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FAILURE IS SUCCESS IF WE LEARN FROM IT: THE FRAMEWORK OF GOAL ACHIEVEMENT IN STRATEGIC NETWORKS

The relational view of strategic management argues that the advantages of an individual firm are often linked to the advantages of the network of relationships in which the firm is embedded. Hence, an important question is how to manage a firm's network of relationships successfully. The aim of this study is to develop a model which considers goal achievement at the firm and network level. An empirical survey was conducted which consisted of 101 telephone interviews with both purchasing and sales managers of the top level of branded Ukrainian food manufacturing companies. To test the model, we used the Partial Least Squares (PLS) technique for Structural Equation Modelling

Key words: *goal orientation, strategic framework, supply chain networks.*

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НЕУДАЧА ОБОРАЧИВАЕТСЯ УСПЕХОМ, ЕСЛИ МЫ ИЗВЛЕКАЕМ ИЗ НЕЕ УРОКИ: СТРУКТУРА ЦЕЛЕДОСТИЖЕНИЯ В СТРАТЕГИЧЕСКИХ СЕТЯХ

Согласно реляционному взгляду на стратегический менеджмент, преимущества отдельной фирмы часто связаны с преимуществами сети отношений, в которую погружена фирма. Поэтому управление сетью фирмы оказывается важным вопросом. Задача представляемого исследования — создание модели достижения цели на уровне фирмы и на сетевом уровне. Проведенный опрос включал 101 телефонное интервью с топ-менеджерами по продажам и закупкам украинских компаний — производителей брендированных продуктов питания. В ходе проверки модели мы использовали метод частных наименьших квадратов для моделирования структурными уравнениями.

Ключевые слова: *целевая ориентация, стратегическая рамка, сети цепочек поставок.*

1. Introduction

As suggested by the proponents of the relational view of strategic management, the advantages of an individual firm are often linked to the advantages of the network of relationships in which the firm is embedded (Dyer and Singh 1998). Accordingly, there is an ongoing discussion on how to manage a firm's network of relationships successfully, i.e. such that the firm's competitive advantage is sustained (Gulati et al. 2000; Kale et al. 2002; Dyer and Hatch 2006).

It seems, however, that the discussion on network management has not exhaustively addressed the "network management — network success — firm success" cause-and-effect chain. Given that success generally means the achievement of goals, we argue that the "network success" link has been understudied, in particular, because of incomplete interpretation of network goals. In fact, most empirical studies that declare their focus on the network success or performance, address the achievement of goals by an *individual firm* participating in a network and analyze the role of network-related "collective constructs" such as inter-firm trust, commitment and relational norms (Medlin 2006: 860) in achieving those goals. Yet, goals that are set at the *network level*, i.e. collectively pursued outcomes, are mainly neglected although their presence and relevance in inter-organizational relationships has been widely emphasised (e.g. van de Ven 1976; Pitsis et al. 2004; Winkler 2006).

As shown by Medlin (2006), studying collective constructs needs to be undertaken with regard to both collective and self-interest outcomes. Focussing solely on the goals of an individual firm in a network will provide biased results with respect to management styles that are actually based around self and collective interests, i.e. around the whole network of relationships. Thus, without simultaneous consideration of goals at the firm and network levels and without understanding of how the network should be managed in this respect, the whole network's success will remain under-defined and the validity of the derived implications will be brought into challenge.

Therefore, the aim of this study is to develop and test the model of goal achievement at the firm and network levels. We test our model of the whole network's success in the context of strategic networks in the food industry. In particular, our study examines the relationships between a food manufacturer and its independent (upstream) suppliers and between the food manufacturer and its independent (downstream) customers.

The article proceeds as follows. First, we delineate the theoretical foundations of strategic network management. In this part, we build on prior research on management of strategic networks to generate hypotheses that constitute our conceptual model. Next, we test the model and discuss the results. Finally, we derive some implications.

2. Theoretical foundations

2.1. Management of strategic networks

The main challenge for the focal actor in managing the strategic network is adaptation to uncertainty which depends on how the connected relationships are organised (Jap and Ganesan 2000; Wathne and Heide 2004). For example, a manufacturer's ability to adapt in a flexible manner to uncertainty in the downstream relationship can be contingent upon its effectiveness in structuring the relationship

with its upstream supplier and vice versa. In this regard, Gulati et al. (2005) have posited that adaptation in the procurement relationship involves fulfilment of the coordination and cooperation tasks. The coordination task is the alignment of actions, i.e. enabling a joint action, whereas the cooperation task is the alignment of interests, i.e. motivation of the exchange parties. Furthermore, Hanf and Dautzenberg (2006) have shown that individual and collective interests as well as individual and collective actions are entwined in strategic networks and, therefore, interests and actions must be aligned at the firm, dyadic and network levels simultaneously.

