the rules of business exchange, may have a significant relationship to brand spillover which might be the outcome of companies' cooperation.

Considering that governance structures are distinct by the contacting laws (among other things), in this thesis governance form choices are measured using formal and relational contracts, which are two most important government mechanisms (Sande 2007). Both forms are further discussed.

#### 2.3.1 Formal contracts

According to Lusch and Brown (1996) the relationship between two exchange parties can be governed by two types of contracts – explicit and normative (implicit). In particular, explicit contracts are the formal agreements that specify and detail the obligations of each party, including their roles and responsibilities, outcomes expectations, contingency planning, monitoring procedures and dispute resolutions (Zhou and Poppo 2010, Barthelemy and Quelin 2006, Sande and Haugland 2011). In addition, formal contracting can be defined as promises and obligations to perform certain actions in future (Macneil 1978, Poppo and Zenger 2002). Writing formal contracts is perceived to be a good solution to situations that increase transaction costs (Zhou and Poppo 2010, Williamson 1996).

Among the two most studied dimensions of formal contracting are role specification and contingency planning (Sande 2007, Sande and Haugland 2011). Role specification refers to the level of describing roles, responsibilities and performance tasks in their contracts (ibid.). Contingency planning relates to the specification of adaptation to changes (Sande 2007). The latter means that during exchange relationship some uncertainties, unexpected future events, disagreements or exchange hazards may occur. Hence, by designing complex formal contracts, parties are safeguarding themselves and enforcing future dispute

resolutions (Sande 2007, Sande and Haugland 2011, Poppo and Zenger 2002, Argyres et al. 2007).

Among the main functions of formal contracts are: control and coordination (Zhou and Poppo 2010). Specifically, control function indicates that contracts aim to govern the agreed behavior, activities and sanctions for non-compliance (Poppo and Zegner 2002, Zhou and Poppo 2010). The second function – coordination – reflects the role of a contract as a "technical aid" for managing particular exchange relationship, including specification of terms, goals, specific coordination mechanisms etc. (Mayer and Argyres 2004, Zhou and Poppo 2010).

Poppo and Zenger (2002) argue that formal contracts differ on the level of complexity. The authors suggest that the more the level of complexity is, the more detailed is the specification of promises, obligations and ways of resolving disputes. In addition, the level of formal contracting complexity depends on the extent of exchange hazards: the increase in exchange hazards promote the use of more formal contracts. However, exchange hazards increase makes contracts less complete due to the fact that it becomes less possible to forecast and be prepared to future uncertain states (Zhou and Poppo 2010).

In this thesis, the choice of a formal contracting of different complexity in order to guide B2B relationships will be referred to as the choice of formal governance.

#### 2.3.2 Relational governance

Relational governance is primarily identified by implicit or soft contracts, which define a set of mutual expectations and understandings between the channel partners (Lusch and Brown 1996). This type of contracts is also called "normative contracts" (ibid.). Moreover, relational contract can be explained as "a self-enforcing agreement so rooted in the parties' particular circumstances that the agreement cannot be enforced by a third-party such as a court" (Gibbons 2005, p. 236).

The choice of relational contracting can be argued by the fact that it sanctions exchange behavior from opportunistic attempts due to increased trust, willingness to rely on the partner company and the idea of enforced mutual long-term cooperation (Zhou and Poppo 2010).

Relational governance form occurs through a set of relational *norms* that govern acceptable behavior between exchange partners (Lusch and Brown 1996). These norms are based on common beliefs and depict particular informal rules that control and guide exchange process (Sande and Haugland 2011, Heide and John 1992).

Furthermore, Poppo and Zenger (2002) state that if companies choose relational governance form to manage their cooperation, then the enforcement of obligations, promises, and expectations of the exchange will occur through social processes. These social processes of relational governance are most commonly characterized by three basic relational norms (dimensions): solidarity, flexibility and information sharing (Ivens and Blois 2004, Heide and John 1992, Sande and Haugland 2011, Poppo and Zenger 2002). Solidarity norm depicts the bilateral approach to problem solving. It promotes commitment to joint actions in value creation and facilitates mutual efforts to adjustments. Flexibility shows the readiness of partners to adapt to unexpected circumstances, whereas information sharing norm assumes that parties are willing to independently share private information with one another about their plans and goals (Poppo and Zenger 2002, Heide and John 1992). Since many other norms were measured in connection to relational contracting and governance (Ivens and Blois 2004), it is possible to assume that they depict the informal level of trust, mutual dependency and reliability between parties in exchange.

To be more exact, analyses of relational contracts use will be the measure of relational governance form in this study.

#### 2.3.3 Governance form choice and brand spillover

While discussing governance structures, Williamson (1979) argues that governance forms should be used with regards to optimization. That means that companies' managers should be willing to shift from one form to another to reduce both costs of writing contracts and expenses of efficient execution in an uncertain environment. There is an assumption that formal contracts undermine trust, thus while choosing more formal governance, the level of relational one may decrease. On the contrary, relational governance choice may substitute the formal controls characteristics (Gulati 1995, Dyer and Singh 1998, Poppo and Zenger 2002). However, Poppo and Zenger (2002) find that formal and relational

governance forms are more likely to be complements than substitutes. In addition, Sande and Haugland (2011) analyze the relationship between formal and relational contracting. Among other findings authors argue that misaligned formal contracts with the transaction attributes result in undermining relational norms. Considering these studies, both governance forms will be measured in this thesis simultaneously, assuming that B2B managers may imply formal and relational contracts with different levels of complexity and completeness as the parts of overall framework for their particular exchange relationships.

Further, there are some discussions regarding the relationship between brands and governance form choice. Glynn, Motion and Brodie (2007) argue in their study that in terms of B2B relationship, brands are considered as market-based assets by resellers. These types of assets can be shared between companies and can create relational rents from relationship specific assets, knowledge sharing, complementary resources and *governance*. Thus, brands are influenced by the choice of governance structure. The latter supports the idea that governance form choice could be related to brand spillover effect in B2B relationships, as spillover is essentially the outcome of relationship between companies.

Ghosh and John (2005, 2009) analyze branded components as "efficient government devices" in their studies on branded component contracts in industrial markets. They suggest that as well as any other contracts, brand contracts assign ownership and decision control to the parties at hand. Hence, governance type and principles should also apply to these contracts. The authors suggest that the allocation of brand ownership presumes an efficient governance response to exchange hazards. These findings are in line with Gonzalez-Diaz et al. (2002) and Azevedo et al. (2002) studies.

The issue of brand spillover was not discussed in these studies. However, while brands are analyzed within the context of governance, it shows that there might be a connection (even causal effect) between governance form and brand spillover effect. As a result, in this study I propose that brand spillover might be the consequence of B2B relationship. At the same time, governance form choice is defined as a framework, which is used to manage a particular buyer-seller relationship and influence specific consequences of it. In other words, it is a structure within which the cooperation, negotiations and actual B2B performance

take place. Thus, governance form might as well manage, influence or determine the level of brand spillover among partnering companies (or the actual side effect of B2B relationship).

Since both governance forms are present in this research model simultaneously, another suggestion about the governance-brand spillover relation is made. As it was mentioned before, formal contracts include specifications of roles, goals, monitoring procedures etc., while relational governance is based on informal rules, trust and joint actions. Considering that brand spillover as an outcome of B2B relationship is intangible, it might not be described and controlled by formal governance. Therefore, in this study I suggest that the level of *relational* governance will be linked to the level of brand spillover effect. This statement is based on assumption that while developing B2B relationship on the basis of solidarity, trust, information sharing, flexibility and reliability (characteristics of relational governance), it will guarantee more close relationship management, will increase perception of these two companies and their brands as partners and, eventually, will generate brand spillover effect. Taking this proposition into account, these study's hypotheses are formulated as follows:

 $H_{1a}$ : There is a positive relationship between relational governance form and brand spillover effect for focal firm.

H<sub>1b</sub>: There is a positive relationship between relational governance form and the level of spillover effect of brands in B2B relationship for partner firm.

Additionally, in this thesis the choice of governance form is expected to have a moderating effect on the influence of companies' resource base, companies' contracting capabilities and reputation of both focal and partner firms on brand spillover effect. A moderator is defined as a variable which specifies under what conditions a predictor (independent variable) influences a dependent variable (Baron and Kenny 1986). It may reduce or enhance the direction of the relationship or even change the relationship from positive to negative (Lindley and Walker 1993, Kim, Kaye and Wright 2001). Since governance form defines "the rules" of B2B relationship, it might have a moderating effect on predictors. The mentioned factors and the possible moderating effect will be discussed in the following.

#### 2.4 Companies' resources

Within GVA framework, resources are defined as "the imperfectly mobile and scarce skills or assets that are owned by the focal parties to the exchanges" (Ghosh and John 2012, p. 56). Moreover, Ghosh and John (1999; 2012) suggest that companies' resource base, including technological, customer-side (brand) and supply-chain based, should be connected to the transaction attributes and governance form choice. In the essence, authors argue that firms should align their resource base with the appropriate governance form, so that it will guarantee further solution of potential conflicts, which weaken opportunities to realize mutually beneficial advantages. Further, Ghosh and John (1999) argue that resources such as brand equity have a different impact on companies' performance and outcomes, depending on the choice of governance form or strategy. Recalling that brand spillover is considered to be one of the outcomes of B2B relationship, companies' resource base may have a relationship to it.

A company may use its resource base either to accomplish various activities within the company itself, or to achieve competitive advantages from joint activities with value-chain partners, including buyers and suppliers (Ghosh and John 2012). In particular, the firms with stronger resource base (including stronger brands) might tend to use formal contracts as governance form to safeguard themselves from opportunistic behavior during the value claiming stage. Hence, companies will protect their non-imitable resources.

On the contrary, the companies with strong resource base may get more benefits from choosing relational governance. That can be explained by the fact that relational governance form will enable leveraging of partners' resources which may lead to possible competitive advantages, e.g. positive brand spillover. That effect might be even more strengthened for a company with less well-known brand in B2B relationships (Ghosh and John 1999, Glynn, Motion and Brodie 2007).

Considering the discussion above, I assume that the stronger resource base of the focal firm will result in the higher level of brand spillover effect for partner firm while it is controlled by the relational governance form. Moreover, using the logic that while choosing greater level of relational governance companies tend to achieve higher benefits from relationship, I assume that companies resource base

will have the relationship with brand spillover effect on focal firm as well. Hence, the next hypotheses are:

H<sub>2a</sub>: The relationship between company's resource base and brand spillover effect for a focal firm is more positive if it is moderated by relational governance form.

H<sub>2b</sub>: The relationship between company's resource base and brand spillover effect for a partner firm is more positive if it is moderated by relational governance form.

#### 2.5 Contracting capabilities

Contracting capabilities can be defined as alliance capabilities that determine the level of performance of this alliance and individual companies' performance, which consequently influence companies' competitive advantage (Argyres and Mayer 2007, Weber and Mayer 2005). In particular, contracting capabilities include contract designing, contract negotiation and knowledge sharing. Argyres and Mayer (2007) discuss that companies should determine the players (internal/external; lawyers, managers, engineers or sales agents) and their responsibilities at each stage of contracting process.

Due to the definition of contracting capabilities it is possible to assume that they are the antecedence of formal (not relational) governance. Weber and Mayer (2005) argue that if during contract designing the roles were specified incorrectly (e.g. personnel involved in designing and negotiation lack the appropriate knowledge and information), then it would influence the efficiency and outcomes of governance.

In line with the previous argument, I suggest that brand spillover as an outcome of B2B relationship will be related to contracting capabilities and this link will be weaker while it is moderated by the choice of formal governance. In other words, if companies choose more formal framework to guide their relationship, then the relationship between companies's contracting capabilities (the efficiency of contracting and the ability to get all benefits from it) and the level of brand spillover effect between B2B companies will be lower. Considering that it is hypothesized:

H<sub>3a</sub>: The relationship between contracting capabilities and brand spill-over effect for focal firm is weakened while moderated by formal governance.

H<sub>3b</sub>: The relationship between contracting capabilities and brand spill-over effect for partner firm is weakened while moderated by formal governance.

#### 2.6 Reputation

Reputation and company's soundness play quite important role during the process of B2B partner's choice in line with price-quality and costs decisions. Corporate reputation is defined as a valuable intangible asset, accumulated impression formed by stakeholders after interaction with the company and receiving communication from it (Keller 2008, Chun 2005). Chun (2005) describes reputation through three concepts: image, identity and desired identity, and states that reputation affects the way various stakeholders act towards the company. This concept influence customer and employee satisfaction, retention rate and loyalty. In other words, reputation is what others think of the company. That is why of a company I assume that reputation plays important part in the process of choosing a business partner for exchange relationship as well.

Mayer (2006) argues that reputation can be a function of product quality managerial competence and other factors which are essential for external constituencies. With respect to transaction cost economics framework, reputation can be characterized as a hostage firms can use as an evidence that exchange partner will imply high efforts (Mayer 2006, Klein and Leffler 1981). Additionally, according to Walsh and Beatty (2007), good corporate reputation can reduce transaction costs.

Before signing the contract or entering relationship companies' managers will most likely assess reputation of their potential partners as it provides competitive advantages as a point of differentiation (Rao and Ruekert 1994, Mayer 2006). Therefore, firms with better reputation might be considered as more safe and beneficial to do business with. In this thesis I assume that companies' good reputation (or external evaluation of companies image, brand etc.) has positive link towards their brand equity and companies' soundness. Moreover, some particular company may appear to have better reputation in B2B dyad, which

makes it a valuable partner. Hence, after entering B2B relationship it may influence its partner's brand equity as an outcome of this cooperation. Thus, positive brand spillover will occur. Note that the reputation of a *focal* firm is expected to be positively related to brand spillover effect for *partner* firm and vice versa. In line with this argument, I hypothesize the following:

H<sub>4a</sub>: The direct relationship between reputation of a focal firm with brand spill-over effect for a partner company is positive.

H<sub>4b</sub>: The direct relationship between reputation of a partner firm with brand spill-over effect for a focal company is positive.

Recalling this study's research questions and all the restrictions and frameworks guiding B2B exchange I suggest that this relationship might be also moderated by governance form choice. In this case I argue that the level of *relational* governance will have significant moderating effect, since it requires building close cooperation based on trust and solidarity. Thus, the following hypotheses are:

H<sub>4c</sub>: Positive relationship between reputation of a focal firm with brand spill-over effect for a partner company is strengthened while moderated by the relational governance form.

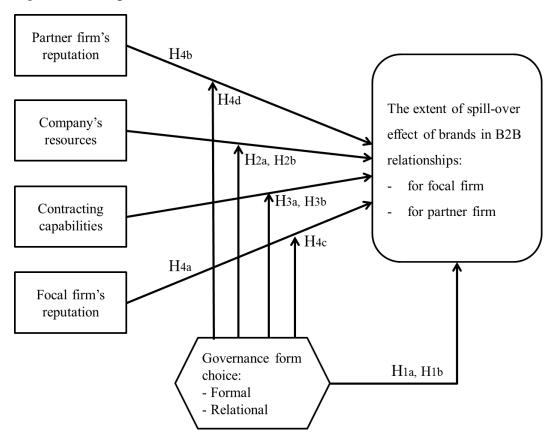
H<sub>4d</sub>: Positive relationship between reputation of a partner firm with brand spill-over effect for a focal company is strengthened while moderated by the relational governance form.

#### 2.7 Model description

Aforementioned hypotheses and relationships are illustrated on the following research model (Figure 2.1). This model shows that there are two dependent variable in this study – the extent of spillover effect of brands in B2B relationship for focal and for partner firm. Governance form choice (formal and relational), reputation of a partner and focal firm, company resources and contacting capabilities are the predictors. Moreover, the moderating effect of governance form choices on the relationship between other predictors and the level of brand spillover effect on both focal and partner companies will be tested.

Furthermore, a number of control variables will be included in the analysis. They are discussed in the following section.

Figure 2.1 Conceptual model



#### 2.8 Control variables

This theoretical model will use a set of control variables which may give insight on alternative explanations for the relationships between endogenous variables. Three classical transaction cost economics variables – relationship-specific investment, market uncertainty and measurement ambiguity – as well as institutional and legal environment and perceived fit will be included as control variables.

#### 2.8.1 Institutional and legal environment

Institutions and legal environment are often explained as particular rules. For example, Williamson (1975) defines institutions as the 'rules of the game'. In line with this definition, John (2008) explains institutions as the rules that govern the interaction between two actors. Institutional and legal factors often affect the financial and economic performance. These two factors state the conditions and rules of business partner relationships. Additionally, Carson et al. (1999) explain that institutional environment is the 'rule' on macro level, while institutional arrangements are the 'rules' of micro level of relationship. Legal environment

(e.g. country's law system) is also assumed to be a part of institutional environment.

Zhou and Poppo (2010) argue that in terms of transaction costs analysis, strong (weak) institutional and legal environment means that one partner in B2B relationship may perceive the court system able (unable) to defend company's financial interests when some disputes emerge. Thus, weak institutional and legal environment may reduce managers' reliance on formal governance form.

In addition, efficient legal regulations provide guarantees of property rights safety and minimize transaction costs. More vulnerable legal systems (which presume corruption, for example) create more uncertainties in the interorganizational relationship outcomes etc. To adjust to all these circumstances, companies' are expected to make the appropriate choices of governance form to 'run' their B2B relationships. Institutional environment can be measured using ranking by Doing business (provided by World Bank since 2005).

Moreover, Homburg, Klarmann and Schmitt (2010) argue that characteristics of the market, which might be the part of institutional environment variable, influences brand awareness. Thus, I assume that institutional and legal environment may directly influence the level of spillover effect as well.

#### 2.8.2 Transaction costs analysis variables

Relationship-specific investments are defined as the specialized portion of investments that cannot be reemployed if the exchange relationship terminates permanently (Williamson 1996, Sande 2007, Zhou and Poppo 2010). In other words this is an investment that buyers and suppliers made, tailored to specific exchange and which will lose their value outside this particular relationship.

Market uncertainty is defined by Buvik and John (2000) as unpredictability of environment in which the relationship takes place. It is argued to have an influence on exchange coordination by creating the need to adapt strategies and actions in situations with incomplete and asymmetric information (Zhou and Poppo 2010,

Performance measurement ambiguity can be interpreted as the difficulty a buyer or supplier face in defining their partner's performance (Mooi and Ghosh 2010). It also relates to the challenges of measuring and monitoring collective actions of

partners (Zhou and Poppo 2010). Moreover, if the actions and efforts of parties are hard to measure, companies may tend to decrease their level of efforts, which may result in worse exchange outcomes.

From the definitions above I conclude that all these three variables can have direct effect on the level of brand spillover effect as they are related to the way business relationships are governed and may define the outcomes of B2B relationship.

#### 2.8.3 Perceived Fit

I decided to include perceived fit between partnering companies as control variable. According to a number of marketing studies of brand extension and alliances it was argued that the level and direction of spillover may depend on the perceived fit between brands (Völckner and Sattler 2006; Jaju, Joiner and Reddy 2006, Simonin and Ruth 1998 and others). Thus, using the same logic, perceived fit between two partnering companies in B2B may be related to the extent of spillover.

#### 3.0 Methods

In the following, an overview of research design, methods, participants, procedure, measurement scales of dependent and independent variables and data collection process will be presented.

#### 3.1 Research design

Research design is a framework for data collection and analysis, which details decisions and actions necessary for obtaining required information to structure and solve research problems (Malhotra 2010, Bryman and Bell 2011). Aiming to test research predictions regarding the influence of governance form choice on the extent of brand spillover effect and all the consequential linkages that may strengthen or weaken this influence, the conclusive research design was chosen. I expect it to be the most suitable one as it is used to test hypotheses and examine relations in case when information needed for analysis is clear and does not require specifications (Malhotra 2010). To be more precise, descriptive cross-sectional design (also called *sample survey research design*), which is a part of conclusive design, was conducted. This type of analysis is performed through data collection from any sample of population at a single point in time to conduct quantitative analysis of two or more variables (Bryman and Bell 2011). Among its

advantages are relative small amount of time and effort for data collection, possibility to collect large amount of data and the absence on previous response bias (as data is collected only once no previous responses can influence current judgments) (Malhotra 2010, Bryman and Bell 2011).

As any type of research design, cross-sectional design has its disadvantages. First, it does not detect changes at the individual level as it is performed only once (compared to, for example, longitudinal design which measures sample repeatedly) (Malhotra 2010). Nevertheless, the purpose of this thesis does not include the detection of changes in time. It aims to analyze the current situation, meaning the effect which has already occurred. Research variables are more or less stable constructs and it takes quite a lot of time to change them (for example, companies' brands, reputation, institutional and legal environment etc.). Therefore, inability to detect changes is not found to be a problem for this study.

Second, cross-sectional design may require participants to recall their previous actions, activities that took place in their companies in the past or simply their own subjective opinion which may lead to a problem of inaccuracy. The data can be biased due to memory lapses or response prejudice (Malhotra 2010).

The third weakness is patterns of association (Bryman and Bell 2011). Due to the fact that cross-sectional design intents only to detect relationships between variables, researcher is not able to manipulate those variables (as in experimental design). Thus, it is not possible to establish the direction of causality between variables, while the only possible conclusion that researcher can make is whether or not variables are related. Still, it is possible to draw theoretical and analytical conclusions about causal effect based on literature analysis and general knowledge, which will further be done in this thesis to interpret the results of analysis.

#### 3.2 Ukraine as empirical setting

Ukraine was chosen as a country of interest for several reasons. Ukraine is a relatively young country (independent since 1991), which has gone through transition of its economy from centrally planned to market. In 2005 Ukraine was proclaimed by European Union as a country with market economy. Nowadays it is defined as lower middle income developing country according to World Bank classification (World Bank Data). In accordance to Doing Business 2013 rank

Ukraine is on the 137 place out of 185 economies indicating the overall ease of doing business, which is 15 points better result comparing to the previous year (Doing Business Data).

Despite the 'market economy' status, in some cases Ukraine is still considered as a 'transition economy' country. Thus, it is expected that such vulnerable economy status may influence the type of governance form the companies choose while entering B2B relationships. The latter means that companies may be quite highly distributed on their governance form choice variables which may cause different levels of brand spillover effects. Furthermore, transition versus market economy status of Ukraine makes this country interesting for analysis in terms of studying *Institutional and legal environment* variable influence. Companies need to adjust to regulatory norms while creating their governance agreements. Moreover, such equity as companies' reputation may also play quite important role in such economies as Ukrainian, due to the issue of trust in the case of unpredictable and inconstant economic conditions.

Emerging economies (e.g. Ukrainian) might be quite an interesting even though challenging places to expand your business to. Considering that, many international partnering companies and suppliers are expected to be involved in B2B relationships in Ukraine.

Moreover, there may be drawn some conclusions based on the analysis of the development of B2B market in Ukraine in 2012 (Yurchak 2012). First, Ukrainian B2B market lacks efficient analytical and theoretical studies particularly in B2B marketing field. Still, empirical work and business experience plays an important part in doing business in Ukraine. Next, marketing in Ukrainian B2B companies (even among market leaders) is quite a complementary, not main function in leading business. Thus, the importance of marketing function (e.g. the role of brand equity and brand spillover effect in particular) in neglected.

Another challenge with Ukrainian B2B market deals with proper terminology and translation. Ukrainian economics and business schools are facing the problem of correct translation of international business language. Indeed, many terms bear slightly different meaning when translated to Ukrainian; some translations risk to lose the initial meaning at all, while many terms are not yet translated into Ukrainian. For example, there is no direct and correct translation of the term

"brand spillover effect" in Ukrainian, which might create some complications while explaining to potential informants the purpose of this research.

