Trust and reciprocity in buyer-supplier relations:
Do social preferences matter?

Alessandro Ancarani, aancaran@dica.unict.it
Dipartimento di Ingegneria Civile e Ambientale, Università di Catania
Viale A.Doria, 5, 95131 CATANIA, ITALY

Carmela Di Mauro, cdimauro@unict.it
Dipartimento di Ingegneria Civile e Ambientale, Università di Catania – Italy
Viale A.Doria, 5, 95131 CATANIA, ITALY

Florian Schupp, Florian.Schupp@schaeffler.com
Automotive Schaeffler Group
Schaeffler Technologies GmbH & Co. KG, Germany

Abstract
Social bonds are crucial for the success of buyer-supplier relationships. This paper investigates whether individual social preferences may explain inter-firm social bonds built on trust and reciprocity in supply chain relationships. The research questions are explored by means of a case study involving the first-tier suppliers of a large organization in the automotive component sector. The research has practical implications for firms’ staffing decision and supplier selection criteria.

Keywords: supply chain integration, social preferences, behavioural operations
Paper type: Academic Research Paper
1 Introduction
Recent research has underlined that the behavioural characteristics of human agents may play a crucial role in organizations’ decision making. These characteristics include social preferences such as cooperativeness or opportunism (Tangpong et al., 2010), trust propensity (Mayer et al., 1995), but also other individual characteristics such as risk preferences and over-confidence (Malmendier and Tate, 2005; Villena et al., 2009; Li and Tang, 2010).

In the analysis of supply chain (SC) integration it has been recognised that buyers and suppliers may forego the benefits of integration because of fear of opportunistic behaviour (Carson et al., 2006). Also, it has been underlined that, in the presence of imperfect information and incomplete contracts, the creation of social bonds, based on reciprocity and trust may be an important pre-requisite for the success of SC relations (Dyer and Singh, 1998; McCarter and Northcraft, 2007).

In the SC literature the analysis of constructs such as trust, reciprocity or opportunism in buyer-supplier relationships has mostly been undertaken at the organizational level, with very few forays into individual behavioural aspects (Tangpong et al., 2010; Schoorman et al., 2007). In particular, little is known about how the social preferences of the persons in the organizations directly involved in the inter-firm relationship influence the decision to establish social bonds and whether they affect business integration decisions between supply chain partners.

In order to fill this gap in the literature, the aim of this paper is to investigate whether some selected behavioural characteristics of buyers and suppliers in dyadic supply chain relationships are linked to social bonds built on trust and reciprocity.

2 Model and hypotheses tested
The issues of trust and reciprocity among the members of a SC network have received ample consideration in supply chain literature (Dyer and Singh, 1998; Ireland and Webb, 2007). Cai et al. (2010) identify three major theoretical perspectives to explain interpersonal trust production: process-based, according to which trust develops from past or expected exchanges; characteristic-based, such that trust is tied to the characteristics of individuals; and institutional-based, for which trust relates to an organization’s institutional environment, including the legal, political, and social systems. Reciprocity enhances the long-term orientation and relational behaviors of partners and positively influences performance (Griffith et al., 2006; Zhao et al., 2008).

Relatively little research has explored how individual behavioural characteristics carry over to supply chain relationships (Bendoly et al., 2010; Ancarani and Di Mauro, 2011), and to buyer-supplier social bonds in particular. The role of personal characteristics (such as risk propensity and trust propensity) in the risk—trust relationship embodied in supply chain is acknowledged by Das and Teng (2004). There is recent evidence that social aspects of individual preferences (cooperativeness, trust, altruism, reciprocity, and so forth) are related to organizational behaviour and performance. For instance, there is proof that agents’ individual attitude to cooperativeness is related to firms’ opportunism in dyadic relationships (Tangpong et al., 2010). Also, there is support for the link between individual level trust and trust among members of virtual teams (Yakovleva et al. 2010).