The strategic management literature has mainly addressed collective strategies in the context of their orientation towards reduction of variation in inter-organizational environment (Bresser and Harl 1986). However, in the strategic network context, collective strategies aim not only to shape the network processes and relationships but also to achieve certain network goals (Sydow and Windeler 1998: 268). In a strategic network in which a focal firm is responsible for the correctness of attributes of the final product (Hanf and Dautzenberg 2006), a collective strategy will be most often goal-oriented.

To exemplify, in 2005, Nestlé has formed its milk powder strategic network in Russia by setting up effective guidelines for managing relationships with suppliers and customers. Following these guidelines, Nestlé has enhanced long-term vertical and horizontal cooperation among the network members to address the issues related to antibiotics, good dairy farming practices, HACCP, organoleptic quality and taste deviations. As a result, rejected milk powder quantities have decreased from 20% to 3% in one year. Nestlé has introduced incentives for farmers to produce quality and avoided €6 Million costs that would have resulted from import substitution. Finally, Nestlé has been successful in selling its confectionery and ice cream products in Russia (Nestlé CT Agriculture 2006). In this example, the collective strategy aimed to achieve the food safety and chain quality goals as well as economic goals of Nestlé and its partners who have benefited from meeting the introduced standards. Beyond that, we suggest that a collective strategy may be perceived as a framework of activities to sustain a network's success because it aims at the achievement of network goals. We further describe the dimensions of network success in detail and develop hypotheses on interrelatedness of constructs that compose these dimensions.

2.2. Goals of strategic networks

The entwinement of self and collective interests implies that the success of individual network members is critical to success of the whole network and, conversely, positive outcomes for the whole network contribute to the firm's success. Thus, success of a strategic network will involve the achievement of network members' goals at the firm and network levels. At the firm level, firms are setting their individual goals whereas they are setting collective goals at the network level.

Network-level goals involve a predefined set of outcomes that are shared by all network members and can be achieved only if all network members work together. Although such shared goals have rarely been addressed in empirical analyzes, their achievement can be regarded as the essence of collaboration (Sydow and Windeler 1998; Pitsis et al. 2004). Examples of network-level goals in the include, for example,

food safety and quality aspects addressing primarily the increasing consumers' demands and the risk of food scandals, e.g. goals such as total chain quality, end consumer satisfaction, etc. Resolution of such complex, rather non-pecuniary issues involves tight collaboration of all network members (Hingley 2005). Although network-level goals have to be shared by all network members, in strategic networks they have to be seen as viable and acceptable primarily by the powerful focal firms as was the case in the above example of Nestlé. A strategic network is most often deliberately established by a powerful focal actor, either distributor- or manufacturer-brand owner, who selects appropriate partners to develop products under its brand (Belaya and Hanf 2009).

Additionally, there are *firm-level goals*, i.e. goals which single firms want to achieve for themselves by participating in a network. All in all, we argue that goals of the whole strategic network involve network-level and firm-level goals. The network-level goals are set by the focal actor and are jointly pursued by all the network members. The firm-level goals are set by individual network participants that exert their individual efforts in pursuit of these goals within a given network.

3. Goal achievement in strategic networks: hypotheses and conceptual model

3.1. Impact of cooperation and coordination on goal achievement

One of the objectives of the focal firm is to secure the strategic network from an unplanned dissolution of relationships caused by contradictory forces (Das and Teng 2000: 85). In particular, these contradictory forces are likely to occur in strategic networks wherein most partners are profit-seeking organizations. As emphasised by Eliashberg and Michie (1984: 75), goals pursued by the parties may be one of the chief determinants of the prevailing level of conflict among those parties. We contend that this statement is also valid to address conflict between the firm and network levels because goals at the firm level and at the network level are set by the different network actors. Although conflict can be a stimulant for some positive outcomes, it is widely argued that organizations perform better when there is more goal consensus than conflict (Provan and Kenis 2007). Whereas consensus on goals is not a necessary condition for collaborative action to take place, disagreement among network members may lead to dissolution of relationships even if members' actions are synchronised and produce collective benefits. Given this fact, we suggest that the extent to which disagreements among network members affect the achievement of their goals will depend on how successfully the interests of network members are aligned.