Furthermore, according to the analysis of Ukrainian B2B trends in 2013 (B2B Report 2013, Program of B2B Ukraine 2013), only 23% of respondents agreed that their marketing activities directly or indirectly influence sales. The latter indicates the low level of marketing development in Ukrainian business world in general.

Considering everything abovementioned, Ukraine appears to be an interesting country for analysis of interorganizational relationships and governance form choice. Moreover, this thesis may become a significant contribution towards strengthening positions of marketing function in B2B in Ukraine, both in analytical field and in a real business world.

#### 3.3 Research method

Since new relationships between research variables and moderated effects are studied in this thesis quantitative primary data collection is required. For this reason, self-completion survey among managers of Ukrainian B2B companies (or firms involved in interorganizational relationships) was conducted.

According to Hair et al. (2011), self-completion approaches use predetermined set of questions or questionnaires designed to gather data from respondents. Among the weaknesses of this method are loss of researcher's control (e.g. due to delivery type – through mail, emails etc.), quite common low response rate, and the question of whether the chosen respondents accurately represent the target population as expected (Hair et al. 2011).

Some of these disadvantages can be eliminated by other research methods, e.g. by structured or unstructured interviews. While conducting interview researcher has a power of controlling the process of data collection and can determine whether or not respondents represent the target population. Moreover, it is possible to get more insights on the researched topic, which could not be reached by structured questionnaires. On the contrary, interviews might require more time and efforts both for researcher and respondents. Hence, it becomes more complicated to collect many responses. When researcher is interested in collecting only quantitative (not qualitative) data for analysis, questionnaire might be more

appropriate. Another option – secondary sources examination, was not used due to the lack of previous studies on the researched topic.

Furthermore, email questionnaire was chosen for data collection among all other survey methods. Malhotra (2010) defines a set of factors to evaluate different types of survey methods. According to that classification, email surveys eliminate problems of field force control (when interviewers subjectively influence respondents) and interviewer bias, as well as decrease the problem of perceived anonymity of responses. The latter one leads to a higher chance of obtaining sensitive information and to the possibility of more honest responses. Moreover, email surveys are conducted with low costs and comparably high speed.

Still, researchers face some problems when they choose to use online survey. Among those problems are low response rates, low sample control (the ability to reach respondents effectively and efficiently) and low control of data collection environment. Likely response rate varies from 11 to 59 % depending on whether it is possible to distribute survey only through internet or throughout organization/intranet as well (Saunders, Lewis and Thornhill 2012). Low response rates are also expected due to decreased control over when respondents decide to fill in questionnaire. Nevertheless, this particular research method is decided to be the most suitable for this study in terms of time, required resources and participants' reachability.

#### 3.4 Procedure, sampling and participants

The key informant data is used in order to analyze Ukrainian companies (national or international) involved in B2B relationships in terms of governance form relationship with brand spillover effect. This technique assumes that individual informants (managers, buyers etc.) can provide relevant and representative information about processes of group decision making, for example, companies' governance form agreements (Wilson, Lilien 1992). The threats of using key informant data may be the following: questionable reliability and validity, respondents' bias (e.g. overestimation of positive traits) etc. (Philips 1981, Wilson, Lilien 1992). Despite that, careful selection of group of formal or informal opinion leaders, influential leaders or experts, combined with a structural contact with them can lead to positive results (Key informant approach according to University of Wisconsin-Extension).

In this study, company representatives were asked to name a person (brand manager, CEO, marketing manager or other personnel) who is the most appropriate one to answer the questions on this papeer's research topic and who eventually became the main respondents. This referring approach may decrease respondents' bias.

Initially, at least 70-80 representatives of Ukrainian companies in B2B relationships were expected to participate. Considering that in this study particularly B2B market is a topic of research and that in Ukraine there are no publicly available databases or lists of companies in B2B relationships, potential participants were planned to be reached through *snowball sampling technique* (also known as referral sampling (Hair et al. 2011)). This is a useful and convenient approach in the case when subjects are hard to locate. The researcher usually asks initial respondents to help identify and contact other potential respondents from the target population. This process is repeated until the required sample size is reached (Hair et al. 2011).

This technique has several challenges. First of all, it is a threat to randomness and it can cause problems in representativeness. Next, this sampling approach may be biased towards the inclusion individuals within interrelationships. This can lead to responses' correlation bias and exclusion of 'isolated' but important potential participants (Atkinson and Flint 2001). Still, in this particular study, where both focal and partner firms' reputation and brand spillover effects are the points of interest, the inclusion of companies within interrelationships might be beneficial. These sampling biases can be reduced by larger sample sizes. Moreover, applying snowball sampling may help to reach (hidden) participants who will be missed in the case when any other sampling approach is used. Thus, snowball sampling technique is considered as the only one appropriate for this research.

#### 3.5 Validity, replication and reliability

According to Bryman and Bell (2011), to evaluate any marketing research one must use the following three criteria: reliability, replication and validity. Moreover, these three criteria can be used both to evaluate the choice of research design and the measurement scale.

Reliability is the extent to which a scale generates consistent results if repeated measurements are made. In other words it is the extent to which measures are free

from random error (Malhotra 2010). One of the forms of reliability is internal consistency, which assesses reliability of a summated scale were the total score is created from summing several items (Malhotra 2010). High reliability level will show greater consistency of results (Hair et al. 2010). To reach higher reliability in this study it was decided to introduce at least four items per each factor. Moreover, construct reliability will be later tested for each theoretical model (Cronbach's alpha, AVE, CR).

Replication is closely related to reliability of research. According to Bryman and Bell (2011), in some cases researchers choose to replicate the findings of others. Thus, all research process should be specified clearly and in detail. The choice of cross-sectional survey design increases this study's replicability due to the fact that it specifies all procedures, including: selection of respondents, designing measures, administration of research instruments etc. (Bryman and Bell 2011).

*Validity* is considered to be the most important criterion of research. It is concerned with the integrity of the conclusions that are created during research (Hair et al. 2010, Bryman and Bell 2011). In the following, different types of validity will be discussed with regards to this study.

Content or measurement validity stands for the assessment of how well the content of a scale represents measurement task (Malhotra 2010, Bryman and Bell 2011). In this study content validity was ensured through the initial interview (pre-test) with two of the participants, during which they were asked to evaluate whether the scale items cover the entire construct.

*Internal validity* refers to the issue of causality. In the case of using cross-section survey design, this criterion is typically weak as it does not have the features of experimental design (Bryman and Bell 2011). Nevertheless, it is still possible to make judgments about causal inferences based on research findings.

External validity deals with the question of whether or not it is possible to extrapolate findings beyond the analyzed sample (Bryman and Bell 2011). In this study, employing non-probability sampling technique (snowball sampling in particular) might decrease external validity in comparison to using probability sampling (e. g. random sampling or stratified sampling). Still, snowball sampling technique leaves researcher some control over potential participants' selection, which might increase the possibility that all respondents will be adequate for this

particular study. Moreover, due to the lack of research on the topic of brand spillover effect in B2B relationships, I propose that the findings can be generalized on the population and can be further tested using other samples.

Construct validity is also related to the efficiency and accuracy of measures in research. It refers to the question of what construct (characteristic) is actually measuring (Hair et al. 2010, Malhotra 2010). Almost all items and scales in this thesis were adapted and supported by previous studies, which strengthens its construct validity. Furthermore, construct validity consists of three components: convergent validity (the extent to which a construct share high portions of variance, meaning that the scale correlates positively with other measures of a scale); discriminant validity (the extent to which a measure does not correlate with other constructs which it should be distinct from), and nomological validity (assesses the relationship between theoretical construct and findings) (Hair et al. 2010, Malhotra 2010).

Reliability and validity of this research theoretical constructs will be checked and discussed in the Results part of this thesis.

### 3.6 Measurement

In this section, development of measurement scales and items will be discussed. To increase content and construct validity almost all items were based on previous research works with some adjustments introduced to meet this particular study's requirements and goals. Several measures were newly designed based on common knowledge to cover all researched variables. The complete questionnaire in English is presented in appendix 1.

#### 3.6.1 Measurement of dependent variables

Two dependent variables in this study's model – brand spillover effect for focal firm and for partner one in B2B relationships – were measured using multiple-item scale which was the modification of previously used measures in brand extension, brand alliances and co-branding literature (Aaker and Keller 1990, Simonin and Ruth 1998, Levin and Levin 1996, Jaju, Joiner and Reddy 2006, Völckner and Sattler 2006). Since it is unlikely to measure these two variables using financial statements and accounting documents (e.g. brand equity value increase may not be documented in Ukrainian B2B companies), they were

measured using subjective scales. By introducing two dependent variables it is possible to measure brand spillover effect on both sides of buyer-supplier relationship. Hence, all parts of the dyad are analyzed.

To be more precise, seven-point Likert scale was chosen to evaluate a cluster of attitudes. Likert scale is an ordinal scale format that indicates the cognitive part of respondents' attitude (Shiu et al. 2009). The choice of a *seven*-point scale was approved by the fact that it allows to measure items with more accurate variations compared to four- or five-point scales.

In this study seven-point scale anchored from 1 = "Strongly disagree" to 7 = "Strongly agree". The question all participants were asked to respond was: "To what extend do you agree with the following statements about the impact of the relationship with partner firm on your own company brand". In order to measure brand spillover effect on partner firm, respondents were offered to evaluate the same items statements, but with respect to partner firm (items are with PF prefix added). All items for the dependent variables are presented in Table 3.1.

Table 3.1 Questionnaire items for brand spillover effect on focal (partner) firm in B2B relationships

Item	Item statement	Item developed and modified from
BrandSpillOver1	It has improved my company's (partner firm's) reputation among customers	Modified from Mayer 2006, Chun 2005, Diermeier and Trepanier 2009
BrandSpillOver2	It has added value to my company's (partner firm's) brand equity	Based on Jaju, Joiner and Reddy 2006
BrandSpillOver3	It has made my company's (partner firm's) brand more visible	Based on Aaker and Keller 1990
BrandSpillOver4	It has increased the brand awareness of my company (partner firm)	Völckner and Sattler 2006
BrandSpillOver5	It has benefited to the efficiency of company's (partner firm's) other business relationships	New, somewhat based on Gosh and John 2005
BrandSpillOver6	It has increased my company's (partner firm's) brand attitude	Simonin and Ruth 1998, Jaju, Joiner and Reddy 2006
BrandSpillOver7	It has a negative impact on	Simonin and Ruth 1998, Levin and Levin 1996,
(Reversed score)	my company's (partner firm's) brand familiarity	Jaju, Joiner and Reddy 2006
BrandSpillOver8	My company's (partner firm's) corporate brand image has benefited from this relationship	New

The resulting evaluations were equally weighted and loaded directly to two brand spillover effect dependent variables (using factor analysis). Chronbach's alpha test were conducted to analyze whether both focal and partner firm measures were highly correlated and could be joined into two variables. Note that item number 7 has a reversed scaling. Therefore, it will be recoded as follows: 1=7, 2=6, 3=5, 4=4, 5=3, 6=2, 7=1.

### 3.6.2 Measurement of independent variables

In this study's model independent variables are: governance form choice (formal and relational), reputation of focal and partner companies, company's resources and contract design capabilities. The measurement scales were developed on the basis of previously used scales in respective studies. Some of the items were newly introduced based on the discussions with my thesis supervisor Jon Sande.

## 3.6.2.1 Governance form choice

Influence of *governance form choice* was measured using two dimensions. The first one, formal governance dimension was measured using five-point scale. Participants were offered to indicate how detailed they specify contract terms in their companies on a scale, where 1 = "Not specified", 2 = "General specifications with no details", while the next three points had a common headline "Contract specification of details is" with 3 = "Low", 4 = "Medium" and 5 = "High" (see Table 3.2 for statements formulation). The scale was adopted from the measures in studies by Lusch and Brown (1996), Grandori and Furlotti (2011).

Table 3.2 Questionnaire items for formal governance dimension

Item	Item statement	Item developed and modified from
Form1	Performance goals	Grandori and Furlotti 2011
Form2	Parties' tasks (including production, delivery etc.)	Grandori and Furlotti 2011
Form3	Monitoring, audit, quality control	New
Form4	Information sharing obligations	New
Form5	Rights to overtake particular decisions	Grandori and Furlotti 2011
Form6	Property rights (technology possession rights, right to obtain or use income etc.)	Grandori and Furlotti 2011
Form7	Legal consequences of contract breach	Lusch and Brown 1996
Form8	Consequences and procedures of handling unexpected events	Lusch and Brown 1996
Form9	Procedures of managing conflicting situations	Lusch and Brown 1996

The second dimension, relational governance, was measured using seven-point scale, where 1 = "Completely inaccurate description" and 7 = "Completely accurate description". By using this scale respondents had to indicate the extent to which the statements from Table 3.3 describe their company's relation with a partner firm. To measure relational governance choice, three basic dimensions were chosen for analysis: flexibility, information sharing and solidarity. The scales for this dimensions were adapted from Heide and John (1992), Anita and Frazier (2001), Sande (2007) and Ivens and Blois (2004).

Table 3.3 Questionnaire items for relational governance dimension: flexibility, information sharing, solidarity, trust and reliance

Item	Item statement	Item developed and modified from
Flex1	Parties are expected to be able to make adjustments during B2B relationship to cope with changing circumstances	Anita and Frazier 2001, Heide and John 1992, Ivens and Blois 2004, Sande 2007
Flex2	Parties are eager to work out new deal in case of any unexpected situation rather than holding to the previous relationship conditions	Anita and Frazier 2001, Heide and John 1992, Ivens and Blois 2004, Sande 2007, Lusch and Brown 1996
Flex3	Partner relationships can be characterized as flexible in response to external changes	Anita and Frazier 2001, Heide and John 1992, Sande 2007, Lusch and Brown 1996
Infosh1	Parties share information that might be interesting/useful for another party	Anita and Frazier 2001, Heide and John 1992, Sande 2007
Infosh2	Information is frequently shared and on the informal basis	Anita and Frazier 2001, Heide and John 1992, Sande 2007, Ivens and Blois 2004
Infosh3	The parties provide proprietary information if it can help the other party	Anita and Frazier 2001, Heide and John 1992, Sande 2007
Infosh4	The parties keep each other informed about events or changes that may affect the other party	Anita and Frazier 2001, Heide and John 1992, Sande 2007, Ivens and Blois 2004
Solid1	Problems that arise in the course of this B2B relationship are treated by the parties as joint rather than individual responsibilities	Anita and Frazier 2001, Heide and John 1992, Ivens and Blois 2004, Sande 2007
Solid2	The parties are committed to improvements that may benefit the relationship as a whole, and not only the individual parties	Anita and Frazier 2001, Heide and John 1992, Ivens and Blois 2004, Sande 2007
Solid3	The parties in this B2B relationship do not mind owing each other favors	Anita and Frazier 2001, Heide and John 1992, Ivens and Blois 2004, Sande 2007
Trust	This B2B relationship is highly relied on trust among parties	New
Reliance1	My company highly depends on the performance of the partner firm	New
Reliance2	It is important for my company to have joint relational investments with the partner company	New
Reliance3	The relationship with this partner company is hard to substitute with another potential B2B partner	New

Furthermore, new items were developed to test the effect of trust and reliance as a part of relational governance (Table 3.3).

# 3.6.2.2 Reputation

*Reputation* (either focal or partner's firm) measurement was based on the discussions of corporate reputation and measurements previously used by Chun (2005), Walsh and Beatty (2007), Diermeier and Trepanier (2009) and Fortune AMAC reputation scale.

Table 3.4 Questionnaire items for reputation measurement

Item	Item statement	Item developed and modified from
		Chun 2005, Walsh and Beatty 2007,
ProdServ1	The company offers high quality	Diermeier and Trepanier 2009,
	products and services	Fortune AMAC
		Chun 2005, Walsh and Beatty 2007,
ProdServ2	The company offers products and	Diermeier and Trepanier 2009,
	services that are good value for money	Fortune AMAC
		Chun 2005, Walsh and Beatty 2007,
ProdServ3	The company stands behind its	Diermeier and Trepanier 2009,
	products and services	Fortune AMAC
		Chun 2005, Walsh and Beatty 2007,
LeadVision1	The company has excellent leadership	Diermeier and Trepanier 2009,
	1	Fortune AMAC
	771	Chun 2005, Walsh and Beatty 2007,
LeadVision2	The company recognizes and take	Diermeier and Trepanier 2009,
	advantages of market opportunities	Fortune AMAC
	Tri	Chun 2005, Walsh and Beatty 2007,
LeadVision3	The company has defined a vision for	Diermeier and Trepanier 2009,
	its future	Fortune AMAC
		Chun 2005, Walsh and Beatty 2007,
WorkplEnv1	The company is well managed	Diermeier and Trepanier 2009,
		Fortune AMAC
	The company looks like an availant	Chun 2005, Walsh and Beatty 2007,
WorkplEnv2	The company looks like an excellent	Diermeier and Trepanier 2009,
	place to work	Fortune AMAC
	The company's employees are treated well	Chun 2005, Walsh and Beatty 2007,
WorkplEnv3		Diermeier and Trepanier 2009,
	wen	Fortune AMAC
		Chun 2005, Walsh and Beatty 2007,
SocResp1	The company is socially responsible	Diermeier and Trepanier 2009,
		Fortune AMAC
	The company is environmentally	Chun 2005, Walsh and Beatty 2007,
SocResp2	friendly	Diermeier and Trepanier 2009,
	111011011	Fortune AMAC
	The company tends to outperform its	Chun 2005, Walsh and Beatty 2007,
FinancPerf1	competitors	Diermeier and Trepanier 2009,
	-ompositors	Fortune AMAC
		Chun 2005, Walsh and Beatty 2007,
FinancPerf2	The company is financially sound	Diermeier and Trepanier 2009,
		Fortune AMAC
<b>T</b>	The company have strong prospects for	Chun 2005, Walsh and Beatty 2007,
FinancPerf3	future growth	Diermeier and Trepanier 2009,
	Tuture growni	Fortune AMAC

The seven-point scale was used where 1 = "Totally Disagree" and 7 = "Totally Agree". Items are presented in Table 3.4. Same item statements were used both for focal company's reputation measurement and for partner one. They were distinct by the prefix "PF" added to the partner firm's measurement item (e.g. *ProdServPF1*, *LeadVisionPF2* etc.).

Additionally, in line with Jaju, Joiner and Reddy (2006) measurements, participants had to rate brand familiarity of both partner and their own companies among stakeholder, which is also an indicator of reputation as if both brands are highly familiar (in other words, they fit), then the interorganizational relationship should be rated equally. Otherwise, if one brand is more well-known it can be dominating in the relationship and, as a result be the one who causes greater spillover effect. These items (*StholdFamiliar\_Foc* and *StholdFamiliar\_PF* respectively) were measured using seven-point scale with 1 = "Unfamiliar" and 7 = "Highly Familiar".

In order to measure reputation of a partner's firm, participants were offered to evaluate whether they will recommend their partner firm as a good business partner. This item (*RecomPartner*) was anchored in a seven-point scale where 1 = "Definitely will not recommend" and 7 = "Definitely will recommend".

Moreover, Diermeier and Trepanier (2009) argue that while measuring companies' reputation, customers' opinion should be evaluated as well. For this reason, another scale was introduced to measure both focal and partner companies' reputation. Scale items are presented in Table 3.5.

Table 3.5 Questionnaire items for reputation (customer perception)

Item	Item statement	Item developed and modified from
CustSat	Customers find company's performance satisfiable	New, based on Chun 2005
CustTrust	Customers trust your company	New, based on Chun 2005
CustLoyl	Customers are loyal to your company	New, based on Chun 2005
CustWOM	Customers spread positive word of mouth about your company	New, based on Chun 2005
CustFeel	Customers have a good feeling about the company	New, based on Chun 2005
CustAdm	Customers admire and respect the company	New, based on Chun 2005

Most of them were developed on the basis of corporate reputation measurement analysis by Chun 2005 with slight adjustments. Seven-point Likert scale was used with 1 point = "Strongly disagree" and 7 = "Strongly agree". Like in the

abovementioned case, same item statements were used both for focal firm measurement and partner one (with the item prefix PF in the latter case).

### 3.6.2.3 Companies' resources

Company's resources variable was measured using seven-point Likert scale where 1 = "Strongly disagree" and 7 = "Strongly agree". Respondents were asked to what extent they agree with the statements presented in Table 3.6. This variable was measured using three dimensions - technological, end-consumer and supply chain resources – previously discussed by Gosh and John (1999).

Table 3.6 Questionnaire items for company's resources construct

Item	Item statement	Item developed and modified from
Tech1	My company obtains unique equipment	New, based on Gosh and John 1999
Tech2	My company uses innovative processes	New, based on Gosh and John 1999
Tech3	The company is active in gaining patents	New, based on Gosh and John 1999
Tech4	The company invests heavily in R&D	New, based on Gosh and John 1999
EndCons1	I perceive brand equity of my company as high	New, based on Gosh and John 1999
EndCons2	Company's customers are loyal	New, based on Gosh and John 1999
EndCons3	My company has large market share	New, based on Gosh and John 1999
SupChain1	My company's suppliers acquire high switching costs	New, based on Gosh and John 1999
SupChain2	Supply chain partners are trustworthy	New, based on Gosh and John 1999
SupChain3	Relationships with trading partners are reliable	New, based on Gosh and John 1999
SupChain4	Channel partners cooperation is high	New, based on Gosh and John 1999
SupChain5	My company has sustainable relationship with channel partners	New, based on Gosh and John 1999

# 3.6.2.4 Contract design capabilities

Contract design capabilities were measured in accordance to Weber and Mayer (2005) and Argyres and Mayer (2007) studies. First, participants had to estimate their level of experience in designing and negotiating contracts on a seven-point scale, where 1 = "Low experienced" and 7 = "High experienced". Next, contract capabilities were presented as role specificities and knowledge management items in Table 3.7. Items were anchored in the seven-point Likert scales where 1 = "Totally disagree" and 7 = "Totally Agree".

Table 3.7 Questionnaire items for contracting capabilities: Role specificity and Knowledge management

Item	Item statement	Item developed and modified from
Rolespec1	Specific roles are defined to employees at each step of contracting process in our company	Based on discussions in Weber and Mayer 2005, Argyres and Mayer 2007
Rolespec2	Each party involved in designing and negotiating contracts knows its responsibilities	Based on discussions in Weber and Mayer 2005, Argyres and Mayer 2007
Rolespec3	Employees participating in contract designing are the same as those participating in contract negotiating	Based on discussions in Weber and Mayer 2005, Argyres and Mayer 2007
Knman1	Specific knowledge sharing process is managed well during contracting processes	Based on discussions in Weber and Mayer 2005, Argyres and Mayer 2007
Knman2	Knowledge resource allocation in my company depends on the exchange requirements (different professionals can be involved with regards to the specific area of contracting)	Based on discussions in Weber and Mayer 2005, Argyres and Mayer 2007
Knman3	Managers, lawyers and engineers of my company successfully manage trade- offs for different types of contractual provisions	Based on discussions in Weber and Mayer 2005, Argyres and Mayer 2007

#### 3.6.3 Control variables

The choice of governance form may be influenced by variety of factors. In this study three classical transaction costs economics variables – relational specific investments, market uncertainty and performance measurement problems – will be included as control variables. In addition, due to the specific B2B market characteristics, it was decided to control for the influence of institutional and legal environment. Finally, companies' size, turnover, country of performance, B2B relationship duration and respondents' employment duration were measured to provide more detailed characteristics of a sample.