In this paper, we focus on two individual characteristics, namely the individual’s propensity to trust (Mayer et., 1995), and her aversion to an unequal distribution in an exchange (inequality aversion or preference for fairness) (Fehr and Fischbacher, 2002). We posit that these social traits of individual preferences are correlated to the strength of inter-firm social bonds. Propensity to trust (Mayer et., 1995) is considered a pre-
requisite for behavioural trust, and trust propensity measures have also been introduced in some general social surveys (Dohmen et al., 2008) as proxies of social capital. Inequality aversion or preference for fairness (Hatfield, Walster, Berscheid, 1978; Fehr and Schmidt, 1999; Fehr and Fischbacher, 2002) has been identified as a measure of preference for reciprocity. In some models, it is considered a barrier to the establishment of inter-firm bonds based on trust. Specifically, we conjecture that trust propensity will foster inter-firm relationships based on trust, whereas we expect inequality aversion to be a barrier to the establishment of trust-grounded inter-firm bonds and to be linked to stronger reciprocity in relationships. Since purchasing managers play a pivotal role in inter-firm relationships (Chen et al., 2004; Handfield and Bechtel, 2002; Cousins et al., 2006), which may lead to a competitive advantage, these individual traits are bound to leak into inter-firm relationships, especially when purchasing managers and buyers enjoy managerial discretion (Hambrick, 2007).

Thus, we formulate our hypotheses as follows:

**H1:** Trust propensity is positively related to inter-firm relationships based on trust

**H2:** Preference for fairness is positively related to inter-firm relationships based on reciprocity

![Figure 1 - Model](image)

3 **Methodology and study design**

The hypotheses under study are tested by means of a survey study involving the first-tier suppliers of a large organization in the automotive component sector and the buyers in this organization involved in purchasing decisions with respect to those suppliers.

To this end, a questionnaire was developed to collect the perceptions by buyers and suppliers involved in the dyadic relationship.

Several constructs are investigated in order to test the above hypotheses (Table 1). At the individual level, constructs for trust propensity and preference for fair relationships are used as proxies of social preferences. In addition, a risk preference measure is also adopted. A trustful attitude often involves that individuals are willing to take the risk that the trust is not reciprocated, so that we expect that risk taking and trust giving are positively correlated (Das and Teng, 2004).

Those same traits at the inter-firm level are captured by the constructs of Trust, Reciprocity and Risk Taking.

Following the first formulation, obtained from a search of the relevant literature, the questionnaire was refined through a pilot study carried out on a small number of buyers and suppliers. The invitation to participate in the survey was sent out by e-mail to 102 first-tier suppliers of the organization. The questionnaire was administered on-line through Lime-survey tool.
4 Results
We report results based on the evaluation of social bonds of sixty-six buyer-supplier dyadic relationships. The behavioural characteristics of interest refer to the buyers of each dyad. A random effect model was adopted to keep into account the fact that each buyer at the customer firm evaluated the relationship with more than one supplier.

5 Conclusions
This research may contribute to throw light on the necessity that in supply chain staffing decisions senior managers consider the personal characteristics of purchasing and supply chain managers, in order to ensure that the characteristics of the individuals are aligned with the relational norm context of their buyer–supplier relationships, and this does not foreclose business integration opportunities.

Table 1 – Constructs adopted in the questionnaire

<table>
<thead>
<tr>
<th>INDIVIDUAL CHARACTERISTICS</th>
<th>Trust Propensity (Mayer et al., 1995)</th>
<th>Risk Aversion (Barsky et al, 1997)</th>
<th>Preference for fairness (Fehr and Fischbacher, 2002)</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERFIRM TRUST/RISK TAKING</td>
<td>Reciprocity (Johnson and Sohi, 2001)</td>
<td>Trust (Klein et al., 2007)</td>
<td>Risk Taking (Mayer et al., 1995; Colquitt et al, 2007)</td>
</tr>
</tbody>
</table>

Table 2 – Random effect model

<table>
<thead>
<tr>
<th>dep.vbl</th>
<th>reciprocity</th>
<th>trust</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>model1 (RE)</td>
<td>model1 (RE)</td>
</tr>
<tr>
<td>ind.vbl.</td>
<td>coeff</td>
<td>sign.</td>
</tr>
<tr>
<td>inequality aversion</td>
<td>0,04</td>
<td>0,036</td>
</tr>
<tr>
<td>trust propensity</td>
<td>-0,49</td>
<td>0,008</td>
</tr>
<tr>
<td>length relation</td>
<td>-0,29</td>
<td>0,4</td>
</tr>
<tr>
<td>seniority</td>
<td>-0,22</td>
<td>0,07</td>
</tr>
</tbody>
</table>

We find support for our two hypotheses: buyers’ individual inequality aversion is significantly related to organizational relations built on reciprocity, whereas trust is positively related to individual trust propensity.

Table 2 – Random effect model
Another potential implication concerns supply partner selection criteria. When a firm is seeking a supply chain partner, it would be worthwhile to consider not only the traditional company-level characteristics but also the personal characteristics of the individuals who are in charge of their exchange relationships.

References