The *alignment of interests* can be regarded as the establishment of good working relationships among the parties. It addresses factors such as the degree of compatibility of firms' cultures and decision-making styles, the convergence of business views, and other organizational characteristics (Ariño et al. 2001). The alignment of interests of the network members facilitates higher levels of relational capital (i.e., prompts trustful relationships, commitment and low levels of conflict among members) so that confidence in the reliability and integrity of the partners is gained (Kauser and Shaw 2004). Thus, the alignment of interests largely facilitates the network members' perception of compatibility of network-level goals with firm-level goals. We therefore hypothesise that:

H 1: The alignment of interests has a direct positive effect on the achievement of network-level goals.

H 2: The alignment of interests has a direct positive effect on the achievement of firm-level goals.

However, a strategic network may fail even if goal conflict is minimised but the network-level and firm-level goals are not achieved due to unsynchronised actions of partners or failure to react in a timely way to requests from each other. Therefore, it is important also to align the actions of network members.

The *alignment of actions* is necessary to implement concerted, joint actions needed to capitalise on the specialised but interdependent activities of partners (Thompson 1967). In the context of strategic networks, the firms need to combine and integrate their resources and knowledge across organizational boundaries to create competitive advantage (Gulati et al. 2000). Consequently, there exists high task interdependence between partners that involves managing a complex and overlapping division of labour, linking their specific activities with each other, and making regular mutual adjustments. In such a situation, the greater the joint efforts taken by the partners to manage their activities, and/or the more a partner becomes involved in activities that are traditionally considered the other's responsibility and vice versa, the greater their ability to compete successfully with the marketplace (Schreiner et al. 2009: 1402). Furthermore, the alignment of actions enables organizations to gather high-quality information about the others and creates strong disincentives for opportunistic behaviour (Sarkar et al. 2001). Accordingly, we hypothesise:

H 3: The alignment of actions has a direct positive effect on the achievement of network-level goals.

H 4: The alignment of actions has a direct positive effect on the achievement of firm-level goals.

3.2. Impact of network characteristics on cooperation and coordination

In order to evaluate strategic networks, Gulati et al. (2000) have proposed considering three types of relational characteristics: network structure, network membership, and tie modality. Network structural characteristics describe the overall pattern of relationships in the network. Network member characteristics include the identities, resources, access, and other features of the network actors. Tie modality is the set of institutionalised rules and norms that govern appropriate behaviour in the network (ibid.: 205). Based on the strategic management literature, we draw upon the ideas of Gulati et al. to analyze respective constructs that reveal how the network structure, network member characteristics, and tie modalities affect the achievement of goals of the network.

Network Structural Characteristics. Strategic networks consist of a multitude of participating firms. Therefore, the embedded flows of resources and information have to cross various stages, while the involved firms differ widely in size. As a result, strategic networks are highly complex systems and they bear a high risk of failure (Brito and Roseira 2005). Hence, reducing complexity is one of the most important tasks. In particular, the strategic network's management has to consider comprehensively the levels of transparency and interdependence.

Transparency. Dyer and Singh (1998) have emphasised the role of transparency in transferring knowledge among partners. Because of the complex nature of strategic networks, their structure is often not made public to all network members, and a feeling of anonymity may appear. Such missing transparency of the network structure increases the probability of free-riding. Transparency is associated with open communication. Therefore, it will be primarily conducive to enabling the partners' knowledge of each other's decision-making styles, and certainty in intentions of each other. We accordingly hypothesise that:

H 5: Higher levels of transparency have a direct positive effect on the alignment of interests in the whole strategic network.

Interdependency is acknowledged by firms when they join forces to achieve mutually beneficial outcomes (Mohr and Spekman 1994). However, beyond the focal firm's set of first-level contacts, there is normally a limited amount of intentionality possible in terms of coordinating the whole network (Gulati et al. 2000). In this context, higher interdependence between the focal firm's partners and their partners makes it possible that the mechanisms employed by the focal firm to coordinate its direct partners impact on the indirect partners too. Thus, a higher level of organizational and task interdependence among network members is necessary to reduce complexity and alleviate uncertainty about the whole network. Furthermore, higher levels of interdependence among the strategic network members imply that the network functions as a single entity and is characterized by a joint action to achieve the desired goals. Based on these arguments, we hypothesize:

H 6: Higher levels of interdependence between the focal firm and its direct partners have a direct positive effect on the alignment of actions by the focal firm in the whole strategic network.