#### 3.6.3.1 Institutional and legal environment

In this thesis, I decided to control for the possible influence of *institutional and legal environment* on brand spillover effect. Its items are presented in Table 3.8. Participants were offered a seven-point Likert scales with 1 = "Totally disagree" and 7 = "Totally Agree". Items were newly developed on the basis of general knowledge of macroeconomic principles and the role of vulnerable and efficient institutional and legal environment. Reliability and validity tests will be performed to check the efficiency of these items. Note that statements with

indexes 3, 5, 6 and 8 have reversed scaling. Thus, they will be recoded as follows: 1=7, 2=6, 3=5, 4=4, 5=3, 6=2, 7=1.

Table 3.8 Questionnaire items for institutional and legal environment

Item	Item statement	Item developed and modified from
ILEnv1	My company's industry is heavily controlled by institutions	New
ILEnv2	Market legal regulations are efficient	New
ILEnv3	The level of corruption is high in our industry	New
ILEnv4	Legal institutions positively contribute to contracts enforcement	New
ILEnv5	Legal institutions performance is volatile	New
ILEnv6	I perceive institutional environment as constricting	New
ILEnv7	The courts performance in resolving business conflicts is trustworthy	New
ILEnv8	Institutional environment is vulnerable in the market	New
ILEnv9	Legal system effectively helps to solve uncertainties in B2B relationships	New
ILEnv10	Institutional and legal environment is perceived as highly regulatory	New

### 3.6.3.2 Relationship-specific investments

To measure relationship-specific investments the seven-item scale adapted from Jap and Ganesan (2000) and Rokkan, Heide and Wathne (2003) was used with 1 = "Strongly Disagree" and 7 = "Strongly agree". Participants were asked to indicate whether they agree with the statements presented in Table 3.9 concerning relational specific investments generated between their company and a partner firm they were previously evaluating.

Table 3.9 Questionnaire items for Relational specific investments

Item	Item statement	Item developed and modified from
RSInv1	My company has made a significant investment in relationship-specific equipment (tailored to this particular B2B relationship only)	Heide and John 1990, Jap and Ganesan 2000, Rokkan, Heide and Wathne 2003
RSInv2	My company has spent a specific amount of non-refundable money in this particular interorganizational relationship	New, based on Rokkan, Heide and Wathne 2003
RSInv3	The company has invested time and energy in training and qualifying in order to adjust to this particular B2B partnership	Anderson 1985, Heide and John 1990, Rokkan, Heide and Wathne 2003
RSInv4	My company has made comprehensive investments to restructure and integrate production facilities with partner's ones	Buvik and John 2000, Heide and John 1990, Rokkan, Heide and Wathne 2003

#### 3.6.3.3 Market uncertainty

Buvik and John (2000) offer the four-item scale to measure market uncertainty variable, which was adapted for this study and are presented in Table 3.10. To make all measures more comparable, a seven-point scale was chosen in this analysis where 1 = "Strongly Disagree" and 7 = "Strongly agree". To be more precise, participants were asked to evaluate environment in which their company is operating.

Table 3.10 Questionnaire items for market uncertainty

Item	Item statement	Item developed and modified from
Mrkubc1	My company's industry is highly innovative	Buvik and John 2000
Mrkubc2	The demand for end products in our industry varies continually	Buvik and John 2000
Mrkubc3	My company's main competitors are constantly developing new products and invest in product improvements	Buvik and John 2000
Mrkubc4	My companies main product/service has short life cycle	Buvik and John 2000
Mrkubc5	The economic trends in market are very vulnerable	Buvik and John 2000

### 3.6.3.4 Performance measurement problems

The three item scale previously developed by Mooi and Ghosh (2010) was used to examine performance measurement ambiguity. The items are presented in Table 3.11. Participants had to evaluate their partner's performance measurement challenges using seven-point scale, where 1 = "Very easy", 7 = "Very difficult". Note that in this case reverse scaling was used.

Table 3.11 Questionnaire items for performance measurement ambiguity

Item	Item statement	Item developed and modified from
MA1	It is difficult to evaluate the quality of product/service at the time our partner firm delivers it	Mooi and Ghosh 2010
MA2	It is difficult to compare this product/service to similar ones	Mooi and Ghosh 2010
MA3	It is difficult to compare price/quality ratio of potential partner's product/service	Mooi and Ghosh 2010

#### 3.6.3.5 Perceived fit

In line with Jaju, Joiner and Reddy (2006) research, participants were asked to evaluate *perceived fit* between focal and partner companies on a seven-point scale ranging from 1 = "Low fit" to 7 = "High fit".

#### 3.6.3.6 Additional characteristics variables

In addition to aforementioned control variables, several other factors were measures to enable more accurate sample characteristics analysis. Company's *size* was measured by the following question: "Please, indicate how many employees there are in your company" with an answer option: "Approximately \_\_\_\_\_\_ employees." Participants were also asked how many years they have being working in their company (in years and months) and how long their company has been in the relationship with the partner firm they were evaluating (*employment duration* and *relationship duration* variables). Moreover, company's *value* was measured by the question "Please, approximately indicate your company's turnover in 2012" in UAH. Later this amount was recalculated in US dollars. Finally, *business market* was measure by asking participants to tick whether their company was operating nationally or internationally.

# 3.7 Measure development

At the beginning of data collection, to ensure validity of all measures, interviews with participants were organized. Summarizing all suggestions and discussions, the following problems were identified.

First, some translations of English terms in Ukrainian were found confusing. To avoid that, either short descriptions of the terms or the English equivalent were provided in the brackets. Moreover, some questions were understood differently from what was originally intended. Thus, some formulations were explained in slightly different terms to add clarity. Furthermore, it was argued whether the question about turnover can be misinterpreted as an attempt to uncover some confidential information (due to cultural specificities of Ukrainian business). Thus, while asking about company's sales it was specified that that information will be used only for value estimation. There were also some concerns that due to unstable political situation in Ukraine measurement of institutional and legal environment might be slightly inaccurate. Still, as subjective opinions are

measured in this research, particular participants' judgments are valuable. Finally, the confidentiality problem was raised. It was suggested that in the case of conducting a study among Ukrainian managers it is better to point out that everything is completely confidential both in the cover letter and in the initial emails to potential informants. Such actions may increase willingness to participate in this study and overall response rate as well.

Furthermore, to verify and assess the research variables Chronbach's alpha test, exploratory and confirmatory factor analyses were conducted with respective reliability and validity tests. All items with significant cross-loadings, poor reliability and validity were excluded from analysis.

### 3.8 Data collection

The data for this thesis was collected by online survey using Qualtrics software. It is user friendly both for researchers and informants. Moreover, it allows flexibility in questions designing and lets researcher keep track of and manage responses (including sending reminders and "thank you" letters).

As the sample consisted of managers, CEOs and other business people, the survey completion should not take much time and efforts. For this reason, it was estimated, that the approximate questionnaire completion time should not exceed 20 minutes. Moreover, an option of saving response and continuing later was introduced to guarantee higher convenience for participants.

As it was discussed above, data collection process started with interviewing two respondents, who in addition to actual survey completion were asked to estimate general efficiency and clarity of the formulated questions as well as the appropriate application of translated marketing terms.

The initial key informants' contacts were found through 'B2B Ukraine' group on Linkedin. They were contacted via email and asked whether they agree to participate in this research or whether they can refer to other personnel who can become potential respondents. The template for the primary emails was designed and was used during all further recruiting process.

Using the features of snowball sampling technique, all respondents were asked to provide contacts of potential participants either in the last question of the survey or by answering to the email they get. It was mentioned that providing contact information was strictly voluntarily. Nevertheless, it would greatly help this study.

By initially contacting key informants or potential respondents before sending them link through web-based survey software it was possible to ensure that participants are indeed representatives of the target population. Moreover, it enabled getting their personal agreement to participate in this research. While using such individual approach it was possible to provide more detailed information about this study upon request. It's worth mentioning that mostly people reacted positively towards doing new study of B2B relationships in Ukraine. Though, there were people who responded skeptically to the fact that this is a *student* research for master thesis. Additionally, some of the potential respondents were sharing concerns towards unwillingness of possible company's confidential information disclosure. Those concerns were settled by a promise of complete confidentiality and by providing clarifications that mainly their personal opinion is measured in this study.

Furthermore, as emails with personal survey links were sent right after reaching agreements with potential respondents, it was assumed that this would increase the felling of more direct personal involvement in the study ("each response matters") and the feeling of responsibility to fill in the survey. The latter was predicted to increase survey overall response rate.

Each participant was promised to get a short report, which will sum up the collected data so that they could compare themselves to the average responses. The cover letter and the questionnaire, which was distributed to participants is provided in appendix 1 (English version).

Using snowball sampling technique the overall number of 273 key informants and their referrals were contacted, 126 respondents agreed to participate in the research, while 147 persons refused to participate due to the lack of time, lack of knowledge in the researched topic or due to vacation time. Respondents were recruited mostly from the following industries: IT and communications, finance and banking, consulting, logistics etc.

In total, 126 emails with personal survey links were sent. If respondents were staying inactive for four or five days they were sent reminder letters. Overall, 43 respondents received from one to three reminders. Three respondents after starting

the survey declined to complete it, stating in their emails that they believe to be outside target group. Out of 126 links sent, 86 complete responses were collected. Out of 40 respondents, who did not complete the questionnaire, five sent an email explaining their decline with a lack of time.

Thus, the overall sample of 86 responses was collected and recoded into numerical values (through the Qualtrics web-based software) in order to proceed with statistical analysis.

# 4.0 Data examination and results

In this part data analysis and results of measurements will be discussed. Initially, all data from Qualtrics was imported to SPSS to be checked for system missing, correct naming and labeling of measures. Next, all reversed-scale items were recoded to be able to proceed with further analysis. In the following paragraphs sample characteristics and descriptive statistics will be presented. Next, reliability, normality, construct validity of dataset and theoretical model will be checked, and factor analyses will be conducted. Finally, regression analysis will be performed to test theoretical model and its hypotheses.

# 4.1 Sample characteristics

In addition to the main model measurements, several supplementary variables were included in the analysis to give the broader characteristics of a sample. Respondents indicated that the size of their companies ranged from 2 to 167,000 employees. Moreover, the annual turnover of the focal companies ranged from 0.01 to 640000 million UAH<sup>1</sup>. Participants reported that their employment duration ranged from 1 year to 21 years with mean value of 4.27 years (Table 4.1).

Table 4.1 Characteristics of the focal company

	Minimum	Maximum	Mean
Employment duration in years	1,00	21,00	4,2727
Size of focal company (number of employers)	2,00	167000,00	8201,9647
Value of focal company (in UAH)	10000,00	640000000000,00	11167711445,9016

<sup>&</sup>lt;sup>1</sup> Official exchange rate of UAH to NOW is: 1 UAH = 0.73 NOK (<u>www.xe.com</u>, 20.07.13)

Furthermore, respondents were asked to indicate the market their companies were operating in. Table 4.2 shows that out of 86 informants, 27.9% indicated that their companies operate only nationally, while 72.1% do their business on international markets. In the case of evaluating partner firms, respondents reported that 54.7% of companies worked only in national market, while 45.3% - in international one.

Table 4.2 Characteristics of business market of focal company

		Frequency	Percent
Business market of focal firm	National	24	27,9
	International	62	72,1
	Total	86	100,0
Business market of partner	National	47	54,7
firm	International	39	45,3
	Total	86	100,0

Next, respondents indicated that the length of cooperation between their companies and partner firms ranged from half a year to 20 years, with mean value of relationship duration equal to 4.81 years. The annual turnover of partner firms varied from 1000 UAH to 310000 million UAH. The size of partner firms ranged from 3 to 400,000 employees (table 4.3).

Table 4.3 Characteristics of the partner firm

	Minimum	Maximum	Mean
Relationaship Duration in years	,50	20,00	4,8140
Size of partner company (number of employees)	3,00	400000,00	16688,1392
Value of partner company (in UAH)	1000,00	310000000000,00	10916462102,3256

Finally, respondents were asked to evaluate perceived fit between focal and partner companies. The results show that the mean value of fit between companies is 4.91. Considering that the seven-point scale was used, respondents generally answered that companies are more likely to have high fit level. This measurement should be taken into consideration while analyzing brand spillover effect.

# 4.2 Descriptive statistics and multivariate analysis requirements

Descriptive statistics is used to give an overview of all collected data and to make judgments of variation in the data. Table 4.4 reveals that most of variables have mean values higher than 4. Considering that the seven-point scale was used (except for the formal governance measures where five-point scale was implied), it is possible to conclude that respondents were mostly agreeing with the statements. Different results were discovered in Institutional and legal environment assessment – respondents tend to more likely disagree with the statements showing generally more negative evaluation and distrust to courts and institutions in Ukraine. Moreover, mean values for technology companies' resources and relationship specific investments items were lower than 4. Still, those variables have standard deviation exceeding 2, which indicates large variance of responses.

To be more precise, standard deviation coefficient from Table 4.4 indicates how much the responses vary from their mean value. In this case, standard deviation does not generally exceed the value of 2 (with the exceptions discussed above). That means that almost all responses somewhat correspond to the mean value.

Further, while implying multivariate analysis there are some assumptions which should be met in order to proceed with further estimations. Thus, normality tests and the problems of missing values issue will be discussed in the following.

According to Hair et al. (2010), assumption of normality in multivariate analysis refers to the correspondence of data distribution shape to normal distribution (benchmark). If the distribution shape differs largely from normal, then neither F-test statistics nor t-test one can be used in the analysis. The shape of distribution is estimated through skewness and kurtosis measures. Skewness relates to the symmetry of distribution shape and indicates the tendency of the deviations from the mean to be large in one direction (Malhotra 2010). At the same time kurtosis is a measure of the relative of peakedness or flatness of the curve of distribution. The distribution is normal when both skewness and kurtosis are equal to zero (Hair et al. 2010). Nevertheless, such measures happen rarely. Thus, there is the rule of thumb which indicates that only values outside [-1; 1] range are considered substantially skewed. Extreme skewness is present when a skewness characteristic exceeds 3 (Kline 2004, Hair et al. 2010).

Table 4.4 Descriptive statistics, skewness and kurtosis

				Std.		
	Minimum	Maximum	Mean	Deviation	Skewness	Kurtosis
ProdServ1	1	7	6,12	1,121	-1,722	4,283
ProdServ2	1	7	5,70	1,256	-,972	1,060
ProdServ3	1	7	6,23	1,124	-1,952	4,988
LeadVision1	1	7	5,28	1,307	-,957	,753
LeadVision2	1	7	5,20	1,454	-,777	,039
LeadVision3	1	7	5,30	1,638	-1,012	,538
WorkplEnv1	1	7	5,30	1,347	-,928	,732
WorkplEnv2	1	7	5,27	1,401	-,572	-,158
WorkplEnv3	1	7	5,55	1,484	-1,164	1,126
SocResp1	1	7	5,38	1,595	-1,011	,414
SocResp2	1	7	5,16	1,714	-,604	-,627
FinancPerf1	1	7	5,94	1,268	-1,873	4,332
FinancPerf2	1	7	5,52	1,272	-,897	,933
FinancPerf3	1	7	5,42	1,376	-1,047	1,326
CustSat	1	7	5,52	1,145	-,564	1,272
CustTrust	3	7	5,76	,932	-,381	-,247
CustLoyl	3	7	5,65	1,060	-,590	,025
CustWOM	2	7	5,44	1,144	-,361	-,441
CustFeel	1	7	5,41	1,172	-,668	1,000
CustAdm	1	7	5,16	1,336	-,669	,410
StholdFamiliar_Foc	1	7	5,70	1,406	-1,053	,624
ProdServPF1	3	7	5,60	,924	-,223	-,324
ProdServPF2	4	7	5,69	,949	-,088	-,943
ProdServPF3	3	7	5,67	1,068	-,677	,062
LeadVisionPF1	1	7	5,24	1,363	-,599	,145
LeadVisionPF2	1	7	5,55	1,271	-,881	,885
LeadVisionPF3	1	7	5,48	1,281	-,858	,822
WorkplEnv1PF1	1	7	5,43	1,288	-,923	1,142
WorkplEnv1PF2	2	7	5,00	1,256	-,073	-,477
WorkplEnv1PF3	2	7	4,98	1,422	-,033	-,842
SocRespPF1	1	7	4,86	1,416	-,155	-,506
SocRespPF2	1	7	4,60	1,566	,102	-,961
FinancPerfPF1	1	7	5,98	1,062	-1,459	4,244
FinancPerfPF2	1	7	5,62	1,170	-,829	1,253
FinancPerfPF3	3	7	5,51	1,145	-,246	-,880
CustSatPF	2	7	5,38	1,065	-,587	1,061
CustTrustPF	4	7	5,55	,903	-,142	-,715
CustLoylPF	3	7	5,35	,967	,041	-,653
CustWOM_PF	1	7	5,01	1,269	-,305	,018
CustFeelPF	2	7	5,15	1,143	-,352	-,148
CustAdmPF	2	7	5,05	1,197	-,133	-,503
RecomPartner	1	7	5,80	1,206	-1,298	2,670
StholdFamiliar_PF	1	7	5,38	1,416	-,611	-,130

BrandSpillOver1	1	7	5,29	1,345	-,521	,229	
BrandSpillOver2	1	7	5,07	1,429	-,571	,062	
BrandSpillOver3	1	7	5,12	1,522	-,570	-,238	
BrandSpillOver4	1	7	4,98	1,645	-,595	-,451	
BrandSpillOver5	1	7	5,14	1,543	-,613	-,148	
BrandSpillOver6	1	7	4,86	1,603	-,522	-,332	
BrandSpillOver7	1	7	6,31	1,043	-2,193	7,048	
BrandSpillOver8	1	7	4,88	1,523	-,397	-,330	
BrandSpillOverPF1	1	7	4,93	1,404	-,474	,090	
BrandSpillOverPF2	1	7	4,84	1,556	-,471	-,377	
BrandSpillOverPF3 BrandSpillOverPF4	1 1	7 7	4,92 4,98	1,603	-,619	-,200 -,327	
BrandSpillOverPF5	1	7	4,98	1,557 1,654	-,535 -,475	-,327 -,479	
BrandSpillOverPF6	1	7	4,92	1,551	-,473	,018	
BrandSpillOverPF7	2	7	6,35	1,114	-1,934	3,374	
BrandSpillOverPF8	1	7	4,99	1,475	-,565	-,012	
Perceived Fit	1	7	4,91	1,508	-,724	-,209	1
				·	, i		4
Form1	1	5	4,02	1,051	-1,104	,566	
Form2	1	5	4,48	,904	-2,082	4,479	
Form3	1	5	4,01	1,068	-,972	,203	
Form4	1	5	4,01	1,163	-1,034	,045	
Form5	1	5	4,01	1,153	-1,061	,144	
Form6	1	5	4,13	1,282	-1,412	,774	
Form7	1	5	4,29	1,039	-1,645	2,245	
Form8	1	5	3,97	1,100	-1,015	,325	
Form9	1	5	3,71	1,216	-,584	-,736	
Flex1	2	7	5,53	1,205	-,766	,408	
Flex2	1	7	4,24	1,728	-,066	-,981	
Flex3	2	7	5,37	1,284	-,802	,366	
Infosh1	1	7	5,60	1,366	-1,147	1,280	
Infosh2	1	7	5,03	1,818	-,811	-,238	
Infosh3	1	7	4,73	1,690	-,750	-,061	
Infosh4	2	7	5,48	1,370	-1,061	,396	
Solid1	2	7	4,93	1,396	-,564	-,375	1
Solid2	2	7	5,23	1,352	-,436	-,476	
Solid3	1	7	4,24	1,673	-,351	-,725	
Trust	1	7	5,55	1,531	-1,066	,370	1
Reliance1	1	7	4,28	1,740	-,277	-,807	
Reliance2	1	7	3,13	2,011	,336	-1,308	
Reliance3	1	7	3,87	1,963	,030	-1,278	
ILEnv1	1	7	4,64	1,915	-,229	-1,235	
ILEnv2	1	7	3,35	1,622	,464	-,509	
ILEnv3	1	7	4,01	1,985	-,137	-1,224	
ILEnv4	1	7	3,24	1,422	,485	,344	
ILEnv5	1	7	3,00	1,557	,613	-,345	
ILEnv6	1	7	3,13	1,651	,514	-,653	
ILEnv7	1	6	2,58	1,350	,455	-,677	
ILEnv8	1	7	3,17	1,581	,456	-,367	
				l	l	I	I

ILEnv9	1	6	2,70	1,293	,586	-,478
ILEnv10	1	7	4,37	1,609	-,023	-,760
Tech1	1	7	3,97	2,209	-,029	-1,424
Tech2	1	7	5,20	1,629	-,879	,169
Tech3	1	7	3,37	2,249	,518	-1,232
Tech4	1	7	3,91	2,304	,093	-1,514
EndCons1	1	7	5,22	1,837	-1,011	,159
EndCons2	1	7	5,09	1,316	-,619	,189
EndCons3	1	7	4,98	1,815	-,545	-,774
SupChain1	1	7	3,93	1,651	,033	-,618
SupChain2	2	7	5,26	,996	-,246	,033
SupChain3	2	7	5,28	1,113	-,577	,379
SupChain4	2	7	5,13	1,166	-,346	-,426
SupChain5	1	7	5,21	1,228	-,646	,693
Rolespec1	1	7	4,50	1,734	-,409	-,741
Rolespec2	1	7	5,24	1,388	-,937	,728
Rolespec3	2	7	4,86	1,504	-,500	-,720
Knman1	1	7	4,93	1,501	-,605	-,378
Knman2	1	7	5,24	1,414	-,728	,244
Knman3	1	7	5,03	1,537	-,617	-,212
RSInv1	1	7	3,38	2,047	,281	-1,300
RSInv2	1	7	3,36	1,915	,281	-1,152
RSInv3	1	7	4,64	1,801	-,455	-,787
RSInv4	1	7	3,35	2,068	,343	-1,331
Mrkunc1	1	7	4,77	1,753	-,439	-,676
Mrkunc2 Mrkunc3	1 1	7 7	4,67 4,72	1,711 1,780	-,384 -,476	-,673 -,864
Mrkunc4	1	7	3,83	2,042	,021	-1,407
Mrkunc5	1	7	5,03	1,655	-,662	-,401
MA1	1	7	4,45	1,685	-,401	-,711
MA2	1	7	4,38	1,737	-,269	-1,054
MA3	1	7	4,48	1,636	-,412	-,652

Table 4.4 indicates that most items skewness absolute measurement is not higher than 1. Those which exceed 1 still are lower than extreme measure of 3. Those items have somewhat skewed distributions (e.g. ProdServ 1 and 3, Form 6 and 7 etc.). Positive kurtosis indicates more peaked distribution, while negative one – flatter distribution. The extreme value for kurtosis measurement is 10 (Kline 2004, Hair et al. 2010). In this analysis none of the items exceeds extreme value. Still, none of the items have kurtosis equal to zero. Thus, their distribution is somewhat different from normal one. Hair et al. (2010) point out that in the case of sample size lower than 50, significant departures from normality may have negative

impact on results. Therefore, having sample larger than N=50 will somewhat solve the "nonnormality" problem.

As in Qualtrics software it is possible to set validation option of forced response (respondent cannot proceed without answering the question), none of the main items has missing values. Considering that it is possible to proceed with further analysis.

# 4.3 Primary reliability test – Cronbach's alpha

In order to test reliability of the data, I examine Cronbach's alpha estimates. This measure tests internal consistency, meaning that it assesses the level of consistency between items which are planned to be summated. According to Malhotra (2010) Cronbach's alpha is a coefficient which gives the average of all possible split-half coefficients resulting from different scale-splitting types. Satisfactory reliability is reached if Cronbach's alpha is larger than 0.8. If it is in the interval between 0.6 and 0.8, some items might be removed to increase alpha coefficient. If the coefficient is lower than 0.6 and items reduction does not increase it, then the summated scale cannot be constructed based on remaining items (Janssens et al. 2008).

Table 4.5 gives the results of internal consistency. While testing the items of two dependent variables (brand spillover effect for focal company and for partner one), Cronbach's alpha showed satisfactory results of 0.917 and 0.935 respectively. However, while testing reliability in SPSS software it gives suggestions of how to increase reliability through items reduction. Thus, in both variables removing seventh item will significantly increase construct reliability. The seventh item had a reversed scaling, measuring the negative effect of relationship on brand familiarity of focal (partner) company (item was recoded before analysis). Comparing to other items of these constructs, which were measuring the positive effect of B2B relationship, informants might have misread the statement. Therefore, these items were removed from analysis. After reduction of one item in each dependent variable's constructs, resulting alpha coefficients were 0.935 for focal company and 0.958 for partner firm (with total number of items – 7 in each construct). Cronbach's alpha scores of formal governance was also high – 0.905. Still, there was a suggestion that removing of the first item (performance goals specifications) will increase reliability to 0.911. The increase

of 0.06 is quite low. Moreover, considering the fact that all items for formal contracting construct were previously tested in other analyses, it was decided not to remove this item. Relational governance construct showed satisfactory reliability of 0.826 with no significant suggestions for item reduction.

**Table 4.5 Reliability testing** 

Variables	Number of items	Cronbach's alpha
BrSpOv	8	0,917
BrSpOv_reduced	7	0,935
BrSpOv_PF	8	0,932
BrSpOv_PF_reduced	7	0,958
FormGov	9	0,905
FormGov_reduced	8	0,911
RelatGov	14	0,826
Reput_FF	21	0,936
Reput_FF_reduced	20	0,941
Reput_PF	22	0,951
Reput_PF_reduced	21	0,955
ComRes	12	0,892
ContrCap	6	0,854
ContrCap_reduced	5	0,862
ILEnv	10	0,448
ILEnv_reduced	6	0,624
RSpInv	4	0,855
MrkUnc	5	0,529
MrkUnc_reduced	4	0,55
MA	3	0,87

The reliability scores for the reputation of focal and partner firms were 0.936 and 0.951 respectively. However, removing the items which measured the level of brand familiarity among stakeholder in both constructs will increase reputation variables reliability to 0.941 and 0.955 respectively. Reliability test for company's resources variable (0.892) and for two control variables – relationship specific investments (0.855) and measurement ambiguity (0.870) – showed satisfactory results above lower limit. Thus, no item reduction is required. In the case of contract capabilities removing first item (RoleSpec1) will increase Cronbach's alpha from 0.854 to 0.862. Cronbach's alpha score for institutional and legal environment construct was below lower limit of 0.6. The reduction of four items allows increasing reliability to 0.624. This assumption for items reduction will be considered in the following analysis. Nevertheless, removing four items might negatively impact the significance of this variable. Finally, one control variable –

market uncertainties – showed reliability lower than 0.6. Even reduction of one item does not significantly increase alpha coefficient (0.55). Hence, it might be not efficient to summate a variable using respective items.

As a result, all variables except measurement ambiguity show satisfactory reliability and, thus, ensure their theoretical concepts. Moreover, all suggestions for items reduction will be considered in the following factor analysis.

### 4.4 Exploratory factor analysis

Prior to actually confirming the validity of all measurement models, it was decided to explore data first. For this reason exploratory factor analysis (EFA) was conducted. This type of analysis is used when there is a need to explore the consistency of measurements used in the research. EFA gives information about how many factors are needed to best represent the data. For this analysis all variables should be related to every factor (using factor loading estimates) and the factors should be uncorrelated.

EFA was performed in IBM SPSS Statistics 20 software. To fulfill the requirements for sample size in factor analysis (10 respondents to one item, Hair et al. 2010) it was decided to run EFA separately for groups of theoretical constructs (e.g. dependent variables, reputation variables etc.). Afterwards, all constructs were checked for cross-loadings.

Maximum likelihood method was chosen for extraction with Promax rotation method. The latter method allows rotation of factors so, that an item will load high on one factor and very low on another (if possible). Firstly, it was tested how many factors SPSS will statistically generate (based on eigenvalue equal to 1 principle). This was done to verify, that constructs are consistent and that construct validity is good. Next, based on theoretical model, the exact number of factors for each set of variables was manually identified to enable cross-loading analysis. Moreover, factor loadings of 0.5 and above were considered as significant.

Analysis of dependent variables measurement items showed that SPSS automatically defines variables into two factors. Moreover, each construct has significant factor loadings, and no essential cross-loadings were found (appendix 2 shows results of exploratory factor analysis).

Testing two independent latent variables of governance form showed that all theoretically predicted items were well described by two factors. However, some items (Solid3, Flex2, Flex3, Infosh1) had quite low factor loadings. Some crossloadings were present as well. For this reason, both governance constructs should be analyzed more carefully. It's worth mentioning, that choosing other rotation types may solve the cross-loading problems. Moreover, as it was discussed earlier, these two governance forms may be more complements than substitutes. That explains correlation between items that were chosen to measure different constructs. Further, testing each of these two constructs separately gave satisfactory results in terms of factor loadings in the case of formal governance. Relational governance model revealed insignificant factor loadings of Reliance1 and Flex1 items. Recall, that there was a suggestion to eliminate Flex1 item in reliability test above. Thus, these findings should be counted for in the further analysis. Similar results were achieved after testing reputation of focal firm and partner firm constructs. All factor loadings were significantly high in both constructs with the exception of CustSat and FinancPerfPF1 items. However, alpha coefficient test has shown that deleting these items from analysis will decrease reliability of constructs. Further, cross-loadings were revealed between the items of two reputation measures. That might be explained by high correlation between items as they are measuring similar constructs and they were formulated using similar wording.

Analysis of institutional and legal environment model showed that four items had unsatisfactory factor loadings (ILEnv4, 2, 7 and 9) and one item (ILEnv8) had quite low one. Thus, there are reasons to decrease number of items representing this construct in future analysis, which is in line with respective reliability test. Two of other control variables (relationship-specific investments and measurement ambiguity) models were tested against each other. SPSS results showed that theoretical items were described by the appropriate constructs with no significant cross-loadings. Market uncertainty – had two items (Mrkunc1 and 4) which had low factor loadings. Combined with low reliability results, this construct should be tested more carefully in further analysis.

Analyses of all constructs revealed that there are some cross-loadings in this model (mostly insignificant, however). It is advised to consider deleting items with significant cross-loadings (Hair et al. 2010). Despite this, all items measuring

dependent and independent constructs were maintained for further analysis due to a fact that most of them were derived from prior research. Moreover, all inconsistencies revealed by EFA will be checked using CFA, validity and reliability tests. Hence, all insignificant items will be removed.

# 4.5 Confirmatory factor analysis

To test validity of all conceptual variables confirmatory factor analysis (CFA) was conducted. CFA is used when researcher has theoretically specified the number of constructs (factors) and variables (items) which depend on each particular construct before actually running statistical analysis (Jöreskog, Sörbom 1993). In other words, CFA is used when there is a need to confirm and estimated postulated relationships in the data and suggest improvements. There are two main assumptions which should be satisfied before conducting CFA. First, degrees of freedom should be non-negative. Second, no different parameters configuration should give the same theoretical covariance matrix. Both assumptions were satisfied. Thus, it is possible to continue with analysis.

Moreover, CFA is a method of testing validity of measurement model. According to Hair et al. (2010), to assess model fit the following estimations should be used:  $\chi^2$  test (p-value greater than 0.05 would suggest good model fit); RMSEA (root mean squared error of approximation – should be less than 0.08 to indicate good fit); NFI (normed fit index – a model with perfect fit will be close to NFI=1); CFI (comparative fit index – higher values indicate better fit). To be more precise,  $\chi^2$  test checks whether the observed covariance matrix matches the estimated one within sample variance. RMSEA is a modification of  $\chi^2$  test which helps to estimate how well a model fits the population and not just a sample. NFI is a ratio of the difference in the  $\chi^2$  value for the fitted model and a null model divided by the  $\chi^2$  test estimate for it. CFI is an improved measure of NFI (Hair et al. 2010).

However, Hair et al. (2010) suggest that this cutoff model fit estimations should be sensitive towards model characteristics. The latter means that in the case of sample size lower than 250 and number of observed variables less than 12 or between 12 and 30, p-value is expected to be insignificant or significant even with good fit; CFI is expected to be 0.95 or better. With the sample size of N=86, this adjustments should be kept in mind.

Moreover, factor loadings should be used to assess construct and convergent validity. In this study, factor loadings should exceed the level of 0.6 to be kept in a measurement construct.

Single-factor confirmatory factor analysis was performed in Lisrel 9.10 Student edition in order to analyze each construct discussed above and their measurement items validity. All path diagrams with basic fit measures are presented in the appendices (appendix 3).

While testing two dependent variables constructs (brand spillover effect for focal and partner firm) one item was excluded from each construct due to results of reliability test discussed above. All factor loadings were significantly high; still, models have quite low fit. Lisrel offered suggestions that allowing for correlation between items bso3 and bso4 as well as between items bso4 and bso8 for focal firm spillover effect construct and between items bsopf1-bsopf2 and bsopf2-bsopf3 for partner brand spillover effect will increase the goodness of fit of both models. Formal governance was initially tested with all theoretical estimates. However, two primary items appeared to have low factor loadings. Recalling that Cronbach's alpha test and EFA also suggested item reduction, items with low factor loadings were removed from analysis. Resulting measurement model showed high and significant factor loadings. However, deleting items did not improve model fit. Modification indices showed that the largest improvement of fit will take place if the correlation between items from4 and form5, form5 and form7 will be opened.

Relational governance model revealed one item with low factor loadings estimate (0.29). Thus, the first flexibility item was deleted from further analysis. Moreover, considering the results of EFA and a poor model fit it was decided to separate reliance and trust items into a new control construct – Reliance (further used as control variable). This new constructed showed that data fit the model well. Additionally, all factor loadings except trust item (0.26) were satisfactory high. Thus, trust item was removed from analysis. That resulting model showed perfect fit through all goodness of fit estimates. The new relational governance construct showed low factor loadings estimates for items flex3 at first. After testing model without this item, infosh1 appeared to have low factor loadings estimate as well. It

was decided to remove these items from the construct, which has increased model's goodness of fit.

The measurement models for reputation of both focal and partner firms were tested through two factors (RepFF, RepFF2, RepPF and RepPF2 respectively) due to the fact that Lisrel student addition allows testing only 15 items at once. All four constructs showed high factor loadings estimates, but quite poor fit. Generally speaking, all constructs measured in this study are rather sophisticated, meaning that they are either hard to measure or are analyzing subjective attitude, which may depend on different external factors. All these show possible limitations of this thesis work. Still, it was decided to keep all reputation constructs.

Both company's resources and contracting capabilities showed high factor loadings estimates with no further item reduction requirements. Companies resources model fit would increase, it correlation between Tech1 and SupCh4, Tech2 and SupCh5, SupCh2 and SupCh3 will be opened. In the case of contracting capabilities measurement construct, overall model fit increases when correlation between Rspec2 and Knman2 is allowed. The latter can be explained by the fact that both items were measuring close by meaning statements concerning responsibilities and knowledge sharing.

Further, while checking reliability and conducting EFA on Institutional and legal environment variable, there was a suggestion to remove 4 items which did not appear to describe variation of a construct well enough. Initially, all 10 items where tested. Four showed very low factor loadings (-0.0, 0.19, 0.23, 0.25) and proved the earlier findings. Thus items ILEnv2, ILEng4, ILEnv7 and ILEnv9 were deleted from analysis. Respondents were sharing concerns towards unstable economic and political situation in Ukraine, which might have resulted in low model fit for this construct. Nevertheless, removing items increased the overall goodness of fit of this measurement model. Further increase of fit can be reached by allowing correlation between ILEnv1 and ILEnv5, ILEnv1 and ILEnv10.

Measuring control variables relationship-specific investments and measurement ambiguity constructs showed perfect model fit and satisfactory factor scores. Thus, both constructs were kept in the analysis. Another control variable construct – market uncertainty – showed lower model fit, but good factor loadings

estimates. Thus, despite unsatisfactory reliability estimates, this construct was kept as well.

It's worth mentioning that NFI and CFI model fit coefficients (Table 4.6) indicated that all measurement models have satisfactory fit. Slightly less level of goodness of fit was depicted in market uncertainty construct, while all other control constructs (including reliance one) showed perfect fit. However, these measures are sensitive to the number of items included in a construct (Hair et al 2010).

Table 4.6 NFI and CFI model fit coefficients

	NFI	CFI
BSO	0,956	0,972
BSO_PF	0,947	0,959
FORMGOV	0,875	0,893
RelGOV_full	0,754	0,837
RelGOV_new	0,796	0,858
RelGOV_final	0,875	0,927
Reliance	0,982	1
Reliance_new	1	1
RepFF	0,901	0,934
RepFF2	0,941	0,958
RepPF	0,904	0,935
RepPF2	0,901	0,92
ILEnv	0,812	0,864
ComRes	0,82	0,857
ConCap	0,924	0,948
RSInv	0,999	1
MrkUnc	0,769	0,789
MA	1	1

Measuring theoretical constructs (RelGov, RepPF, RepFF etc.) through more than one measurement model has shown slight increase in overall measurement model fit. Moreover, high correlation between such sub-constructs enabled further description of their variances through only one factor (model variable) as it was theoretically argued.

Cross-loadings were initially tested in EFA. Subsequently, CFA was conducted to test constructs (after items reduction) against each other and to test for cross-loadings. As a result, no significant cross-loadings were detected.

## 4.6 Validity and reliability

Confirmatory factor analysis was used to test construct validity or the extent to which items actually represent theoretical construct. The cases, when construct validity (model fit) was not high enough (or was poor), could be explained by quite complex theoretical model and sophisticated constructs in connection with rather small sample. That means that such concepts as reputation, brand spillover effect, type of governance form are rather complicated to measure in the real business world (particularly depending only on the subjective attitude of sample respondents). Thus, despite some problems with model fit estimations all theoretical constructs were kept.

Moreover, convergent validity as a part of construct validity was tested through several ways (see Table 4.7 for results of validity estimation). First, as it was discussed above, all factor loadings estimates for each theoretical construct (after item reduction where it was necessary) were satisfactory high. The latter means that all factor loading were above 0.7 (or at least above 0.6), which indicates that items actually converge on a common point, which is particular construct. Next, following the procedure offered by Hair et al. (2010), average variance extracted (AVE) was estimated. This measure is a summary indicator of convergence and is calculated as a mean variance extracted for the items loading on a measurement construct (Hair et al. 2010). The AVE results above 0.5 indicate good convergence. Results of AVE below 0.5 mean that more error remains in the items compared to variance explained by latent variable. Table 4.7 shows that almost all construct exceed AVE equal to 50% point. However, three constructs have AVE below 0.5 – market uncertainty (which is in line with previous findings), institutional and legal environment (also supported by weak model fit) and relational governance, while two constructs showed AVE close to 50% company's resources and reliance).

Further, reliability was tested through construct reliability (CR) measurement. It is computed from the squared sum of standardized factor loadings for each factor and the sum of the error variance terms for this factor (Hair et al. 2010). The basic rule of thumb here indicates that all estimates higher than 0.7 have good reliability. Estimations in Table 4.7 show that all constructs have satisfactory reliability.

Table 4.7 All constructs factor loadings, error terms, AVE and CR

Constructs	Items	Stand. solutions	Complete stand.	Squared multiple correlations	Error terms	AVE	CR
BrandSO	BSO1	0,973	0,724	0,524	0,862	67,77%	0,94
	BSO2	1,145	0,801	0,642	0,731		
	BSO3	1,391	0,914	0,835	0,383		
	BSO4	1,465	0,891	0,793	0,56		
	BSO5	1,079	0,699	0,489	1,217		
	BSO6	1,357	0,846	0,716	0,729		
	BSO8	1,315	0,863	0,745	0,59		
BrandSO_PF	BSOPF 1 BSOPF	1,059	0,754	0,569	0,85	76,57%	0,96
	2 BSOPF	1,333	0,857	0,734	0,643		
	3 BSOPF	1,52	0,948	0,899	0,259		
	4 BSOPF	1,498	0,962	0,925	0,181		
	5 BSOPF	1,359	0,822	0,675	0,889		
	6 BSOPF	1,401	0,903	0,816	0,442		
	8	1,27	0,861	0,742	0,562		
FormGov	Form3	0,834	0,781	0,61	0,445	59,71%	0,92
	Form4	0,897	0,771	0,594	0,549		
	Form5	0,792	0,687	0,472	0,702		
	Form6	0,846	0,66	0,435	0,929		
	Form7	0,864	0,832	0,692	0,332		
	Form8	0,935	0,85	0,723	0,335		
	Form9	0,983	0,808	0,654	0,512		
RelGov (final)	Flex2	0,63	0,365	0,133	2,589	36,07%	0,79
	Infosh2	0,967	0,532	0,283	2,37		
	Infosh3	1,229	0,727	0,529	1,345		
	Infosh4	0,83	0,606	0,367	1,118		
	Solid1	0,835	0,598	0,357	1,252		
	Solid2	0,864	0,639	0,409	1,081		
	Solid3	1,118	0,668	0,447	1,549		
Reliance	Rel1	0,92	0,529	0,28	2,181	48,73%	0,74
	Rel2	1,533	0,762	0,581	1,695		
	Rel3	1,522	0,775	0,601	1,536		
Reputation	DC 1	0.754	0.672	0.452	0.600	00.000/	0.04
(FF)	PS1	0,754	0,673	0,453	0,688	90,99%	0,94
	PS2	0,642	0,511	0,261	1,165		
	PS3	0,721	0,642	0,412 0,653	0,743		
	LV1	1,056	0,808	0,653	0,593		
	LV2	1,141	0,784		0,813		
	LV3 WplEnv 1	1,314 1,126	0,802 0,836	0,643 0,698	0,957 0,547		
	WplEnv 2	1,139	0,813	0,661	0,664		
		1,137	Dogo 50		3,007		

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	WplEnv 3	1,043	0,703	0,494	1,115		
	SResp1	1,161	0,728	0,53	1,196		
	SResp2 FinPerf	1,229	0,717	0,514	1,428		
	1 FinPerf	0,83	0,655	0,428	0,919		
	2 FinPerf	0,761	0,598	0,358	1,039		
	3	1,011	0,735	0,54	0,871		
Reputation (FF)_cont	CustSat	0,692	0,604	0,365	0,832	61,42%	0,91
	CustTr	0,663	0,711	0,506	0,429		
	CustLoy 1	0,847	0,799	0,638	0,406		
	CustW OM	0,938	0,82	0,672	0,429		
	CustFee 1	1,062	0,906	0,821	0,246		
	CustAd						
Reputation	m	1,104	0,827	0,683	0,565		
(PF)	PSPF1	0,699	0,757	0,572	0,365	53,47%	0,94
	PSPF2	0,500	0,527	0,278	0,651		
	PSPF3	0,774	0,724	0,525	0,542		
	LVPF1	1,128	0,828	0,685	0,585		
	LVPF2	0,991	0,780	0,608	0,634		
	LVPF3	0,962	0,751	0,564	0,715		
	WplEnv PF1	1,123	0,872	0,76	0,399		
	WplEnv PF2	1,036	0,825	0,68	0,505		
	WplEnv PF3	1,173	0,825	0,68	0,647		
	SRespP F1	1,039	0,734	0,538	0,926		
	SRespP F2	1,099	0,702	0,492	1,264		
	FPerfPF 1	0,386	0,364	0,132	0,979		
	FPerfPF 2	0,836	0,715	0,511	0,669		
	FPerfPF 3	0,777	0,679	0,461	0,707		
Reputation		5,111	0,017	0,701	0,707		
(PF)_cont.	CSatPF CTrustP	0,617	0,579	0,335	0,754	60,37%	0,91
	F CLoylP	0,719	0,797	0,635	0,298		
	F CWOM	0,779	0,806	0,649	0,328		
	PF CFeelP	1,132	0,892	0,795	0,33		
	F	0,981	0,859	0,737	0,343		
	CAdmP F	0,999	0,834	0,696	0,436		
	RecPar	0,742	0,616	0,379	0,903		
InstLegEnv	ILEnv1	1,094	0,572	0,327	2,469	31,63%	0,72
	ILEnv3	-1,082	-0,545	0,297	2,769		
	ILEnv5	-0,999	-0,641	0,411	1,427		
	ILEnv6	-1,249	-0,757	0,573	1,165		
	ILEnv8						

	ILEnv1 0	0,725	0,45	0,203	2,064		
ComRes	Tech1	1,311	0,593	0,352	3,162	44,38%	0,88
	Tech2	0,938	0,576	0,331	1,774		
	Tech3	1,313	0,584	0,341	3,335		
	Tech4	1,416	0,615	0,378	3,304		
	EndC1	0,954	0,52	0,27	2,464		
	EndC2	0,794	0,604	0,364	1,101		
	EndC3	0,882	0,486	0,236	2,516		
	SupCh1	1,059	0,641	0,411	1,605		
	SupC2	0,767	0,77	0,594	0,403		
	SupCh3	0,864	0,776	0,602	0,493		
	SupCh4	1,005	0,862	0,743	0,35		
	SupCh5	1,03	0,839	0,704	0,446		
Contracting Cap	Rspec1	0,964	0,556	0,309	2,078	51,73%	0,86
	Rspec2	1,051	0,757	0,574	0,821		
	Rspec3	0,918	0,611	0,373	1,419		
	Knman1	1,366	0,91	0,829	0,386		
	Knman2	0,999	0,706	0,499	1,002		
	Knman3	1,109	0,721	0,52	1,133		
RelSpecInv	RSInv1	1,654	0,808	0,653	1,453	59,90%	0,86
	RSInv2	1,448	0,756	0,572	1,571		
	RSInv3	1,244	0,691	0,477	1,695		
	RSInv4	1,722	0,833	0,694	1,31		
Market Uncertainty	Mrkunc 2 Mrkunc	1,096	0,641	0,41	1,726	26,43%	0,54
	3 Mrkunc	0,603	0,339	0,115	2,805		
	4 Mrkunc	0,63	0,309	0,095	3,773		
3.6	5	1,094	0,661	0,437	1,541		
Measurement Ambiguity	MA1	1,264	0,75	0,563	1,24	69,63%	0,87
	MA2	1,518	0,874	0,764	0,712		
	MA3	1,428	0,873	0,762	0,637		

Discriminant validity checks the distinction between constructs, meaning construct uniqueness (Hair et al. 2010). In its essence it is close to unidimensionality aspect, which identifies whether items can be explained by only one underlying construct. Discriminant validity can be estimated through analysis of cross-loadings between constructs and by comparing the squared correlation of two constructs with their AVE scores. To prove good discriminant validity, squared correlations should be lower than respective AVE scores. That will indicate that the construct explains more of the variance in its item measures than other factors do. As no significant evidence of cross-loadings among constructs

was found (constructs are unidimensional), squared correlations were calculated (appendix 4 with AVE scores included at the bottom of a matrix). As a result almost none of the squared correlation values exceeded the respective AVE score indicating good discriminant validity. The exception is the reputation of a partner firm second measure (the one with 'cont.' index). Thus, this construct might be considered for reduction.