Network Membership Characteristics. Research on networks focuses primarily on the interrelationships of firms but single enterprises can be regarded as initial elements of networks because collaborations do not exist without them. Inter-firm collaboration has been widely defined as the means for firms to achieve the ends which would be impossible without working together (van de Ven 1976). Each partner in a network dedicates its unique resources and capabilities which, when combined with partners' resources and capabilities, can create inimitable and non-substitutable value (Dyer and Singh 1998). We therefore express the network membership characteristics by the constructs of firms' complementarities and coordination capabilities.

Network members' complementarities create incentives for firms to collaborate (Khanna et al 1998). Collaborations do not inevitably create advantages for the involved firms; instead, especially during their establishment, they absorb resources. Consequently, without the firms' willingness to cooperate, collaboration will not prevail. Thus, firms have to recognise collaboration not as a constraint but as a means to access complementary resources. Furthermore, since strategic networks are formed to last over a long period, complementarities are not only essential at the beginning of collaboration but throughout the whole period. Thus, complementarities in culture and strategies (Park and Ungson 2001) combined with resource complementarities (Dyer and Singh 1998) will be conducive to action alignment among the network members.

H 7: Higher levels of complementarity among network members have a direct positive effect on the alignment of actions in the whole strategic network.

Coordination capabilities of firms include the necessary skills and abilities to establish learning routines, build up unique and network-specific knowledge, use modern information technologies, etc. Although collaboration is determined by the complementary abilities of the involved firms, only a part of the firm's strategic resources is synergy sensitive (ibid.). The need for and the explicit knowledge of firm strategies, culture, and values differ with the firm size, i.e. the network members' understanding of strategic management differs. Additionally, the core competencies and resources of the involved firms often differ, precluding additional rents from collaboration (Dyer and Hatch 2006). Therefore, coordination capabilities involve the ability to identify and build consensus about task requirements in a given network (Schreiner et al. 2009). To this effect, higher coordination capabilities of the network members gives rise to the potential to enhance their concerted action (ibid.). As a result, we hypothesise:

H 8: Higher levels of coordination capabilities of the strategic network's members have a direct positive effect on the alignment of actions in the whole network.

Tie Modalities. The nature of the relationships in a network could be either collaborative or opportunistic, setting the tone for the form of interactions among the actors as either benign or rivalrous (Khanna et al. 1998). Whereas we acknowledge that the ultimate tie modalities will be reflected by the extent of interest alignment, it is important to clarify how inherent distinctions among actors are smoothed to preclude the negative consequences of relationships. As is known, in today's procurement relationships, more and more specific investments must be made. Such investments create the chance for the other party to renegotiate the terms of the deal (David and Han 2004). To overcome problems of opportunistic behaviour by the network members, some scholars pose that it is feasible to exert power (Hingley 2005), others recommend managers to employ trust-based enforcement mechanisms (Dyer and Singh 1998). Furthermore, several studies emphasise that the use of non-coercive power (e.g., rewards, recommendations, etc.) has a positive impact on the relationships while the use of coercive power (e.g., punishment, threats, etc.) negatively affects the relationships (Payan and McFarland 2005; Leonidou et al. 2008). We verify these suggestions by analyzing the effects of *trustful relationships* and *non-coercive power* on the alignment of interests.

H 9: Higher levels of trustful relationships among the strategic network's members have a direct positive effect on the alignment of interests in the whole network.

H 10: Higher levels of use of non-coercive power by the focal firm have a direct positive effect on the alignment of interests in the whole strategic network.

4. Methodology

This section explains the survey design, the operationalization of variables, and the statistical procedure used to analyze the data.

4.1. Survey design

To test the model, data was collected from branded food manufacturers in Ukraine from September 2009 to November 2009. We assume a branded food manufacturer to

be a focal company in a network of firms that work together to bring the branded product to the market. The branded food manufacturer is responsible for the attributes of the branded product and, therefore, is knowledgeable about the network to a large extent. The database of the firms was obtained from the locally based market research company. Totally, 359 firms comprised the database*.

A questionnaire was designed based on a review of literature on variables such as strategic partnership, supply chain and strategic alliance performance (see Appendix for operationalization of latent variables). Then, the questionnaire was pretested with five food chain specialists. The specialists included buying and quality managers of the international food retailers, CEO of the international standardization bodies and a CEO of a non-governmental organization active in the food business. The respondents were asked to make their comments on the order of questions, wording and format of the questionnaire. Their feedback was considered to modify the questionnaire.

Telephone interviews were used for data collection. Of 359 branded food manufacturing companies, 101 interviews with both purchasing and sales managers of the top (i.e. strategic) level were conducted (28 % response rate). Each interview lasted about 20 minutes on average.

4.2. Measures

Apart from the literature on performance of supply chains, strategic alliances, strategic partnerships and inter-organizational relationships, we used the results of the pretest in the German specialized fish retail sector to develop the corresponding measures for the variables included in the model.

In each case, a four-point scale was employed. We used a four-point scale to make the respondents to choose one way or another. This is in order to avoid the social desirability bias, arising from respondents' desires to 1) please the interviewer or 2) appear helpful or 3) not be seen to give what they perceive to be a socially unacceptable answer (Garland 1991)**.

4.3. Path analysis

To test the model, we used the Partial Least Squares (PLS) technique for Structural Equation Modelling using the SmartPLS software 2.0.1 (Henseler et al. 2009). Our decision to use PLS was based on its advantages compared to other techniques, i.e., the possibility to analyze small size samples in the absence of distribution assumptions. PLS involves analysis of two forms of variables, i.e., the latent and manifest variables. Manifest variables that make no significant contributions to the respective latent variables are progressively removed and the analysis is repeated until all the manifest variables are significant (Gyau and Spiller 2009).

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* At time of interviews, there were 627 branded food manufacturing companies in Ukraine.

** The questionnaire included a "don't know" option to identify whether the respondents are aware of concrete issues raised in the questionnaire. The "don't know" answers were then coded as missing values (Schweikert 2006).

5. Results

In this section, we test the model and present the estimated results.

5.1. Testing the measurement model

The fit of the model in PLS is evaluated with regard to the structural (inner) and the measurement (outer) models. Individual item reliabilities and convergent validity of the model provide information about the fit of the measurement (outer) model. The individual item reliabilities are evaluated via the factor loadings of the items on their constructs. According to Hair et al. (1998), an item is considered insignificant and removed from the model if its factor loading is less than 0.4. Based on this criterion, the measurement model generally demonstrates a good fit. In particular, the construct of network-level goals demonstrates high reliability and validity of the items. Of the 48 items used to operationalize the latent variables in the model, seven were removed.

We also calculated the composite reliability index to assess convergent validity (Gyau and Spiller 2009). Because all the composite reliability indices are above 0.7, we retained all the constructs in the analysis.

The convergent validity was estimated by calculating the average variance extracted (AVE) scores. The recommended threshold of 0.5 (Bagozzi and Yi 1988) was exceeded for all the constructs indicating that the chosen indicators are explained by their respective constructs.

5.2. Testing the structural model

The fit of the structural (inner) model was evaluated by the discriminant validity criterion which means that every construct is significantly different from the others. The first way to analyze discriminant validity is a comparison of item loadings and cross loadings. If all loadings are higher than cross loadings, then the construct significantly differs from the others. The results of the comparison of loadings of the remaining items with the cross loadings indicate a good fit of the structural model.

The structural model was evaluated based on the R^2 and the significance of the path coefficients. The variances explained (R^2) for each of the endogenous variables were as follows: achievement of network-level goals 0.542, achievement of firm-level goals 0.199, alignment of interests 0.305, and alignment of actions 0.237 (see numbers within the ellipses of respective constructs in Figure 1). Considering the complexity of the research model, the results are indicating a good fit. Rather low R^2 values for the achievement of firm-level goals and the alignment of actions can be caused not only by the complex nature or manifold determinants of these constructs but also by some inconsistency of the operationalization of these constructs.

We have used bootstrap method with 200 re-sampling to define significance of the path coefficients. The path coefficients and their significance based on t-values at the $p<0.05$ level are also shown in Figure 1. Based on this criterion, we verified seven out of the ten hypotheses that were formulated. Specifically, the hypotheses H2 and H7 could not be accepted because the contribution of the constructs of alignment of interests and level of complementarities was insignificant. Additionally, the hypothesis H6 was rejected due to the unexpected sign. We discuss the results in the next section.

6. Discussion and conclusion

6.1. Discussion of the results

The results support the vast majority of our theoretical suppositions. In particular, the achievement of network-level goals is to a large extent explained by how properly both cooperation and coordination problems are solved. This finding underscores the strategic value of viewing strategic network management as a multifaceted construct that consists of cooperation and coordination elements at the different levels. In particular, the alignment of actions has a strong and significant effect emphasizing the role of a joint and responsive action in achieving collective goals.