Nomological validity is usually tested through assessing whether correlation between constructs make sense (Hair et al. 2010). That implies the idea that some constructs may be closely related (e.g. reputation of focal and partner firm, brand spillover effect for focal and partner firm etc.). Correlation matrix (Table 4.8) shows that each reputation construct (both focal and partner) was measured through two dimensions. However, high cross-correlations were detected, meaning that reputations of a focal and partner firm\_cont. items were highly correlated to both reputations of a focal firm and to reputations of a partner firm. To avoid statistical mistakes, these constructs (*Reputation of a focal firm (cont)* and *Reputation of a partner firm (cont)*) were not further used in the analysis. Hence, I will represent reputation variables only through the following constructs: Reputation of a focal firm and Reputation of a partner firm. No other significant correlations were detected. Moreover, nomological validity will be theoretically and analytically checked during regression analysis later in this study.

Table 4.8 Correlation Matrix	atrix													
	Brand spill- Brand spill over effect over effect for for for firm firm	Brand spill- over effect for partner firm	Formal governance form	Formal Relational governance form form	Reputatio Relianceof a focal firm	두	Reputation of a focal firm (cont)	Reputation of a partner firm	Reputation of Institution a partner firm and legal (cont)		Company's Contracting resources capabilities		Relationship Market -specific uncertai investments nties	Market Measurem uncertai ent nties ambiguity
Brand spillover effect for focal firm														
Brand spillover effect for partner firm	0,388	1												
Formal governance form	0,109	0,256	1											
Relational governance form	0,213	0,346	0,285	1										
Reliance	0,364	0,224	-0,114	0,459	-									
Reputation of a focal firm	0,303	0,399	0,247	0,229	0,186	1								
Reputation of a focal firm (cont)	0,27	0,34	-0,034	0,232	0,08	0,566	П							
Reputation of a partner firm	0,324	0,079	0,007	0,287	0,216	0,357	0,482	1						
Reputation of a partner firm (cont)	0,361	0,096	-0,166	0,183	0,207	0,279	0,506	0,804	1					
Institutional and legal environment	-0,022	-0,07	0,002	0,007	-0,17	-0,029	0,016	0,073	-0,013	П				
Comp. resources	0,135	0,546	0,254	0,185	0,088	0,555	0,44	0,159	0,072	-0,187	-			
Contr. capabilities	0,241	0,426	0,366	0,123	-0,08	0,334	0,231	-0,003	-0,149	0,026	0,449	_		
R-S investments	0,388	0,328	0,157	0,388	0,491	0,298	0,055	0,162	0,048	-0,186	0,275	0,298	-	
Market uncertainties	0,087	0,298	0,047	0,064	0,032	0,228	0,041	-0,029	-0,113	-0,074	0,164	0,321	0,255	1
Measurement ambiguity	0,129	0,199	690'0	0,239	0,08	0,063	0,226	0,288	0,277	-0,151	0,017	-0,059	0,218	-0,06

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## 4.7 Testing hypotheses and results discussion

To test direct and moderation hypotheses, two statistical analyses are conducted. First, using IBM SPSS 20 software I analyze the direct relationship between two complementary forms of governance and brand spillover effect for both focal and partner firms (Hypotheses 1a and 1b). Next, a full hierarchical moderated regression for each of two dependent variables is conducted (Cohen 2003). This type of analysis includes step by step model testing. The first-step model represents regression of all control variables on the dependent ones. Second, all independent variables (including moderates) are added. The third "full" model includes interaction terms between independent and moderating variables. This model is used to test all remaining hypotheses (H<sub>2a-2b</sub>, H<sub>3a-3b</sub>, H<sub>4a-4d</sub>). Finally, in the fourth step I include quadratic terms in the models to test whether interaction terms are significant due to multicollinearity or due to true interaction (Ganzach 1997). To gain more insights into moderating effects, significant interactions are decomposed and plotted using methods described by Aiken and West (1991) and Cohen (2003).

Prior to analyses, I evaluate multivariate regression assumption of multicollinearity. According to Malhotra (2010) multicollinearity problem arises when there is a very high intercorrelation between independent variables. For this reason tolerance and VIF indices of each variable are assessed. Hair et al. (2010) argues that tolerance values should not exceed 0.10 and VIF should be less than 10. All these requirements are satisfied in each model. Thus, it is possible to conclude that no significant multicollinearity is present in this study.

#### 4.7.1 Role of governance form testing

Initially, I will analyze the direct relationship between formal and relational governance and brand spillover effect for focal (first sub-model) and partner firm (second sub-model) respectively (H1a and H1b). These models intend to test hypothesized constructs without controlling for external independent variables used later in this study. In other words, these models will provide additional information about the role of governance form choice on the level of spillover effect between companies in B2B relationship. Basic transaction economics variables as well as market of business operations variables were selected as control ones in these sub-models.

Three step hierarchical regression analysis is used to gain more insights. The first step in both sub-models includes only independent and control variables. The second one introduces interaction term of formal and relational governance. This step tests the relationship between formal governance and brand spillover when moderated by relational governance (and vice versa).

The third step includes quadratic terms of analyzed independent variables. According to Ganzach (1997) it is important to introduce quadratic terms into the model with interaction to avoid "misleading interaction". The latter occurs when the analysis shows insignificant interaction in the case of a strong true interaction, or when an observed interaction is positive when the true interaction is negative. Misleading interactions can happen when independent variables are correlated (multicollinearity is present). Thus, by including quadratic terms to the equation researcher can avoid multicollinearity problem and additionally study monotone rather than only linear relationship.

Table 4.9 Influence of formal and governance form on brand spillover effect for partner and focal firms

Variables		Brand spi	llover effect o	n focal firm		Brand spi	and spillover effect on partner n		
		Initial model	Including interaction	With quadratic expressions		Initial model	Including interaction	Including quadratic expressions	
Business market of focal company		194*	196*	201*		.069	.067	.086	
Business market of partner company		.327***	.303***	.314***		081	101	112	
Relationship- specific investments		.354***	.385***	.371***		.135	.160	.192*	
Market uncertainties		.017	.008	.023		.245**	.237**	.226**	
Measurement ambiguity		.031	.056	.062		.124	.145	.157	
Formal governance form		.145	.056	.040		.122	.048	017	
Relational governance form	H1a	.033	.002	024	H1b	.212*	.186*	.206*	
Formal*Relational governance			204*	123			170	246*	
Formal Governance squared				067				065	
Relational Governance Squared				104				.177	
$R^2$		.258	.289	.297		.262	.283	.307	
F		3.867***	3.912***	3.167***		3.946***	3.802***	3.326***	

 $<sup>^{</sup>a}N = 86.$ 

<sup>\*</sup> p < .1; \*\* p < .05; \*\*\* p < .01

Table 4.9 shows that the initial models explain 25.8% and 26.2% of variance in brand spillover effect for focal and partner firm respectively. Moreover, F-statistics reports that both regression modes are significant. No significant relationship was found between relational governance form and brand spillover effect on focal firm (0.033, p > 0.1). Thus, Hypothesis 1a is not supported. Further, relational governance form was found to significantly relate to brand spillover effect on partner firm (b=0.212, p < 0.1). This finding weakly supports Hypothesis 1b. The latter results can be interpreted as follows: while holding all other variables still, brand spillover effect on partner firm is predicted to increase by 0.212 for every one point increase in governance form.

Analysis shows significant negative relationship between interaction term of governance forms and brand spillover effect on focal firm (b = -0.204, p < 0.1). However, after introducing quadratic terms into the model, this relationship becomes insignificant (b = -0.123, p > 0.1). Such results can be explained by the fact that significant interaction in the second step of a first sub-model was due to multicollinearity of independent variables rather than the true interaction.

While analyzing the relationship between interaction of governance forms and brand spillover effect on partner firm, the results show significant negative interaction effect only in the third step of the hierarchical model after including quadratic terms (b = -0.24, p < 0.1). This means that the direct significant positive relationship between relational governance form and partner firm's brand spillover is weakened when formal governance increases.

#### 4.7.2 Full hierarchical regression models: estimating brand spillover effect

In order to separately analyze influences of control variables, predicting and moderating variables, and interacting terms I conduct hierarchical regression analysis. Table 4.10 reports main statistics and coefficients of two models. The third step of each model is used to analyze all remaining hypotheses.

Overall, first model explained 48.8% ( $R^2 = 0.448$ ) of variance in brand spillover effect on focal firm, whereas variance in brand spillover effect on partner firm was explained by 60% of the variation in predicting variables. Considering that F-tests show that all models are statistically significant, it is possible to conclude that models have good fit.

Table 4.10 Regression analysis of the direct and moderated relationships

	Brand spillover effect for focal firm Brand spillover effect for partner firm								
	1	2		3	4	1	2	3	4
Relationship-									
specific	.24**	.212*		.246**	.290**	.152	048	018	016
investments									
Market uncertainties	.016	014		007	047	.259**	.182*	.217**	.203**
Measurement	0.4.0	0.45		004	0.1.0	440	4 a a state	20511	000
ambiguity	013	045		034	012	.119	.199**	.207**	.222**
Reliance	.168	.194		.213*	.177	.074	.152	.128	.152
Perceived Fit	.374***	.335***		.24**	.270**	.253**	.108	.073	.063
Institutional	, .				.2,0	.200	.100	.075	.002
and legal	.03	018		.002	061	007	.066	.093	.056
environment									
Formal									
governance		.025		.005	134		.030	022	086
form Relational									
governance		114		148	100		.137	.131	.133
form		.117		.140	.100		.137	.131	.133
Reputation of a		110		0.42	070		051 114-	0.47	010
focal firm		.119		.042	078		.051 H4a	047	018
Reputation of a		.221**	H4b	.299***	.370***		141	097	073
partner firm			-1.0				/*	/	.0.0
Company's resources		144		16	131		.400***	.412***	.359***
Contracting									
capabilities		.125		.119	.126		.146	.168	.228**
Reputation of a									
focal				.046	.087		H4c	.285**	.304**
firm*Relationa				.040	.007		1140	.263	.504
l Governance									
Reputation of a partner									
firm*Relationa			H4d	.08	043			.041	116
l Governance									
Company's									
resources*For				012	027			0.18	.276*
mal				012	027			0.10	.270
Governance									
Company's resources*Rela									
tional			H2a	298**	228*		H2b	-0.241**	183
Governance									
Contracting									
capabilities*Fo			НЗа	073	066		НЗЬ	-0.319**	489**
rmal			113a	013	000		1130	-0.317	<del>-</del> .02
Governance									
Formal Governance					133				080
Governance squared					133				000
Relational									
Governance					029				.029
squared									
Reputation of a					101				6.45
focal firm					134				.042
squared Reputation of a									
partner firm					.308**				.243**
squared					.500				.2 13
Company's									
resources					.127				125
squared									
Contracting					0.60				100
capabilities					068				.106
squared						2	105		
$R^2$	.324	.396		.488	.559	.251	.488	.600	.643
F	6.317***	3.981***		3.807***	3.419***	4.407***	5.794***	5.994***	4.847**

<sup>&</sup>lt;sup>a</sup> N = 86. \* p < .1; \*\* p < .05; \*\*\* p < .01

As Table 4.10 shows, moderating construct "Company's resources\*Relational Governance" has negative relationship with dependent variables in both models, which is contrary to what was predicted (b = -0.298, p < 0.05 and b = -0.241, p < 0.05 respectively). Thus, <u>Hypotheses 2a and 2b are not supported</u>. In addition, after introducing quadratic terms to the models, the relationship between interaction term and brand spillover for partner firm becomes insignificant. This may show that independent variables are intercorrelated and that, in fact, there is no significant moderating effect on brand spillover for partner firm.

The interaction term "Contracting capabilities \* Formal Governance" in brand spillover effect for focal firm model is not significant (b = -0.073, p > 0.1). So, <u>Hypothesis 3a is rejected</u>. On the contrary, this interaction is found significant in the case of partner firm brand spillover effect model (b = -0.319, p < .05). It becomes significantly more stronger (b = -0.489,p < 0.01) after introducing quadratic terms (depicting the true interaction). Thus, <u>Hypothesis H3b is supported</u>.

There is no significant relationship between reputation of a focal firm on partner's brand spillover effect (-0.047, p > 0.1), while reputation of a partner firm is found to be positively related to brand spillover effect on focal firm (0.299, p < .01). Therefore, <u>Hypothesis 4a is rejected</u> and <u>Hypothesis 4b is supported</u>.

The interaction term "Reputation of a focal firm \* Relational Governance", in brand spillover effect for partner firm model is significantly related to dependent variable (b = 0.285, p < .01) and remains significant after introducing quadratic terms. That means that the true relationship between reputation of a partner firm with brand spillover effect for a focal company becomes more positive while moderated by the relational governance form. This finding is in line with the discussed prediction. Thus, <u>Hypothesis H4c is supported</u>.

Regression analysis provides <u>no support</u> for remaining moderating <u>Hypothesis 4d</u> as "Reputation of a partner firm \* Relational Governance" is not significantly related to brand spillover effect on focal firm (b = 0.08, p > 0.1).

Among control variables, relationship-specific investments, reliance and perceived fit were found to be positively related to brand spillover effect on focal firm (0.246, p < .05; 0.213, p < 0.1; 0.24, p < .05 respectively). Further, market uncertainties (0.217, p < .05) and measurement ambiguity (0.207, p < .05) were

significantly related to brand spillover effect on partner firm. Finally, companies' resource base variable was found to significantly and positively relate to partner's brand spillover effect (0.412, p < .01).

The fourth step of hierarchical model also shows that squared term of reputation of a partner firm has significant positive relationship with brand spillover effect of both focal and partner firms (b = 0.308, p < 0.05 and b = 0.243, p < 0.05 respectively). Recalling significant direct effect of partner's reputation on *focal* company's brand spillover, overall partner reputation has slightly exponential monotone and strong relationship with focal company's brand spillover. This indicates that the higher spillover will occur in favour of focal company when the partner company initially has high reputation. Additionally, in *partner* brand spillover effect model only quadratic term of reputation is significant. These findings indicate that further analyses of non-linear relationship between reputation and brand spillover may give interesting insights on how this concepts interrelate and, hence, how they should be managed.

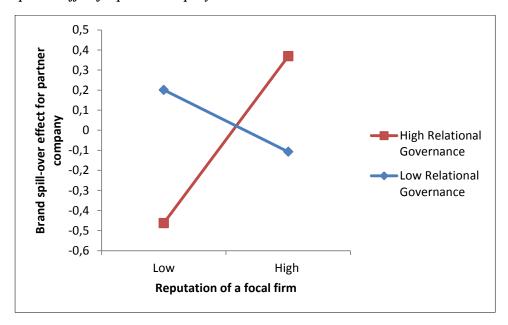
#### 4.7.3 Significant interaction terms assessment

Using procedure proposed by Aiken and West (1991), and Cohen (2003), I decompose and analyze hypothesized significant interaction terms. Specifically, simple slope test is conducted and interaction relationships plotted.

For hypothesis  $H_{4c}$ , both relational governance and reputation of a focal firm are divided into two groups – low (with one standard deviation below the mean value) and high (with one standard deviation above the mean). Afterwards, I evaluate the effect of these variables interaction on brand spillover effect for partner firm.

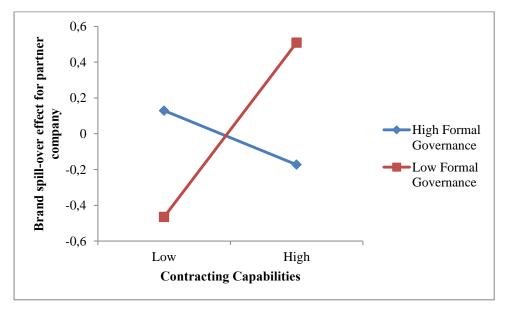
Figure 4.1 shows that the relationship between reputation of a focal firm and brand spillover effect for partner' company is more positive for companies with high level of relational governance. Moreover, for companies with high relational governance: the higher reputation of a focal firm is, the better brand spillover will be (b=0.4415, p < .05). For companies with low level of governance, there is a significant reversed trend: the higher the reputation of a focal firm is, the lower is the level of brand spillover effect for partner firm (b = -0.5104, p < .05). Thus, Hypothesis 4c is fully supported.

Figure 4.1 Interaction effect of reputation of a focal firm and relational governance on brand spillover effect for partner company



Similarly, interaction argued in Hypothesis 3b is decomposed. Figure 4.2 shows that when formal governance is low, better contracting capabilities positively influence brand spillover effect for partner company (t = -0.227, p < .05). At the same time, there is a significant negative relationship with brand spillover effect when formal contracting is high (b = -0.9274, p < .05). The latter corresponds to the predictions in Hypothesis 3b.

Figure 4.2 Interaction effect of contracting capabilities and formal governance on brand spillover effect for partner company



Despite receiving contradictory results for Hypotheses 2a and 2b, interaction terms discussed in them were found significant (still, negative). Therefore, they

are decomposed using the same technique. Figure 4.3 and Figure 4.4 present moderation plotting. There is no significant relationship between company's resources and brand spillover effect for partner firm when relational governance is high (b = 0.175, p > .1). However, there is a significant positive relationship when relational governance is low (b = 0.649, p < .05).

Figure 4.3 Interaction effect of company's resources and relational governance on brand spillover effect for partner company

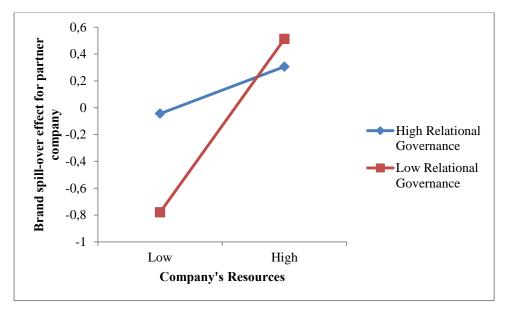
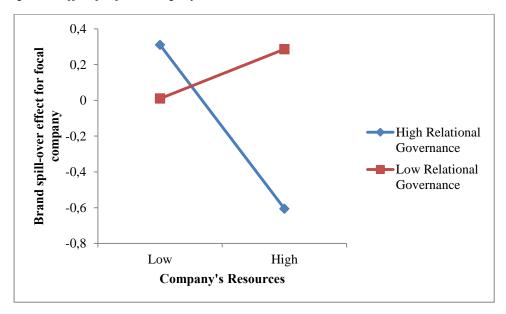


Figure 4.4 Interaction effect of company's resources and relational governance on brand spillover effect for focal company



Plots of low versus high relational governance and company's resources influence on brand spillover effect for focal firm are significant (b = 2.0905, p < .05; b = -0.2556, p < .05 respectively). That indicates that companies using low relational governance have positive effect of resource base on brand spillover effect.

Alternatively, companies practicing high level of relational governance show decrease in their (focal) brand spillover effect having strong resource base.

#### 4.7.4 Summarizing hypotheses testing

Prior to starting the discussion part, a short summary of argued model estimations and hypothesis testing results are presented in Table 4.11:

**Table 4.11 Summary of hypotheses** 

Hupotheses	Result
$H_{1a}$ : There is a positive relationship between relational governance form and brand spillover effect for focal firm	Not supported
H <sub>1b</sub> : There is a positive relationship between relational governance form and the extent of spillover effect of brands in B2B relationship for partner firm	Supported
$H_{2a}$ : The relationship between company's resource base and brand spill-over effect for a focal firm is more positive if it is moderated by relational governance form.	Not supported
H <sub>2b</sub> : The relationship between company's resource base and brand spill-over effect for a partner firm is more positive if it is moderated by relational governance form.	Not supported
$H_{3a}$ : The relationship between contracting capabilities and brand spill-over effect for focal firm is weakened while moderated by formal governance.	Not supported
H <sub>3b</sub> : The relationship between contracting capabilities and brand spill-over effect for partner firm is weakened while moderated by formal governance.	Supported
$H_{4a}$ : The direct relationship between reputation of a focal firm with brand spillover effect for a partner company is positive.	Not supported
H <sub>4b</sub> : The direct relationship between reputation of a partner firm with brand spillover effect for a focal company is positive.	Supported
$H_{4c}$ : Positive relationship between reputation of a focal firm with brand spill-over effect for a partner company is strengthened while moderated by the relational governance form.	Supported
$H_{4d}$ : Positive relationship between reputation of a partner firm with brand spill-over effect for a focal company is strengthened while moderated by the relational governance form.	Not supported

#### 5.0 Discussion

This thesis aimed to make a contribution to the prior empirical studies in both branding field: as it introduces analysis of brand spillovers within the context of B2B relationship; and B2B-marketing field: as it provides more insights into the roles of brands in B2B markets and their relationship to particular governance form choice.

The main purpose of the present study was to investigate the relationship between formal and relational governance form choice and two possible "branding" outcomes: brand spillover effect for focal company and for exchange partner firm. While interorganizational research tend to perceive formal contracting and relational governance as two extremes of governance form continuum, in this study they are analyzed simultaneously, presuming more complementary effect.

On the basis of previous discussions of characteristics, roles and antecedents of two governance forms, in this thesis I argue that the choice of more relational governance will be positively related to the level of brand spillover effect on focal and partner firms. Therefore, changing the level of relational governance during B2B cooperation will change the level of corporate brand influence (stretching) between two partnering companies. The empirical analysis supports this assumption with respect to partner firm's outcome only. Hence, there is no significant effect of relational governance on brand spillover for focal company. Such findings can be justified by the fact that brand spillover is a subjective variable depicting perception of the "stretch" effect of one corporate brand to another. Thus, measuring intangible activities resulting in additional advantages (or disadvantages) for the brand perception might be challenging. For example, there might be additional explanatory variables, which can clarify the effect of brand spillover for focal firm, like brand strength or number of exchange partners, which were not included in this study's empirical model. Moreover, as this thesis relies on subjective scales, the evaluation of focal vs. partner brand spillover may be slightly biased due to the absence of any accounting or financial documents, which might give objective validation.

Remarkably, the interaction effect of governance form choice variables provide additional insights to the relationship of relational governance and brand spillover. In my analysis I have found that the positive influence of relational governance on

brand spillover of a partner firm is decreased by the interaction term of formal and relational governance. The latter means that if managers use both governance forms simultaneously they have more substitutional effect on brand spillover than complementary. However, I assume that this finding does not deny the fact that both relational and formal governance might be used by managers simultaneously.

One of the main issues of brands' role in B2B relationships is how to best manage your relationship, so that it would generate advantages in terms of branding outcomes (e.g. positive brand spillover). Since a choice of governance form may be perceived as a tool to manage brand spillover (the outcome of B2B relationship), in this thesis I measure the moderating effect of governance structures.

I argue that company's resources as a basis for performance outcomes and possible competitive advantages will be positively related to both focal and partner brand spillover while moderated by relational governance. To be more precise, I assume that the higher level of resource base of the focal company will lead to better outcomes of B2B relationship. While moderated by more relational governance choice (e.g. enabling greater level of solidarity, flexibility and information sharing), resources factor is expected to more positively affect brand spillover for focal and partner companies on B2B marketing.

However, the empirical analysis showed contradictory results. Specifically, company's resource base has significant but negative effect on brand spillover for both focal and partner firms, while moderated by relational governance form choice. A possible reason for such results may be that while having good (or non-imitable) resource base companies may tend to protect it from opportunistic behavior of B2B partners during value claiming stage, rather than enable possible advantages for partners. For this reason they might either use formal governance (which is not supposed to have any influence on brand spillover), or apply some other safeguarding mechanisms. Thus, such actions will result in a tendency that the better resource base a company obtains, the lower spillover effect will take place as an outcome of exchange relationships.