The results also show unexpected findings enabled by the PLS property to analyze all the relationships in the model simultaneously. The alignment of interests has a *small* positive effect on the achievement of firm-level goals of the network members*. Importantly, this result contradicts the findings of the strategic management scholars, e.g. Mentzer et al. (2000), Gulati et al. (2005), Gottschalg and Zollo (2007) and others who have observed large positive effects of interest alignment on the achievement of individual firm's goals. We explain this contradiction by the expanded theoretical focus from the dyadic level to the network level, i.e. by the presence of network-level goals in the model. In the dyadic context, it is difficult to recognise the other connected relationships of the same network and, thus, to make complete conclusions about how the relationships should be organised. On account of this, our results show that the focal firm's efforts to align the interests in both downstream and upstream relationships have not much effect on the achievement of the individual firm-level goals of buyers and suppliers. The presence of network-level goals "distracts" the effect of the alignment of interests from the achievement of firm-level goals.

In this context, one should consider that the suppliers in the Ukrainian agri-food business often exhibit high levels of general cooperativeness regardless of the economic feasibility of cooperation. The focal firms, i.e. branded food manufacturers can use this condition to align the interests of the suppliers such that the achievement of firm-level goals of the suppliers is complicated. For example, they can require relationship-specific investments for establishment of sufficient infrastructure that makes it problematic for the suppliers to obtain profits from the relationships in the short run.

Furthermore, one has to take into account that the small effect of interest alignment on the achievement of firm-level goals appears if one simultaneously analyzes the effect of the alignment of actions. In our model, the alignment of actions has a significant positive effect on the achievement of firm-level goals. Thus, the hypothesis H4 is supported, indicating that the joint action as a collective construct is closely linked to individual constructs in business relationships (Medlin 2006). This implies that the

* Cohen (1988) proposes to evaluate the criterion of effect size for each effect in the path model. The effect size f^2 is calculated as the increase in R^2 relative to the proportion of variance of the endogenous latent variable that remains unexplained: $f^2 = (R^2_{\text{included}} - R^2_{\text{excluded}}) / (1 - R^2_{\text{included}})$. Values of 0.02, 0.15, and 0.35 signify small, medium, and large effects, respectively. To be able to better explain the effect of the alignment of interests on the achievement of firm-level goals, we have calculated its size: $f^2 = (0.542 - 0.479) / (1 - 0.542) = 0.14$. The value of $f^2 = 0.14$ indicates a small effect.

successful strategic network has beneficial outcomes also at the firm level of suppliers and customers, although the respective effect (see path coefficients in Figure 1) is weaker at the firm level than at the network level.

Overall, the results of testing the hypotheses H1-H4 demonstrate that cooperation and coordination have larger effects on the achievement of network-level goals than of firm-level goals*. This conclusion contradicts the perceptions of strategic network management by many top managers today. One can observe the contradiction by the example of the McKinsey's Global Supply Chain Survey (McKinsey & Company 2008). The results of this survey demonstrate that managers reasonably consider the improvement of economic efficiency, i.e. cost reduction, as one of the major goals in supply chains. However, the other strategic goals managers define as most important for their supply chains can be regarded either as firm-level goals, e.g. reducing the company's carbon footprint, or as management tasks *per se*, i.e. improving customer service, improving reliability of supply chain, etc. In this context, one has to admit that managers are to a great extent affected by the necessity to report about "successful numbers" to the corporate planners of their firms. As a result, managers often have to deal with conflict between firm-level goals in strategic networks and the corporate goals of their firms. This often leads to a distorted understanding of strategic network management.

Another result can be also regarded as surprising. The alignment of actions is negatively affected by higher levels of interdependence and, thus, the hypothesis H6 is rejected. Although interdependence is usually addressed as enabler of collaboration (Doz et al. 2000; Schreiner et al. 2009), it is evident that the focal companies find higher dependence on the partners as unfavourable and try to have enough opportunities to substitute their partners. In this context, one has to take the specifics of the research setting into account. The result of hypothesis H6 indicates that the issue of supplier and customer compliance is still severe in the Ukrainian agri-food business. Despite the wide scope of vertical coordination practices, the business environment in Ukraine is highly volatile with persisting infrastructural problems. This precludes interlocking of the actions of network members needed to capitalise on the specialised but interdependent activities. At the same time, the situation can be quite different in stable business environments where companies are not afraid of engaging in supportive action, establishing necessary routines, and making mutual adjustments on the distribution of tasks.

The hypothesis H5 addressed the effect of another network structural characteristic, transparency, on the alignment of interests. The hypothesis has been accepted, implying that higher levels of transparency have a significant positive effect on the alignment of interests. This result is consistent with the findings of Deimel et al. (2008)

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* The results, however, must be accepted with some caution as we surveyed only focal firms. For example, the focal firm's suppliers or buyers could have expressed different opinions about satisfaction with achievement of their firm-level goals (Kim et al. 1999; Emiliani 2003). This limitation is caused by the strategic network approach we followed in the study by assuming that the focal firm is concerned with the management of the network and is, therefore, knowledgeable about goals pursued through the network.

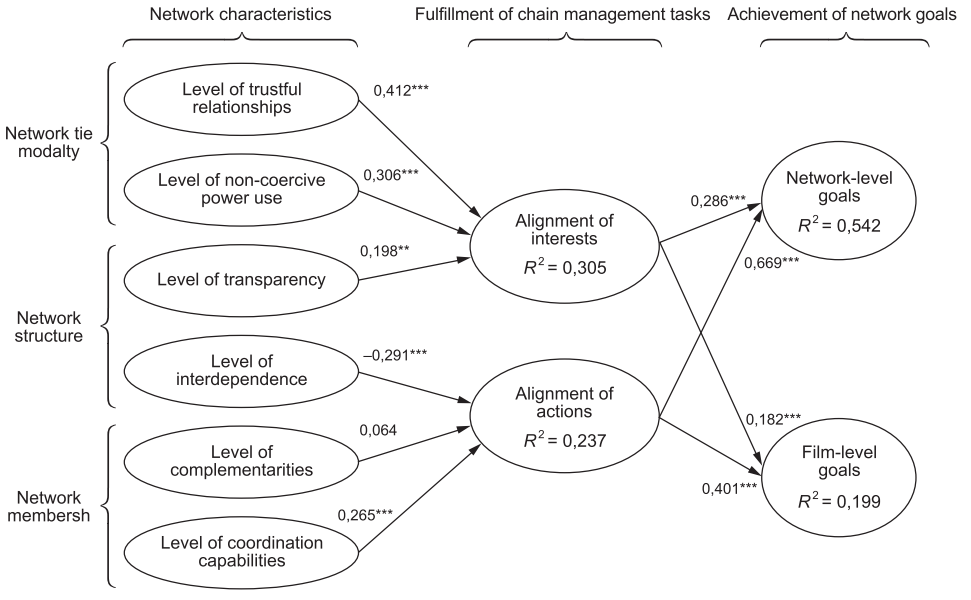

Figure 1. Results of the model testing

who have revealed that high levels of transparency are associated with partner commitment. Although the surveyed focal companies belong to the different sectors which, accordingly, exhibit (and often require) different levels of transparency, the issue of transparency in the strategic network has to be addressed strategically given its importance for the transfer of valuable knowledge and preclusion of free-riding (Dyer and Singh 1998).

Besides, interest alignment is subject to significant positive effects by higher levels of trustful relationships and non-coercive power as proposed by hypotheses H9 and H10, respectively. These results are consistent with the findings of earlier research if considered both separately and simultaneously. For example, Handfield and Bechtel (2002) have shown that trustful relationships have a significant effect on partner responsiveness, whereas Leonidou et al. (2008) have found that the exercise of non-coercive power is negatively related to conflict in inter-firm working relationships.

The remaining hypotheses (H7 and H8) proposed that network members' complementarities and higher levels of coordination capabilities, respectively, have a direct positive effect on coordination. Only the latter of these constructs has a significant influence on the alignment of actions. The reason why high levels of complementarities have no significant effect can be of statistical nature. There is some inconsistency in operationalization of the latent construct: the manifest variables of the strategic fit between the focal company and its suppliers and customers have very low loadings on the construct. Another reason can be the fact that strategic networks represent well-defined value systems (Möller et al. 2005) where firms possess complementary resources

and perform complementary tasks. The strategic complementarity (Dyer and Singh 1998: 668) between network members is, thus predefined, implying that the existing complementarities are well-known to members and can have only minor effect on the alignment of actions.

6.2. Concluding remarks

Two general conclusions can be made based on the results of empirical analysis. First, network-level goals must be considered alongside firm-level goals in strategic networks. They are subject to large effects on the part of cooperation and coordination and have to be of particular interest for focal firms that are responsible for the development and implementation of collective strategies.