Graphical interpretation can be used to get more insights into moderating effect of governance form choice. From the interaction of relational governance and company's resources effect on focal firm brand spillover (Figure 4.4) I conclude

that choosing low relational governance will result in greater spillover effect for focal company under the condition of high resource base, than choosing high (stronger) relational governance. On the contrary, if a company has low resource base and choose high relational governance, it will result in higher brand spillover, than in the case of low relational governance choice.

Another proposition in this thesis concerns the relationship between company's contracting capabilities and brand spillover. I argue that if a company obtains good contracting capabilities it may tend to choose formal governance form. As the level of contracting capabilities (or the way a firm manages contracting process, define roles and share knowledge) should have an influence on the outcome of B2B relationship, I suggest that there is a relationship with brand spillover effect as well. However, I argue that if a company uses high level of contracting capabilities in its interorganizational relationship, it might limit the extern to which companies mutually cooperate and as a result – limit the externalities of the "close" cooperation (like brand spillover). Thus, while choosing more formal governance form, the level of contracting capabilities will be negatively related to the extent of spillover effect for both focal and partner companies. The analysis supports this proposition, but with respect to brand spillover effect for *partner* firm only.

Graphical interpretation of this moderation (Figure 4.2) provides additional findings. In particular, it shows that in condition of high contracting capabilities, choosing more formal governance will lead to lower extent of spillover effect for partner firm than choosing less formal governance structure. This is in line with thesis proposition above. On the contrary, in case of low contracting capabilities, the choice of more formal contracting governance will result in larger spillover effect. The explanation for the latter may be that contracting capabilities are in fact antecedents of formal contracting. If they are weak in a company, then the quality of formal governance might be questioned. As Williamson (1979) suggested, governance forms should be used with a purpose of optimization. In this case, when one governance form (formal) has disadvantages, another one should be implied (relational governance) to fill in the gaps. Considering that relational governance lead to greater brand spillover effect, it explains the interaction effect in the low contracting capabilities condition.

Finally, I empirically analyze both direct and indirect effect of reputation on brand spillover. Reputation is a perceptional construct which may influence the choice of potential exchange partner. Moreover, good reputation may be the source of competitive advantage through its effect not only on the progress of cooperation itself, but on the outcomes as well. Considering there are some linkages between corporate brands and reputation, in this study I argue that reputation of one company will have a positive direct relationship to the brand spillover effect for another firm in B2B dyad. The significant positive relationship is found between reputation of a partner firm and brand spillover effect on focal company. However, no support was found for the influence of focal firm's reputation.

In line with research problem I suggest that the relationship between reputation of one partner and brand spillover for another in the dyad should be moderated by the choice of relational governance. To be more precise I assume that the choice of more "close" flexible governance (relational) will result in more positive relationship between reputation and brand spillover constructs. The empirical analysis supports this suggestion, but only for the effect of *focal* reputation on *partner's* brand spillover. Visual analysis of this moderation (Figure 4.1) shows that for companies with high level of reputation, the choice of more relational governance will result in a greater level of spillover effect for partner firm, than if they choose lower level of relational governance. On the contrary, in a condition of low reputational level, low relational governance shows greater brand spillover than high relational governance form. It can be explained by the fact that in the case of lower reputation level, other external factors can be the predictors of the change in corporate brands' stretching.

Overall, this study is investigating intangible, perceptional constructs relying on subjective scales, personal attitude and evaluations of managers of companies operating on B2B market. Thus, some biased responses may take places. For example, managers may tend to overestimate their companies' reputation or underestimate their partners' one, give inaccurate assessment of contracting capabilities or details specification in contracts etc. That may result in a lack of variation in particular predictors and therefore in the insignificant relationships of the proposed constructs.

Additionally, in this analysis relatively small sample and large number of variables decrease the degrees of freedom, resulting in the increase of the width of confidence interval. The latter statistically explains a large amount of insignificant variables in the model, whereas in reality they might have strong true relationship. Thus, the easiest way to increase statistical significance and improve the results of this analysis is to test the same model using larger sample.

Each theoretical model should be supported by a set of control variables, which can provide additional information about possible influences on analyzed concepts. In this research relationship-specific investments and perceived fit between partnering companies were found significantly related to the focal firm's brand spillover effect. These findings are in line with previous arguments. It means that the more companies invest in common business and the more they are perceived as good partners, the stronger and closer mutual relationship may be developed. Hence it will result in a greater spillover effect for focal firm. Additionally, market uncertainties and measurement ambiguity appeared to have positive direct relationship to brand spillover effect on partner firm. In the uncertain environmental conditions as well as in the case, when it is hard to assess the performance and the level of partner firm's efforts, it might be costly and inefficiently to rely on the formal contracting only. Thus, companies may introduce more relational governance which results in higher brand spillover. In sum, the analysis of control variables has proven that there are other predictors the B2B managers should consider to reach the proficient level of corporate brands and spillover management.

# 5.1 Theoretical implications

From the theoretical standpoint, the present thesis contributes to brand spillover research in that the brands role in B2B perspective is identified. Existing marketing literature has discussed brands spillover effects in brand alliances (e.g. Simonin and Ruth 1998, Suh and Park 2009, Rao, Qu and Riekert 1999), parent brand extensions (Park et al. 1991, Völckner and Sattler 2006, Aaker and Keller 1990, Balachander and Ghose 2003, Lei, Dawar and Lemmink 2008 and many others) and co-branding (e.g. Kalafatis et al. 2012, Erevelles et al. 2008 and Baumgarth 2004). This study's brand spillover research extension and proposition is that company's brands in B2B relationship will act in the same way they do during brand alliances or in brand portfolios.

However, it is necessary to consider that B2B companies are administrated by slightly different "rules" than companies in alliances. Hence, the theoretical model included predictors from transaction costs economics and governance value analysis frameworks (Williamson 1979, 1996; Ghosh and John 1999, 2012 and others).

Further, existing studies in B2B field are limited in terms of the role of brands and their management (Keller and Kotler 2012). To my knowledge, no research was done to analyze spillover effect as a *consequence* of formal and relational governance choice. Thus, proving the proposition that relational governance form choice is positively related to the brand spillover effect for partner firm is a significant theoretical contribution to both brand and B2B governance literature.

This thesis contributes to a number of studies which were dedicated to the simultaneous (not separate) analysis of formal and relational governance as complements or substitutes (Poppo and Zenger 2002, Cannon, Achrol and Gundlach 2000 and others); or formal contracting as predictor of relational governance (Sande and Haugland 2011) etc. In this study both governance forms are examined at the same time. I assume that managers of B2B companies do not have to make a choice between either formal or relational governance. Instead, interorganizational companies are expected to manage their B2B relationships using optimal for particular exchange combination of both governance structures. It should be done to ensure greater B2B performance outcomes and possible generation of brand spillover. The latter is the core topic of the current study. Additional analysis of governance form interaction showed that formal and relational governance forms relate to brand spillover effect more like substitutes than complements.

Another theoretical contribution is that this thesis provides insights into how to manage brand spillover effect. Recalling that this study is dealing with interorganizational context, I analyze company's resource base (as part of GVA) as a predictor (Ghosh and John 1999; 2012). In line with Ghosh and John (1999) arguments, I align company's resources with particular governance form to estimate the impact on the relationship outcome under the influence of classical TCE exchange attributes. The current study extends GVA model by analyzing specifically relational governance form choice and by introducing a particular

outcome variable – brand spillover. The findings show that aligning company's resource variable with relational governance choice has a negative effect on brand spillover for both focal and partner firm.

This study introduces reputation and contracting capabilities as possible predictors of brand spillover. I find that the effect of former should be moderated by relational governance, whereas the latter – by formal. The results show that both constructs impact brand spillover differently: reputation has a positive effect while moderated by relational governance, whereas contracting capabilities have negative effect while moderated by formal contracting choice. Thus, these findings are a significant contribution to governance form analysis in B2B markets (e.g. Ghosh and John 1999, 2012; Williamson 1979, 1991) and to discussion of contracting capabilities role in managing B2B relationships (e.g. Argyres and Mayer 2007, Weber and Mayer 2005).

Analyses of moderating effect of governance form choice and the respective findings (including graph interaction interpretation) provide insights into the strategic brand opportunities of managing corporate brand spillover effect. Hence, the proper choice of governance structure and the accurate evaluation of reputation, resources and contracting capabilities may lead to the expected level of brand spillover as an outcome of B2B partnership, which can be a source of strong competitive advantage.

Finally, the present study makes a contribution to the research of B2B market in Ukraine, which still remains hardly explored in comparison to international B2B research (Yurchak 2011, 2012). No respective studies of corporate brands spillover on Ukrainian B2B market were conducted, particularly with regard to governance form choice.

### 5.2 Managerial implications

From the findings discussed above, it is possible to draw on the main conclusions of this study that can be practically implied. While operating in the uncertain environment B2B managers should be aware of the range of opportunities they get from accurate management of their interorganizational relationships. This argument is even more efficient when the outcome of the relationship is an intangible perceptional concept, like corporate brand spillover effect. It takes a long time for companies to "build" their corporate brands (Keller 2008).

Moreover, it takes time and efforts to generate advantages (or eliminate disadvantages) from brands spillover.

This thesis provides several suggestions for managerial implication. First, managers of the companies operating in B2B markets should not make choices between two types of governance forms. Instead, they should look for the ultimate combination of formal contracting and relational governance, which will be aligned to all external circumstances and will optimize final exchange outcomes.

Since I am not making distinctions between positive or negative effect from brand spillover in this thesis, it is up for managers to make choices whether they want it to be an outcome of a particular B2B relationship or not. Therefore, this study provides insights on how it is possible to manage brand spillover due to the obtained reputation, contracting capabilities and resources, and the respective governance form choice. In particular, if B2B managers want to enhance brand spillover for their own company, they should rely more on the choice of exchange partners with high reputational level. Additionally, if managers perceive brand spillover for partner firm as a desired outcome, they should support high reputation of the focal firm with a choice of more relational governance.

On the contrary, if managers aim to limit brand spillover effect in favour of their partner's firm due to high level of resources, they should choose more formal governance structure. Moreover, aligning high contracting capabilities with formal contracting will diminish effect of brand spillover for the exchange partner.

Finally, it might be beneficial to pay attention to exchange partners' perceived fit as it has direct positive relationship towards brand spillover. Thus, if companies want to generate spillover effect out of their relationship, then the more mutually close and good business partners they are perceived, the greater brand spillover will occur.

# **5.3** Limitations and suggestions for future research

The goal of this thesis was to extent existing interorganizational and marketing literature with the research of yet unexplored concept – brand spillover effect in B2B markets. However, this study has important limitations which denote possible further research extensions.

First, the choice of Ukrainian B2B market is quite a narrow subject of analysis, which requires specific data collection methods. Due to the absence of any respective sources of data for this research, a snowball sampling technique was applied. However, conducting in-depth interviews with managers of B2B companies may provide more insights on the unobserved concepts.

Second, this study's findings might be improved by analyzing the influence of governance choice on brand spillover effect over time. To be more precise, it might be useful to analyze to what extent brand spillover will change in time due to the change in the governance form (e.g. from more relational to more formal or vice versa). These could be solved by using panel data collection method. Furthermore, such analysis will enable studying additional exogenous variables, which were not controlled for in the present research model, but can have significant relationship to study constructs. The latter will solve the issue of endogeneity.

Third, even though generalizability of this study is an essential suggestion, this study might have some context limitations due to the particular characteristics of *Ukrainian* business market. This problem might be resolved either by extension of the area of analysis (e.g. Eastern or Western Europe) or by conducting comparative analysis between countries.

Fourth, several studies are dedicated to the negative brand spillover effect (e.g. Suh and Park 2009, Lei, Dawar and Lemmink 2008). However, the primary aim of current research is to verify the existence of such effect and to provide suggestions how to manage it. No additional estimations of positive versus negative connotations of brand spillover effect were made. Thus, analyzing negative brand spillovers in B2B markets might be an interesting topic for future research.

Fifth, the analysis was based on subjective perceptual data which enables the threat of judgmental or social desirability bias. Nevertheless, recalling specificity of theoretical model, no other method could be applied due to time, efforts and availability of accounting data limitations. Hence, a possible extension to this study might be the analysis objective resources (corporate documents stating governance mechanism of B2B relationship, financial statements that prove

increase or decrease of brand equity, content analysis of publications covering the exchange partnership etc.).

Finally, in the present study, I estimate companies' resource base and contracting capabilities variables for only one side of the buyer-seller dyad. Additionally, partner's reputation and brand spillover effect for partner firm might be limited due to the measurement based on their B2B partners' perception (not actual responses of another side of the dyad). Future research should therefore include the estimation of both buyers' and sellers' sides to make more accurate and generalizable conclusions.

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# 7.0 Appendices

#### Appendix 1 Cover Letter and questionnaire

Hello!

My name is Anna Stepanova. I am a Master of Science student at BI Norwegian Business School in Oslo, Norway. I am writing a thesis about companies' brands in B2B relationships. The purpose of my research is to contribute to the existing literature on brands in interorganizational relationships by analyzing the ways of managing B2B relationships and companies' brands spill-over effects in particular. For that reason I am interested in conducting an online survey among managers of Ukrainian companies involved in business-to-business relationships.

Thank you for your willingness to participate in my research! The quality of this study depends on your answers!

The questionnaire should take no more than 20 minutes of your time. It is completely confidential and will be used for study purposes only. The summary and the main findings of this study will be provided upon request to all informers after the thesis is submitted (September 2013). Thus they can compare themselves with the average.

This survey consists of 5 blocks of questions. There are no right or wrong answers. Please, share your personal opinion while answering the following questions.

If you have any questions, do not hesitate to contact me:

Anna.Stepanova@student.bi.no annast90@gmail.com

+4792508343

+380506966393

Best regards,

Anna Stepanova

BI Norwegian Business School

#### Part A Questions about your company

Please, answer the following questions about your own firm. The information you provide will be strictly confidential.

1. Please, indicate how long you have been working in your company
About year(s) and month(s).
2. Is your company operating:
☐ Nationally (Ukraine only)
☐ Internationally
3. Please, indicate how many employees there are in your company
Approximately employees.
4. Please, approximately indicate your company's turnover:
Approximately UAH.

5. Indicate the extent to which you agree with the following statements about your company:

	Totally Disagree						Totally agree
The company offers high quality products and services	1	2	3	4	5	6	7
The company offers products and services that are good value for money	1	2	3	4	5	6	7
The company stands behind its products and services	1	2	3	4	5	6	7
The company has excellent leadership	1	2	3	4	5	6	7
The company recognizes and take advantages of market opportunities	1	2	3	4	5	6	7
The company has defined a vision for its future	1	2	3	4	5	6	7
The company is well managed	1	2	3	4	5	6	7
The company looks like an excellent place to work	1	2	3	4	5	6	7
The company's employees are treated well	1	2	3	4	5	6	7
The company is socially responsible	1	2	3	4	5	6	7
The company is environmentally friendly	1	2	3	4	5	6	7
The company tends to outperform its competitors	1	2	3	4	5	6	7
The company is financially sound	1	2	3	4	5	6	7
The company have strong prospects for future growth	1	2	3	4	5	6	7

#### 6. Please, indicate how customers perceive your company

	Strongly Disagree						Strongly agree
Customers find company's performance satisfiable	1	2	3	4	5	6	7
Customers trust your company	1	2	3	4	5	6	7
Customers are loyal to your company	1	2	3	4	5	6	7
Customers spread positive word of mouth about your company	1	2	3	4	5	6	7
Customers have a good feeling about the company	1	2	3	4	5	6	7
Customers admire and respect the company	1	2	3	4	5	6	7

7. Please, rate the level of brand familiarity of your company among stakeholders:

Unfamiliar					Hi	Highly familiar			
1	2	3	4	5	6	7			

#### Part B Questions about your company's B2B partner firm

In the following part, please, think of one of your B2B partner companies. Your answers will not be disclosed due to strict confidentiality. You do not need to name your partner company. Simply answer the questions with regards to it.

8. How long has your company been in B2B relationship with this partner
company?
About year(s) and month(s).
9. Is your partner company operating:
☐ Nationally (Ukraine only)
☐ Internationally
•
•
10. Please, indicate how many employees there are in your partner company:
Approximately employees.
11. Please, approximately indicate your partner's turnover:
Approximately UAH.

# 12. To what extent do you agree with the following statements about <u>your partner firm?</u>

	Totally Disagree						Totally agree
The partner firm offers high quality products and services	1	2	3	4	5	6	7
The partner firm offers products and services that are good value for money	1	2	3	4	5	6	7
The partner firm stands behind its products and services	1	2	3	4	5	6	7
The partner firm has excellent leadership	1	2	3	4	5	6	7
The partner firm recognizes and take advantages of market opportunities	1	2	3	4	5	6	7
The partner firm has defined a vision for its future	1	2	3	4	5	6	7
The partner company is well managed	1	2	3	4	5	6	7
The partner firm looks like an excellent place to work	1	2	3	4	5	6	7
The partner firm's employees are treated well	1	2	3	4	5	6	7
The partner firm is socially responsible	1	2	3	4	5	6	7
The partner firm is environmentally friendly	1	2	3	4	5	6	7
The partner firm tends to outperform its competitors	1	2	3	4	5	6	7
The partner firm is financially sound	1	2	3	4	5	6	7
The partner firm have strong prospects for future growth	1	2	3	4	5	6	7

### 13. Please, indicate how customers perceive your partner company:

	Strongly						Strongly
	Disagree						agree
Customers find the partner company's performance satisfiable	1	2	3	4	5	6	7
Customers trust the partner company	1	2	3	4	5	6	7
Customers are loyal to the partner company	1	2	3	4	5	6	7
Customers spread positive word of mouth about the partner firm	1	2	3	4	5	6	7
Customers have a good feeling about the partner firm	1	2	3	4	5	6	7
Customers admire and respect the partner firm	1	2	3	4	5	6	7

## 14. Will you recommend your partner firm as a good business partner?

Defini	itely wi	11		De	efinitely	y will		
not red	comme	nd				r	ecomm	end
	1	2	3	4	5	6	7	

15. Please, indicate the level of your partner firm's brand familiarity among stakeholders:

Unfa	miliar					Hi	ghly fan	niliar
	1	2	3	4	5	6	7	

In the following part you will be asked to evaluate the B2B relationship between your company and your partner firm you were evaluating above.

16. To what extend do you agree with the following statements about the impact of the relationship with partner firm on your own company brand?

	Strongly Disagree						Strongly agree
It has improved my company's reputation among customers	1	2	3	4	5	6	7
It has added value to my company's brand equity	1	2	3	4	5	6	7
It has made my company's brand more visible	1	2	3	4	5	6	7
It has increased the brand awareness of my company	1	2	3	4	5	6	7
It has benefited to the efficiency of company's other business relationships	1	2	3	4	5	6	7
It has increased my company's brand attitude	1	2	3	4	5	6	7
It has a negative impact on my company's brand familiarity	1	2	3	4	5	6	7
My company's corporate brand image has benefited from this relationship	1	2	3	4	5	6	7

17. To what extend do you agree with the following statements about the impact of this relationship on your <u>partner firm's brand</u>?

	Totally						Totally
	Disagree						agree
It has improved partner firm's reputation among its customers	1	2	3	4	5	6	7
It has added value to the partner firm's brand equity	1	2	3	4	5	6	7
It has made partner firm's brand more visible	1	2	3	4	5	6	7
It has increased the brand awareness of the partner firm	1	2	3	4	5	6	7
It has benefited to the efficiency of partner firm's other business relationships	1	2	3	4	5	6	7
It has increased partner firm's brand attitude	1	2	3	4	5	6	7
It has a negative impact on the partner firm's brand familiarity	1	2	3	4	5	6	7
Overall, the partner firm corporate brand image has benefited from this relationship	1	2	3	4	5	6	7

18. How will you rate the level of perceived fit between your company's and your partner firm's brands?

Low fi	t						High fit	
	1	2	3	4	5	6	7	

#### Part B Agreements and relationships between partners

19. Contracts as a tool of governance form choice specify the terms of B2B relationships, including the parties' rights, obligations and responsibilities. Please, indicate how detailed you specify contract terms in your company

	Not specified			specification of	of details is:	
		no details —	Low	Medium	High	
Performance goals	1	2	3	4	5	
Parties' tasks (including production, delivery etc.)	1	2	3	4	5	
Monitoring, audit, quality control	1	2	3	4	5	
Information sharing obligations	1	2	3	4	5	
Rights to overtake particular decisions	1	2	3	4	5	
Property rights (technology possession rights, right to obtain or use income etc.)	1	2	3	4	5	
Legal consequences of contract breach	1	2	3	4	5	
Consequences and procedures of handling unexpected events	1	2	3	4	5	
Procedures of managing conflicting situations	1	2	3	4	5	

20. In this question, please, indicate to what extent the following statements describe your company's relationship with partner firm:

	Completely						Completely		
	inaccurate	e				accurate			
	description	on				des	scription		
Parties are expected to be able to make adjustments during					_		_		
B2B relationship to cope with changing circumstances	1	2	3	4	5	6	7		
Parties are eager to work out new deal in case of any									
unexpected situation rather than holding to the previous	1	2	3	4	5	6	7		
relationship conditions									
Partner relationships can be characterized as flexible in		_	_		_	_	_		
response to external changes	1	2	3	4	5	6	7		
Parties share information that might be interesting/useful			_		_	_	_		
for another party	1	2	3	4	5	6	7		
Information is frequently shared and on the informal basis	1	2	3	4	5	6	7		
The parties provide proprietary information if it can help		_	_		_				
the other party	1	2	3	4	5	6	7		
The parties keep each other informed about events or					_				
changes that may affect the other party	1	2	3	4	5	6	7		
Problems that arise in the course of this B2B relationship									
are treated by the parties as joint rather than individual	1	2	3	4	5	6	7		
responsibilities									
The parties are committed to improvements that may									
benefit the relationship as a whole, and not only the	1	2	3	4	5	6	7		
individual parties									
The parties in this B2B relationship do not mind owing			-			_			
each other favors	1	2	3	4	5	6	7		
This B2B relationship is highly relied on trust among			-		_				
parties	1	2	3	4	5	6	7		
My company highly depends on the performance of the			-			_			
partner firm	1	2	3	4	5	6	7		
It is important for my company to have joint relational		2	2	4			7		
investments with the partner company	1	2	3	4	5	6	7		
The relationship with this partner company is hard to			2	4			7		
substitute with another potential B2B partner	1	2	3	4	5	6	7		

# Part C Institutional environment, company's resources and contracting capabilities

#### 21. To what extent do you agree with the following:

	Totally						Totally
	Disagree						agree
My company's industry is heavily controlled by institutions	1	2	3	4	5	6	7
Market legal regulations are efficient	1	2	3	4	5	6	7
The level of corruption is high in our industry	1	2	3	4	5	6	7
Legal institutions positively contribute to contracts enforcement	1	2	3	4	5	6	7
Legal institutions performance is volatile	1	2	3	4	5	6	7
I perceive institutional environment as constricting	1	2	3	4	5	6	7
The courts performance in resolving business conflicts is trustworthy	1	2	3	4	5	6	7
Institutional environment is vulnerable in the market	1	2	3	4	5	6	7
Legal system effectively helps to solve uncertainties in B2B relationships	1	2	3	4	5	6	7
Institutional and legal environment is perceived as highly regulatory	1	2	3	4	5	6	7

22. Is your	company a part of any professional or business network?
	Yes
	No

23. If yes, how do you evaluate your company's network density?

Network density means the average strength of relations in a network, as well as the level of information and beliefs sharing.

Low density						High density				
	1	2	3	4	5	6	7			

24. Indicate, to what extent you agree with the following statements concerning your company's resources:

	Strongly Disagree						Strongly agree
My company obtains unique equipment	1	2	3	4	5	6	7
My company uses innovative processes	1	2	3	4	5	6	7
The company is active in gaining patents	1	2	3	4	5	6	7
The company invests heavily in R&D	1	2	3	4	5	6	7
I perceive brand equity of my company as high	1	2	3	4	5	6	7
Company's customers are loyal	1	2	3	4	5	6	7
My company has large market share	1	2	3	4	5	6	7
My company's suppliers acquire high switching costs	1	2	3	4	5	6	7
Supply chain partners are trustworthy	1	2	3	4	5	6	7
Relationships with trading partners are reliable	1	2	3	4	5	6	7
Channel partners cooperation is high	1	2	3	4	5	6	7
My company has sustainable relationship with channel partners	1	2	3	4	5	6	7

25. Please, indicate the level of experience you have obtained in designing contracts:

Low							Highl	У
experi	enced					e	xperien	iced
	1	2	3	4	5	6	7	

26. How experienced you are in negotiating contracts?

Low							Highl	y
experi	enced					e	nced	
	1	2	3	4	5	6	7	

27. Please, indicate whether you agree with the following statements concerning capabilities which your company has in the process of designing contracts in B2B relationships:

	Totally						Totally
	Disagree						agree
Specific roles are defined to employees at each step of contracting process in our company	1	2	3	4	5	6	7
Each party involved in designing and negotiating contracts knows its responsibilities	1	2	3	4	5	6	7
Specific knowledge sharing process is managed well during contracting processes	1	2	3	4	5	6	7
Employees participating in contract designing are the same as those participating in contract negotiating	1	2	3	4	5	6	7
Knowledge resource allocation in my company depends on the exchange requirements (different professionals can be involved with regards to the specific area of contracting)	1	2	3	4	5	6	7
Managers, lawyers and engineers of my company successfully manage trade-offs for different types of contractual provisions	1	2	3	4	5	6	7

#### Part D Attributes of relationships with partners

28. Please, indicate whether you agree with the following statements concerning relational specific investments generated between your company and a partner firm you were evaluating above:

	Strongly						Strongly
	Disagree						agree
My company has made a significant investment in							
relationship-specific equipment (tailored to this particular	1	2	3	4	5	6	7
B2B relationship only)							
My company has spent a specific amount of non-refundable		_	2		_	_	
money in this particular interorganizational relationship	1	2	3	4	5	6	/
The company has invested time and energy in training and							
qualifying in order to adjust to this particular B2B	1	2	3	4	5	6	7
partnership							
My company has made comprehensive investments to							
restructure and integrate production facilities with partner's	1	2	3	4	5	6	7
ones							

## 29. Please, evaluate market environment your company is operating in:

	Strongly						Strongly
	Disagree						agree
My company's industry is highly innovative	1	2	3	4	5	6	7
The demand for end products in our industry varies continually	1	2	3	4	5	6	7
My company's main competitors are constantly							
developing new products and invest in product improvements	1	2	3	4	5	6	7
My companies main product/service has short life cycle	1	2	3	4	5	6	7
The economic trends in market are very vulnerable	1	2	3	4	5	6	7

# 30. In the following question, please, evaluate your partner's performance measurement challenges:

	Very easy			V	ery difficul	t
It is difficult to evaluate the quality of product/service at		_	_		_	
the time our partner firm delivers it	1	2	3	4	5	
It is difficult to compare this product/service to similar ones	to similar ones 1 2		3	4	5	
It is difficult to compare price/quality ratio of potential		_	_		_	
partner's product/service	1	2	3	4	5	

# Thank you very much for participating in this survey!

The data for my thesis is collected through snowball sampling technique. Thus, I kindly ask you to refer me to other managers from Ukrainian companies involved in B2B relationships and leave their contact information in the box below. This is not obligatory. Still, it would a great help for my research!

# **Appendix 2 Exploratory Factor analysis: factor loadings results**

	<u>.                                      </u>			
	Brand spillover of a partner firm	Brand spillover of a focal firm	Relational governance	Formal governance
BrandSpillOverPF3	0,942			
BrandSpillOverPF4	0,935			
BrandSpillOverPF6	0,926			
BrandSpillOverPF2	0,901			
BrandSpillOverPF8	0,895			
BrandSpillOverPF1	0,838			
BrandSpillOverPF5	0,826			
BrandSpillOver1		0,892		
BrandSpillOver3		0,89		
BrandSpillOver8		0,886		
BrandSpillOver4		0,876		
BrandSpillOver2		0,805		
BrandSpillOver6		0,787		
BrandSpillOver5		0,773		
Infosh3			0,706	
Solid2			0,692	
Infosh2			0,668	
Infosh4			0,642	
Infosh1			0,631	
Solid3			0,627	
Solid1			0,605	
Trust			0,575	
Reliance2			0,552	
Reliance3			0,542	
Flex2			0,426	
Flex3			0,407	
Reliance1			0,396	
Flex1			-	
Form3				0,847
Form4				0,832
Form8				0,816
Form7				0,815
Form5				0,785
Form9				0,775
Form6				0,731
Form2				0,656
Form1				0,529

<sup>&</sup>lt;sup>a</sup> Extraction Method: Principal Component Analysis

# **Exploratory Factor analysis: factor loadings results (cont.)**

			Institutional		
	Reputation of a Rep	outation of a		Company's	Contracting
		tner firm	environment		capabilities
WorkplEnv2	0,815				•
WorkplEnv1	0,806				
LeadVision1	0,791				
LeadVision2	0,774				
CustAdm	0,77				
LeadVision3	0,742				
CustFeel	0,741				
FinancPerf3	0,732				
WorkplEnv3	0,731				
SocResp2	0,725				
SocResp1	0,724				
ProdServ1	0,708				
ProdServ3	0,684				
CustLoyl	0,611				
CustWOM	0,598				
FinancPerf1	0,596				
CustTrust	0,576				
ProdServ2	0,568				
FinancPerf2	0,567				
CustSat	0,462				
WorkplEnvPF1		0,825	5		
CustWOMPF		0,818	3		
WorkplEnvPF2		0,817	7		
LeadVisionPF1		0,813	3		
CustFeelPF		0,801	1		
WorkplEnvPF3		0,797	7		
ProdServPF1		0,793	3		
CustTrustPF		0,79	)		
LeadVisionPF2		0,768	3		
ProdServPF3		0,767	7		
CustAdmPF		0,765	5		
SocRespPF1		0,75	5		
LeadVisionPF3		0,729	)		
CustLoylPF		0,722	2		
FinancPerfPF2		0,72	2		
FinancPerfPF3		0,712	2		
SocRespPF2		0,687	7		
RecPar		0,683	3		
CustSatPF		0,6	5		

ProdServPF2	0,588	
FinancPerfPF1	0,391	
ILEnv6	0,778	
ILEnv1	-0,706	
ILEnv5	0,684	
ILEnv3	0,642	
ILEnv10	-0,594	
ILEnv8	0,35	
ILEnv4	-0,27	
ILEnv7	-0,244	
ILEnv9	-	
ILEnv2	-	
SupChain4	0,808	
SupChain5	0,803	
SupChain2	0,742	
SupChain3	0,742	
Tech4	0,727	
Tech1	0,71	
SupChain1	0,7	
Tech2	0,675	
Tech3	0,667	
EndCons2	0,657	
EndCons1	0,619	
EndCons3	0,567	
Knman1		0,89
Knman3		0,797
Rolespec2		0,786
Knman2		0,785
Rolespec3		0,705
Rolespec1		0,626

<sup>&</sup>lt;sup>a</sup> Extraction Method: Principal Component Analysis

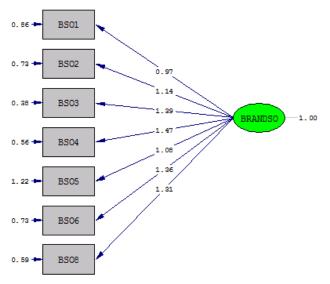
# **Exploratory Factor analysis: factor loadings results (cont.)**

	Relationship- specific investments	Measurement ambiguity	Marketing uncertainty
RSInv1	0,878		
RSInv2	0,86		
RSInv4	0,847		
RSInv3	0,745		
MA2		0,904	
MA3		0,897	
MA1		0,869	
Mrkunc2			0,725
Mrkunc3			0,694
Mrkunc5			0,634
Mrkunc4			0,475
Mrkunc1			0,409

<sup>&</sup>lt;sup>a</sup> Extraction Method: Principal Component Analysis

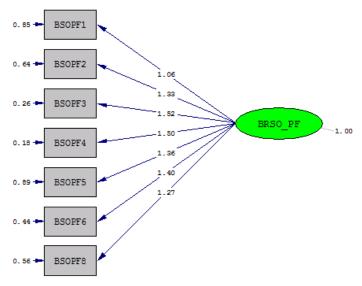
# Appendix 3 Confirmatory factor analysis: single-factor measurement models

# Brand spillover effect on focal firm:



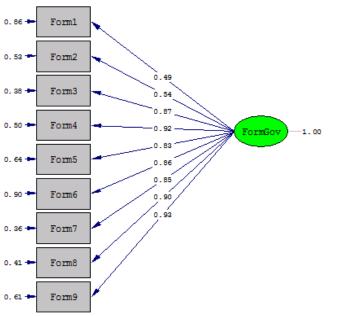
Chi-Square=36.54, df=14, P-value=0.00087, RMSEA=0.137

# Brand spillover effect on focal firm:



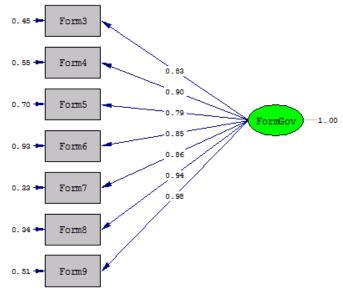
Chi-Square=56.40, df=14, P-value=0.00000, RMSEA=0.188

# Formal governance:



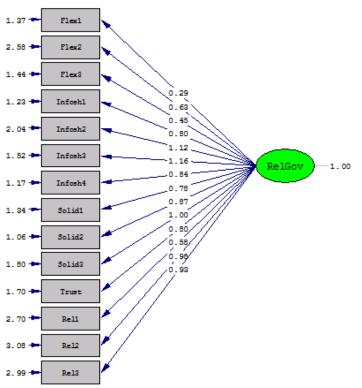
Chi-Square=124.93, df=27, P-value=0.00000, RMSEA=0.205

### After factor reduction:



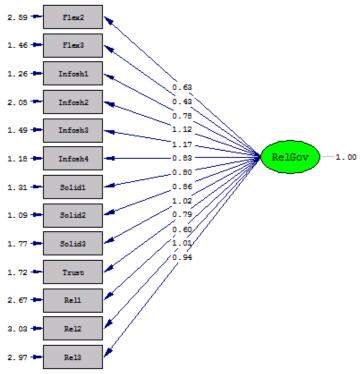
Chi-Square=81.97, df=14, P-value=0.00000, RMSEA=0.238

#### **Relational Governance:**



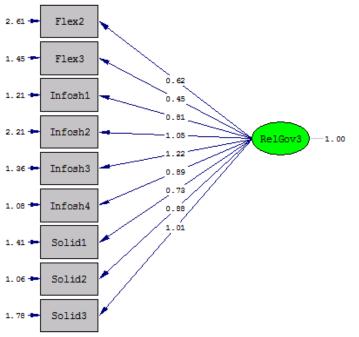
Chi-Square=173.15, df=77, P-value=0.00000, RMSEA=0.120

#### After first factor reduction:



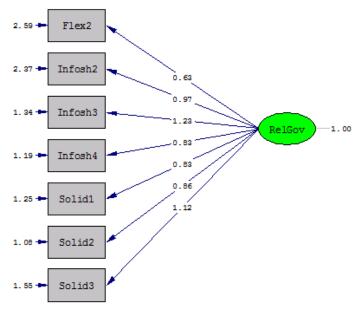
Chi-Square=155.50, df=65, P-value=0.00000, RMSEA=0.127

After second factor reduction:



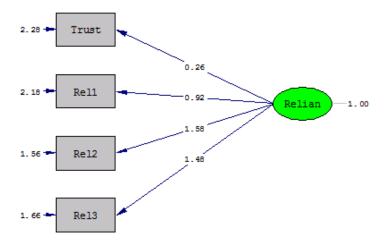
Chi-Square=72.27, df=27, P-value=0.00001, RMSEA=0.140

### After third factor reduction:



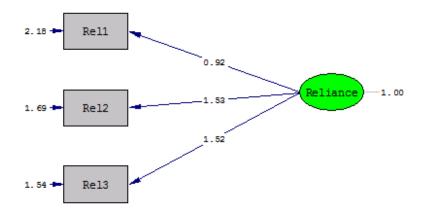
Chi-Square=29.83, df=14, P-value=0.00806, RMSEA=0.115

# Reliance:



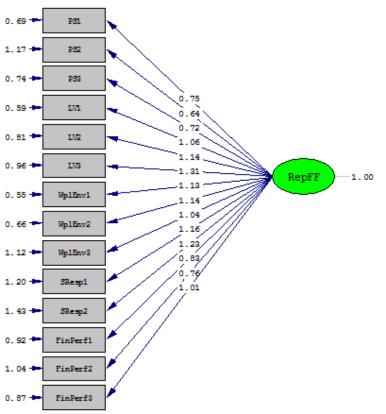
Chi-Square=1.12, df=2, P-value=0.57237, RMSEA=0.000

# After first factor reduction:



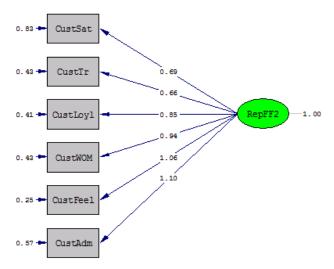
Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

# Reputation of a focal firm:



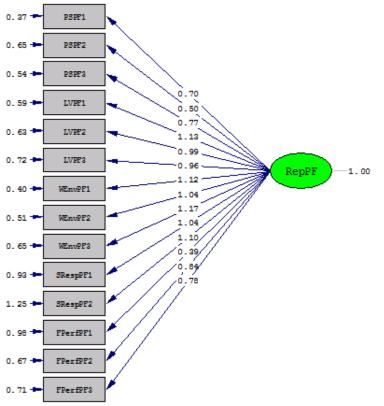
Chi-Square=211.37, df=77, P-value=0.00000, RMSEA=0.142

# Reputation of a focal firm (cont.):



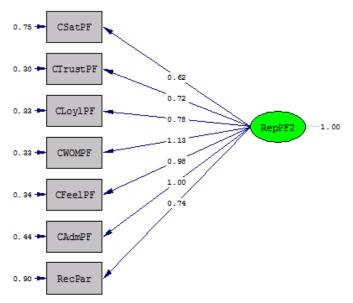
Chi-Square=28.92, df=9, P-value=0.00067, RMSEA=0.160

# Reputation of a partner firm:



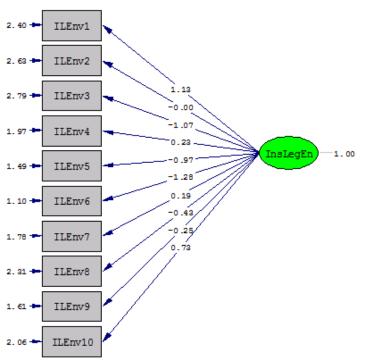
Chi-Square=216.64, df=77, P-value=0.00000, RMSEA=0.145

# Reputation of a partner firm (cont.):



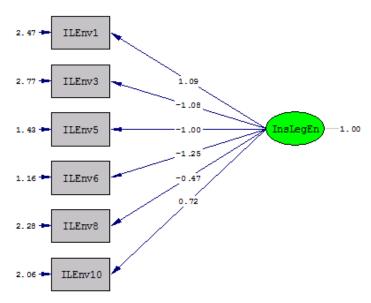
Chi-Square=65.16, df=14, P-value=0.00000, RMSEA=0.206

# **Institutional and legal environment:**



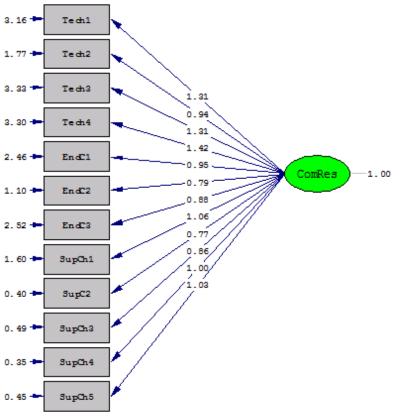
Chi-Square=144.32, df=35, P-value=0.00000, RMSEA=0.191

#### After factor reduction:



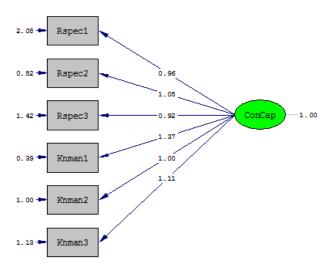
Chi-Square=25.31, df=9, P-value=0.00265, RMSEA=0.145

# **Company's resources:**



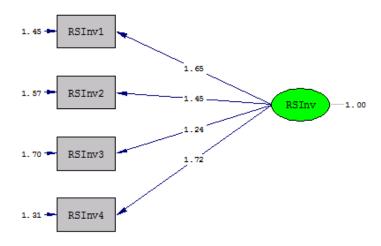
Chi-Square=218.28, df=54, P-value=0.00000, RMSEA=0.188

# **Contracting capabilities:**



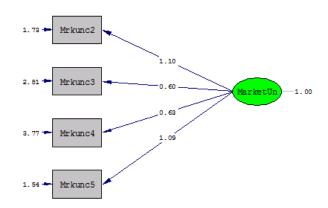
Chi-Square=25.89, df=9, P-value=0.00213, RMSEA=0.148

# **Relationship-specific investments:**



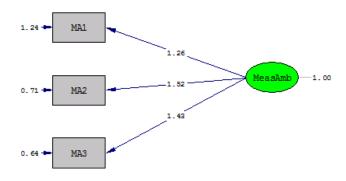
Chi-Square=0.21, df=2, P-value=0.89839, RMSEA=0.000

# **Marketing uncertainties:**



Chi-Square=8.36, df=2, P-value=0.01530, RMSEA=0.192

# Measurement ambiguity:



Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

# **Appendix 4 Squared correlation and AVE scores**

	Brand spillover effect for focal firm	Brand spillover effect for partner firm	Formal Relational governance form form		Reliance	Reputation of a focal firm	Reputation Reputation of a focal of a partner firm (cont) firm		Reputation Ir of a partner firm (cont)	Institutional and legal environment	Company's Contracting resources capabilities	Recontracting apabilities in	Relationship- specific u investments	Market icertaint ies	Measureme nt ambiguity
Brand spillover effect for focal firm	1,000														
Brand spillover effect for partner firm	0,150	1,000													
Formal governance form	0,012	0,066	1,000												
Relational governance form	0,045	0,120	0,081	1,000											
Reliance	0,133	0,050	0,013	0,211	1,000										
Reputation of a focal firm	0,092	0,159	0,061	0,052	0,035	1,000									
Reputation of a focal firm (cont)	0,073	0,116	0,001	0,054	90000	0,320	1,000								
Reputation of a partner firm	0,105	90000	0,000	0,082	0,047	0,128	0,232	1,000							
Reputation of a partner firm (cont)	0,130	0,000	0,028	0,033	0,043	0,078	0,256	0,647	1,000						
Institutional and legal environment	0,000	0,005	0,000	0,000	0,030	0,001	0,000	0,005	0,000	1,000					
Comp. resources	0,018	0,298	0,065	0,034	0,008	0,308	0,194	0,025	0,005	0,035	1,000				
Contr. capabilities	0,058	0,181	0,134	0,015	0,007	0,112	0,054	0,000	0,022	0,001	0,202	1,000			
R-S investments	0,151	0,108	0,025	0,150	0,242	0,089	0,003	0,026	0,002	0,035	0,076	0,089	1,000		
Market uncertainties	0,008	0,089	0,002	0,004	0,001	0,052	0,002	0,001	0,013	0,005	0,027	0,103	0,065	1,000	
Measurement ambiguity	0,017	0,039	0,005	0,057	0,006	0,004	0,051	0,083	0,077	0,023	0,000	0,004	0,048	0,004	1,000
AVE scores	0,678	0,766	0,597	0,361	0,487	0,910	0,614	0,535	0,604	0,316	0,444	0,517	0,599	0,264	969,0

# **Appendix 5 Preliminary thesis report:**

BI Norwegian Business School – Preliminary Thesis Report

The spill-over effect of companies' brands in B2B relationships: the role of governance form choice

Hand-in date: 15.01.2013

Supervisor: **Jon Bingen Sande**, Associate Professor

Campus: BI Oslo

Examination code and name:

**GRA 19003 Preliminary thesis report** 

Programme:
Master of Science in Strategic Marketing Management

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#### Abstract

In academic circles brands in B2B markets get less attention than brands in B2C markets. That creates a huge gap in understanding the importance of brand management in interorganizational relationships. This thesis aims to extend the existing B2B branding literature by analyzing the spill-over effect of companies' brands in interorganizational relationships. The current paper tends to examine whether there is a significant influence of governance form choice on market/relational continuum on brand spill-over effect in B2B relationship for either partner or focal firm. Moreover, the influence of institutional and legal environment, companies' reputation, resources and contracting capabilities on brand spill-over effect through the mediating influence of governance form will be analyzed.

Based on discussed research findings, seven hypotheses are developed and research model presented. A survey among Ukrainian B2B companies will be conducted to collect the necessary data. As a result, it will be used to analyze and test the main thesis assumptions.

#### Introduction

Underestimation of brand management in B2B relationships led to a large gap in academic research on this topic. It is assumed that sometimes companies fail to realize that brands play important part not only in consumer markets, but in business-to-business markets as well (Keller and Kotler 2012). Every B2B company has its own 'portfolio' of ex- or potential partners. To create interorganizational relationships with those partners, each company has to go through a set of steps, including the actual choice of a partner and the choice of governance form which will guide their business relationship. Thus, companies' history of previous relationships, reputation, as well as the image and brand equity of possible partners may become valuable assets in the process of making that kind of choices.

In academic circles there exist some studies on brands and brand management in B2B markets (Kotler, Pfoertsch 2006, Keller and Kotler 2012, Webster and Keller 2004, Erevelles et al. 2008, Glynn, Motion and Brodie 2007, Aspara, Tikkanen 2008 etc.). However, there are no particular studies dedicated to whether there is a brand spill-over effect in B2B relationship and what can be the reason of it. In this study the main question is how the choices of governance form will influence the extent of brand spill-over effect in B2B relationships. To be more precise, the selection of governance form in this study is considered to be making choices on the governance continuum with essentially two extremes: market governance and relational one.

Moreover, it is argued that B2B brand spill-over effect may be influenced by a set of other aspects, including companies' reputation, institutional environment, companies' resources and capabilities through their effect on the choice of governance form. Basically, various companies' managers should realize that dealing with a partner with well-known name and high brand equity not only guarantees the quality and safety of B2B relationship. It can also be quite beneficial and can bring competitive advantages (e.g. due to brand extension). Taking into account all external circumstances, managers should count for all aspects that can increase this 'spill-over' effect to make B2B relationship even more efficient.

This study aims to contribute to existing B2B branding literature in several ways. First, it tends to extend the current analysis of brands in interorganizational relationships by including the question of governance. The latter, basically, can create limitations to the way companies exchange their brand images. Second, it aims to create insights of what can be done to create advantages from B2B partnership, how can they be more efficient and how it will influence focal firm's and partner's brand equity. Considering aforementioned, the overall research questions of this study are:

How does the choice of governance form on market-relational continuum influence the extent of brand spill-over effect between the companies in B2B relationships? How can governance form mediate the influence of institutional environment the companies operate in, companies' resources, contracting capabilities and reputation of both focal and partner firm on brand spill-over effect?

In the next sections, consistent with the presented topic theoretical findings will be first discussed. Next, research hypotheses will be developed and expected outcomes will be argued, followed by the overall study model. Finally, all methods and research procedure will be analyzed.

# Theoretical background and hypotheses

In this part the main research variables will be discussed, supported by the study hypotheses. Next, the research model will be presented and all interrelationships and possible outcomes argued.

#### Brand spill-over effect in B2B relationships

Branding in interorganizational relationships literature is defined as a psychological phenomenon, a valuable intangible asset, which specifically is a name, logo, sign or symbol that identifies the product or service offerings of one firm and helps differentiate this particular firm from competitors (Webster and Keller 2004, Keller and Kotler 2012). Keller and Kotler (2012) in their research argue that branding is much more focused on the consumers' market. Therefore, brands are often neglected in B2B relationships. Moreover, corporate firms assume that manufacturers' brand names are not significant for influencing purchase agents' decisions. Still, the authors prove that branding is B2B has the

same importance as that in B2C markets. It simplifies the process of making decisions and reduces risks while evoking trust and safety in interorganizational relationships.

Furtehrmore, Webster and Keller (2004) mention that some of the most valuable and powerful brands in the world belong to B2B companies. Homburg, Klarmann and Schmitt (2010) also support the idea of brand importance in interorganizational relations and suggest that brand awareness significantly drives market performance in B2B environments.

In branding academic literature there are some precise discussions on brand extensions (Aaker & Keller 1990; Park et al. 1991; Völckner and Sattler 2006), co-branding (Erevelles et al. 2008), brand merges and acquisitions and brand alliances (Simonin and Ruth 1998; Jaju et al. 2006). Considering all these findings it can be suggested that corporate brands have ability to stretch either to new line products, or to sub-companies which were acquired by the parent brand. In this study, the ability of a corporate brand to stretch to (in other words, to be passed to) another partnering company will be further called *the brand spill-over effect*. According to Sullivan (1990), spill-overs occur in the cases when information about one company can influence the demand for other companies' products (service) offerings with the same brand name.

In B2B, while entering partner relationships, companies first choose their potential partners (according to available information), often sign contracts and then start cooperation. The main difference from brand alliances and brand spill-over effect in M&A's is that during interorganizational relationships brands are not actually merged or aligned. Instead, it is expected that cooperation with more well-known company will indirectly raise the focal firm brand awareness through this particular relationship. In other words, some company's brand may become more well-known due to B2B contract with another famous company with already famous (or simply more well-known to some target audience) brand.

Furthermore, co-branding is explained as presenting two or several independent brand names jointly on the same product or service (Erevelles et al. 2008). Brand spill-over effect can be discussed as a part or consequence of co-branding. Indeed, some firms may tend to mention the name of their supplier or partner on their product, if their partners brand has a high value. Erevelles et al. (2008) suggest in

their article that suppliers and manufacturers are both interested in co-branding, which include brand spill-over effect. They empirically prove and support by real life examples that suppliers' profits are higher with co-branding relationships than without it. Specifically, authors argue that co-branding and brand spill-over effect can act as a safeguard for suppliers from possible entry of competitors with unobservable costs.

At the same time, manufacturers expect to reach lower prices as a result of cobranding with suppliers (ibid.). Among other co-branding benefits authors specify relationship benefits, when companies get some particular advantages from mutual co-operation, from becoming endorsers of each other's offerings, sharing knowledge, capabilities, risks, experience and generating trust. Moreover, suppliers may lower costs as a consequence of long-term B2B relationship through economies of scale. Finally, benefits may emerge when suppliers support the advertisement of co-branded product or service offerings.

Taking everything into consideration, brand spill-over effect in B2B appears to be beneficial for companies involved in the relationship, and thus, it becomes an important topic for analysis. In this study, as there usually are at least two parties in one particular B2B relationship, <u>two</u> dependent variables will be analyzed: brand spill-over effect on focal firm and brand spill-over effect on partner firm.

#### Governance form continuum

Governance form is defined as the institutional form companies choose to a particular transaction determined within transaction costs analysis (Ghosh and John 2012). Governance form appeared to be a part of governance value analysis (GVA) framework developed by Ghosh and John (1999). The authors suggest that GVA included four basic components: exchange attributes, governance form, positioning and resources. In this context governance form is described as a part of classical transaction costs analysis.

According to Ghosh and John (1999), governance form is split into three components: market, hierarchical and relational. In their study authors also analysed the impact of governance types and firm resources, including brand equity, on the outcomes of a business relationship. Taking that into account, it is assumed that there is a significant relationship between governance form and branding.

Furthermore, Glynn, Motion and Brodie (2007) discuss in their study that in terms of B2B relationship, brands are regarded as market-based assets by resellers. These types of assets can be shared between companies and create relational rents from relationship specific assets, knowledge sharing, complementary resources and governance. The latter supports the idea that governance could be related to brand spill-over effect in B2B relationships.

In addition, Ghosh and John (2005, 2009) in their study on branded component contracts in industrial markets analyze branded components as "efficient government devices". They suggest that as well as any other contracts, brand contracts assign ownership and decision control to the parties at hand. Hence, governance type and principles should also apply to these contracts. The authors prove that the allocation of brand ownership presumes an efficient governance response to exchange hazards. These findings are in line with Gonzalez-Diaz et al. (2002) and Azevedo et al. (2002) studies.

As the abovementioned studies prove the possibility of connection (causal effect) between governance form and brand spill-over effect, governance form will appear as independent variable in this study. To be more precise, in contrast to three-dimensional definition of governance in GVA model by Ghosh and John (1999), this variable will be analyzed as a continuum between market (more formal contracting) and relational governance. That means that the choice of the level of governance form on this continuum is expected to influence the level of brand spill-over effect in interorganizational relationship. The following hypotheses are:

H<sub>1a</sub>: Governance form on market/relational continuum has a significant effect on the extent of spill-over effect of brands in B2B relationship for focal firm.

H<sub>1b</sub>: Governance form on market/relational continuum has a significant effect on the extent of spill-over effect of brands in B2B relationship for partner firm.

Moreover, in this study the choice of governance form is expected to be a mediator of the influence of institutional and legal environment, companies' resources availability, companies' contracting capabilities and reputation of both focal and partner firms on brand spill-over effect. The latter variables will be discussed in the following.

#### Institutional and legal environment

Institutions and legal environment are often explained as particular rules. For example, Williamson (1975) defines institutions as the 'rules of the game'. In line with this definition, John (2008) explains institutions as the rules that govern the interaction between two actors. It is assumed that institutional and legal factors often affect the financial and economic performance. These two factors state the conditions and rules of business partner relationships. Additionally, Carson et al. (1999) explain that institutional environment is, basically, the 'rule' on macro level, while institutional arrangements are the 'rules' of micro level of relationship. Legal environment (e.g. country's law system) is also assumed to be a part of institutional environment.

Considering abovementioned, institutional and legal environment variable is expected to have a significant influence on the choice of governance form in B2B relationship. For example, constricting legal environment is assumed to increase the entry barriers, consequently allowing suppliers to increase their opportunity costs. At the same time, efficient legal regulations provide guarantees of property rights safety and minimize transaction costs. More vulnerable legal systems (which presume corruption, for example) create more uncertainties in the interorganizational relationship outcomes and so on. To adjust to all these circumstances, companies' are expected to make the appropriate choices of governance form to 'run' their B2B relationships. Institutional environment can be measured using ranking by Doing business (provided by World Bank since 2005).

Moreover, Homburg, Klarmann and Schmitt (2010) argue that characteristics of the market, which might be the part of institutional environment variable, influences brand awareness. Thus, it can be assumed that institutional and legal environment may indirectly (in this study – through governance form choice) influence the level of spill-over effect as well.

In addition, the influence of institutional environment can be measured through the fact whether or not B2B companies are the participants of any network. Wathne and Heide (2004) argue that the dyad governance form depends on how other relationships in the company's network are governed. It is expected that more strict and detailed institutional environment will eliminate uncertainties and hence, will cause more formal governance form. As a result, lower level of spill-

over effect is assumed to be observed. Taking previous findings into account, the hypothesis in this study will be:

H<sub>2</sub>: Strict institutional and legal environment negatively influence both brand spill-over effect for focal and for partner firms through influencing the choice of governance form on market/relational continuum.

#### Companies' resources

In GVA framework Ghosh and John (1999; 2012) offers that companies' resource base, including technological, brand (end-consumer) and supply-chain based, should be connected to the transaction attributes and governance form choice. In the essence, authors argue that firms should align their resource base with the appropriate governance form, so that it will guarantee further solution of potential conflicts which "undermine opportunities to realize mutually beneficial gains." Moreover, it is argued that resources such as brand equity have a different impact on companies' performance, depending on the choice of governance form or strategy.

Basically, the firms with brands that have stronger brand equity with the end-customer should better use market governance form. On the contrary, the companies may get more benefits from choosing relational governance if they have less well-known brands while entering B2B relationships (Ghosh and John 1999, Glynn, Motion and Brodie 2007). The same could be applied to other resources.

It could be also assumed that the stronger resource base of the focal firm will result in the higher level of brand spill-over effect for partner firm and vice versa. The latter could be reached through the mediating effect of governance form choice. Note, that in line with previous research, companies may tend to use more formal governance form to safeguard their resources. Hence, the next hypothesis is:

H<sub>3</sub>: Stronger resource base of the focal (partner) firm will cause lower level of brand spill-over effect for the partner (focal firm) if they choose market governance form compared to relational governance.

#### Contracting capabilities

Contracting capabilities can be defined as alliance capabilities that determine the level of performance of this alliance and individual companies' performance, which consequently influence companies' competitive advantage (Argyres and Mayer 2007, Weber and Mayer 2005). In essence, contracting capabilities include contract designing, contract negotiation and knowledge sharing. Argyres and Mayer (2007) discuss that companies should determine the players (internal/external; lawyers, managers, engineers or sales agents) and their responsibilities at each stage of contracting process.

Moreover, Weber and Mayer (2005) argue that if during contract designing the roles were specified incorrectly (e.g. personnel involved in designing and negotiation lack the appropriate knowledge and information), then it would influence the efficiency of governance. This actually reveals the fact that there might be a direct significant effect of companies' contracting capabilities on the choice of governance form. The higher the level of company's contracting capabilities is, the more confident this company might be during first stages of B2B relationship. The latter might support the idea that trust will be increased to the company with high contracting capabilities, the companies will be more open to relational governance, which will result in higher brand spill-over effect.

Thus, it can be assumed that contracting capabilities, meaning the efficiency of contracting and the ability to get all benefits from contracting, can significantly influence the level of brand spill-over effect between companies in B2B relationship through influencing the way companies govern their relationship. Considering that it is hypothesized:

H<sub>4</sub>: Better contracting capabilities of focal firm (partner firm) will cause higher level of brand spill-over effect for partner (focal) firm, while mediated by the choice of governance form on market vs. relational continuum.

#### Reputation

Reputation and company's soundness play quite important role during the process of B2B partner's choice in line with price-quality and costs decisions. Corporate reputation is defined as a valuable intangible asset, accumulated impression formed by stakeholders after interaction with the company and receiving communication from it (Keller 2008, Chun 2005). Chun (2005) describes

reputation through three concepts: image, identity and desired identity, and states that reputation affects the way various stakeholders act towards the company. This concept influence customer and employee satisfaction, retention rate and loyalty. In other words, reputation is what others think of the company. That is why reputation of a company plays important part in the process of choosing partner in B2B relationship as well.

Before signing the contract or entering relationship companies' managers will most likely assess reputation of their potential partners and make preliminary judgments on whether it is safe and beneficial to do business with them. In these terms, better reputation can guarantee competitive advantage and present company in a much better light. Moreover, according to Walsh and Beatty (2007), good corporate reputation can reduce transaction costs. Hence, reputation may have a direct effect on governance level choice (e.g. higher reputation will lead to more relational governance form). Hence, in this study it is hypothesized:

H<sub>5a</sub>: Both focal firm and partner reputation has significant direct influence on the choice of governance form on market/relational continuum.

However, corporate reputation can also have a direct influence on brand spill-over effect. The latter can be explained by the fact that companies' good reputation significantly contributes to their brand equity and companies' soundness. Thus, some particular company may appear to have better reputation in B2B dyad interaction (contracting). Hence, after the beginning of common relationship it will influence its partner's brand equity. In line with this study's research questions it is assumed that this direct effect will be moderated by governance form the companies decide to use to guide their B2B relationship. For example, if a company with high reputation will still choose more market governance form, it might result in lower level of brand spill-over effect than if companies choose relational governance. That might happen due to more formal encounters which do not require building cooperation on trust. Thus, the following hypothesis is:

H<sub>5b</sub>: Reputation level of focal (partner) firm will significantly increase brand spill-over effect for partner (focal) company while moderated by the choice of governance form.

#### Model description

Aforementioned hypotheses and relationships are illustrated on the following research model (Figure 1). This model shows that there are two dependent variable in this study – the extent of spill-over effect of brands in B2B relationship for focal and for partner firm. There are two main effects on each of these dependent variables – the influence of governance form and the influence of reputation.

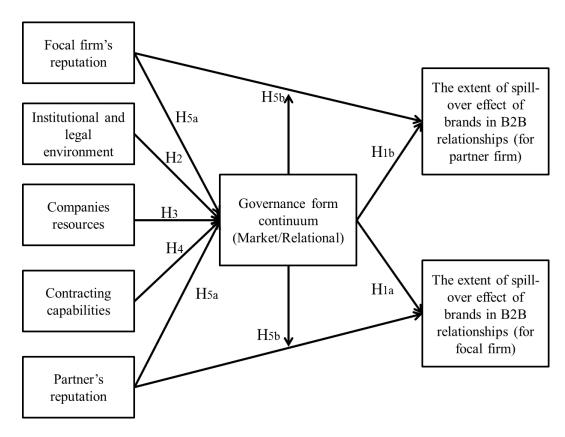


Figure 1 Conceptual model

Moreover, there are three mediating effects of institutional and legal environment, companies' resources and contracting capabilities on the brand spill-over effect variables. Considering one of the argued hypotheses in the case of reputation, governance form continuum appears to be mediating moderator. Next section will describe how all these interactions will be tested.

# Methodology

In the following, a brief overview of methods, participants, procedure, measurement scales of dependent and independent variables will be presented.

Aiming to test research predictions regarding the influence of governance form choice on the extent of brand spill-over effect and all the consequential linkages that may strengthen or weaken this influence, the survey among managers of Ukrainian B2B companies (or firms involved in interorganizational relationships) was conducted.

Ukraine was chosen as a country of interest for several reasons. Ukraine is a relatively young country (independent since 1991), which has gone through transition of its economy from centrally planned to market. In 2005 Ukraine was proclaimed by European Union as a country with market economy. Nowadays it is defined as lower middle income developing country according to World Bank classification (World Bank Data). In accordance to Doing Business 2013 rank Ukraine is on the 137 place out of 185 economies indicating the overall ease of doing business, which is 15 points better result comparing to the previous year (Doing Business Data).

Despite the 'market economy' status, in some cases Ukraine is still considered as a 'transition economy' country. Thus, it is expected that such vulnerable economy status may influence the type of governance form the companies choose while entering B2B relationships. The latter means that companies will be quite highly distributed on the governance form continuum which may cause different levels of brand spill-over effects. Furthermore, transition versus market economy status of Ukraine makes this country interesting for analysis in terms of studying *Institutional and legal environment* variable influence. Companies need to adjust to regulatory norms while creating their governance agreements. Moreover, such equity as companies' reputation may also play quite important role in such economies as Ukrainian, due to the issue of trust in the case of unpredictable and inconstant economic conditions.

Emerging economies (e.g. Ukrainian) might be quite an interesting even though challenging places to expand your business to. Considering that, many international partnering companies and suppliers are expected to be involved in B2B relationships in Ukraine. Considering everything abovementioned, Ukraine appears to be an interesting country for analysis of interorganizational relationships and governance form choice.

#### Procedure and participants

In order to analyze Ukrainian companies (national or international) involved in B2B relationships in terms of governance form influence on brand spill-over effect the key informant data will be used. This technique assumes that individual informants (managers, buyers etc.) can provide relevant and representative information about processes of group decision making, for example, companies' governance form agreements (Wilson, Lilien 1992). The threats of using key informant data may be the following: questionable reliability and validity, respondents' bias (e.g. overestimation of positive traits) and so on (Philips 1981, Wilson, Lilien 1992). Despite that, careful selection of group of formal or informal opinion leaders, influential leaders or experts, combined with a structural contact with them can lead to positive results (Key informant approach according to University of Wisconsin-Extension).

In this study, company representatives will be asked to name a person (manager, CEO other personnel) who is the most appropriate one to answer the questions on this work's research topic and who will eventually become the main respondents. This referring approach may decrease respondents' bias.

At least 70-80 Ukrainian companies in B2B relationships are expected to participate. Considering that in Ukraine there are no publicly available databases of companies in B2B relationships, potential participants will be reached directly at first. For this purpose, snowball sampling technique will be applied. This is a useful and convenient approach in the case when subjects are hard to locate. The current respondent will be asked to name a person/company, who can potentially become further study participant and so on. This technique has several challenges. First of all, it is a threat to randomness and it can cause problems in representativeness. Next, this sampling approach may be biased towards the inclusion individuals within interrelationships. This can lead to responses' correlation bias and exclusion of 'isolated' but important potential participants (Atkinson and Flint 2001). Still, in this particular study, where both focal and partner firms' reputation and brand spill-over effects are the points of interest, the inclusion of companies within interrelationships might be beneficial. These sampling biases can be reduced by larger sample sizes. Moreover, applying snowball sampling may help to reach (hidden) participants who will be missed in the case when any other sampling approach is used.

In this study potential respondents will be reached by telephone and after their agreement to participate they will be provided with a link to study questionnaire. A reminding phone calls and emails will be sent if necessary.

#### Measurement of dependent variables

Two dependent variables in this study – brand spill-over effect in B2B for focal firm and for partner one – will be measured using multiple-item scale which will be the modification of previously used measures in brand extension, brand alliances and co-branding literature (Simonin and Ruth 1998, Jaju, Joiner and Reddy 2006, Völckner and Sattler 2006). Respondents will be asked to indicate the extent to which the relationship with their partner firm has influenced their firms' and their partners' firm reputation/brand equity/brand visibility among customers/other partner companies on the seven-point Likert scale (ranking form 1 – 'not at all' to 7 – 'very much'). In line with Gosh and John (2005) measurement, participants will be also asked to rate the extent to which joint interorganizational relationships made business processes (focal and partner) more efficient on seven-point semantic differential scale. The resulting evaluations will be equally weighted and loaded directly to a single brand spill-over effect variable (using factor analysis). Chronbach's alpha test will be conducted to analyze whether these measures are highly correlated and can be joined into one variable.

#### Measurement of independent variables

Influence of *governance form continuum* will be measured using two dimensions. The first one, market governance dimension will be measured using nine-item scale aiming to question about the extent to which participants specify details in their contracts and make them contingent in terms of property rights, obligation to share information, performance hazards and so on. The scale will be adopted from the measures in studies by Lusch and Brown (1996), Grandori and Furlotti (2011). The second dimension, relational governance, will be measured using similar multiple-item scale based on previously used scales by Heide and John (1992) and on scales discussed by Ivens and Blois (2004). Among other things participants will be asked about the extent to which they rely on social norms, about the level of reliance on contract-specific investments, trust and so on. Five-point Likert scale will be used in both cases.

Reputation (either focal or partner firm) measurement will be based on the scale previously used by Walsh and Beatty (2007). The respondents will be asked to evaluate customer satisfaction, trust, loyalty and word of mouth. Furthermore, in line with Jaju, Joiner and Reddy (2006) measurements, participants will be asked to rate brand familiarity, which is also an indicator of reputation as if both brands are highly familiar (in other words, they fit) then the interorganizational relationship should be rated equally. Otherwise, if one brand is more well-known it can be dominating in the relationship and, as a result be the one who causes greater spill-over effect.

Institutional and legal environment will be measured on the seven-point Likert scale. Participants will be asked to evaluate the extent to which they perceive institutional norms influence their B2B relationship and the choice of governance form. Furthermore, different legal environments stimulate companied to enter professional networks to secure their rights. Therefore, participants will be asked whether they are parts of any networks and how dense those networks are. Measurement of the latter will be based on the scale previously used by Antia and Frazie (2001).

Companies' resources variable means that the resource positioning of the firm can influence brand spill-over effect while mediated by the choice of governance form. Basically, this variable will be measured using seven-point Likert scale (1 – 'totally disagree', 7 – 'totally agree'). Respondents will be asked to assess to what extend their technological, end-consumer and supply chain resources influence the choice of particular governance form. This approach is in line with Gosh and John (1999) study.

Contract design capabilities will be measured in accordance to Weber and Mayer (2005) and Argyres and Mayer (2007) studies. Participants will be asked to evaluate on a multiple-item scale the extent to which they define roles and responsibilities and manage knowledge generated from interorganizational relationship during contract designing. As some capabilities are expected to emerge during the longitudinal relationship, respondents will be also asked to evaluate the extent to which contract duration will influence knowledge sharing and the growth of contracting capabilities.

#### Control variables

The choice of governance form may be influenced by variety of factors. In this study three classical transaction costs economics variables – relational specific investments, market uncertainty and performance measurement problems – will be included as control variables.

Relational specific investments will indicate the extent to which buyers and suppliers made the relationship-tailored investments (those that lose their value outside this particular relationship). To measure this variable the four-item scale adapted from Jap and Ganesan (2000) and Rokkan, Heide and Wathne (2003) will be used. Participants will be asked to indicate on the seven-point Likert scale (1-'strongly disagree', 7 – 'strongly agree') the extent to which they have made investments in time, energy, inventory and money in the relationship that can be lost if they switch to another partner.

*Market uncertainty* is defined by Buvik and John (2000) as unpredictability of environment in which the relationship takes place. The authors offer the four-item scale to measure this variable, which will be used in this study. Scale items will be measured using seven-point Likert scale.

Performance measurement problems variable assumes the difficulty a buyer or supplier face in defining their partner's performance. The three item scale previously developed by Mooi and Ghosh (2010) will be used. This will include the difficulty in judging the quality of the product or service at the time of delivery, in comparing the focal product or service with competing offerings, and in judging the price/quality ratio of potential suppliers' products or services.

#### Measure development

To verify and assess the research variables Chronbach's alpha test and explanatory factor analysis will be conducted. If any significant cross-loadings are revealed during analysis, they will be removed in order to increase the validity of this study. On the contrary, items with high loadings will be retained for further analysis.

#### Results analysis

To test the proposed hypotheses and analyze overall research question, the collected data will be studied using OLS regression and ANOVA tests. These

statistical analyses are expected to be the most appropriate ones to test significance of all linkages and interactions, and, consequently, the general soundness of the research model.

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