Second, strategic networks in the Ukrainian agri-food business require modification of the "imported" management concepts. The analysis of the hypothesised relationships in our model reveals that the investigated strategic networks (the active sample of 101 respondents of 627 branded food manufacturers in Ukraine in total) are characterised by a negative effect of higher interdependence among members on the alignment of their actions. This finding can be explained by the high volatility of the business environment and infrastructural problems (Gagalyuk and Hanf 2009). Additionally, there might be a lack of capabilities by focal firms with regard to capturing the whole strategic network in order to address the existing interdependencies as an issue at the network level of analysis.

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Appendix: Operationalization of the latent variables

Latent construct	Measure (manifest variable)
The level of achievement of network-level goals of network members	**1. How satisfied are you with contribution of *all* your *suppliers* to the quality of your branded product (e.g. maintenance of product freshness, durability, absence of contaminants, etc.)?** (From "very dissatisfied" to "very satisfied")
	2. How satisfied are you with contribution of *all* your *customers* to the sales of your branded product? (From "very dissatisfied" to "very satisfied")
	3. How satisfied are you with the work of *all* your *suppliers* regarding the following aspects: supplies of necessary volumes of product components, proper preservation, traceability of the supplied components, etc.? (From "very dissatisfied" to "very satisfied")
	4. How satisfied are you with the work of *all* your *customers* regarding the following aspects: product appearance on the shelf, provision of logistics and merchandizing services, etc.? (From "very dissatisfied" to "very satisfied")
The level of achievement of firm-level goals of network members	**1. To what extent do you think your current *suppliers* are satisfied with knowledge received from your company?** (From "very dissatisfied" to "very satisfied")
	2. To what extent do you think your current *suppliers* are satisfied with reputation of working together with your company? (From "very dissatisfied" to "very satisfied")
	3. To what extent do you think your current *suppliers* are satisfied with profit generated from cooperation with your company? (From "very dissatisfied" to "very satisfied")
	4. To what extent do you think your current *customers* are satisfied with knowledge received from your company? (From "very dissatisfied" to "very satisfied")
	5. To what extent do you think your current *customers* are satisfied with reputation of working together with your company? (From "very dissatisfied" to "very satisfied")
	6. To what extent do you think your current *customers* are satisfied with profit generated from cooperation with your company? (From "very dissatisfied" to "very satisfied")

Latent construct	**Measure (manifest variable)**
The level of the alignment of interests (cooperation goal of chain management)	Please indicate your opinion about the following statements: (From "strongly disagree" to "strongly agree")
	1. We are certain that the majority of our current *suppliers* will perform their tasks properly
	2. We are certain that the majority of our current *customers* will perform their tasks properly
	3. Most of our *suppliers* invest enough in quality and technology to be able to meet our requirements
	4. Most of our *customers* invest enough in quality and technology to be able to meet our requirements
	5. How satisfied are you with the mutual information exchange with your current *suppliers*? (From "very dissatisfied" to "very satisfied")
	6. How satisfied are you with the mutual information exchange with your current *customers*? (From "very dissatisfied" to "very satisfied")
The level of the alignment of actions (coordination goal of chain management)	**1. How satisfied are you with the responsiveness of your *suppliers* to your requests regarding e.g. process quality, product quality, etc.?** (From "very dissatisfied" to "very satisfied")
	2. How satisfied are you with the timeliness of delivery of components for your branded product by your current *suppliers*? (From "very dissatisfied" to "very satisfied")
	3. How satisfied are you with the responsiveness of your *customers* to your requests regarding e.g. product storage, merchandizing, etc.? (From "very dissatisfied" to "very satisfied")
	4. How satisfied are you with the timeliness of payments for your branded product by your current *customers*? (From "very dissatisfied" to "very satisfied")
	5. How satisfied are you with the willingness by your current *suppliers* to perform their operational tasks? (From "very dissatisfied" to "very satisfied")
	6. How satisfied are you with the willingness by your current *customers* to perform their operational tasks? (From "very dissatisfied" to "very satisfied")
The level of complementarities among network members	Please indicate your opinion about the following statements: (From "strongly disagree" to "strongly agree")
	1. The strategies of most of our *suppliers* correspond to our strategy
	2. The cultural norms and values of most of our *suppliers* correspond to our cultural norms and values
	3. The strategies of most of our *customers* correspond to our strategy
	4. The cultural norms and values of most of our *customers* correspond to our cultural norms and values

Latent construct	**Measure (manifest variable)**
The level of coordination capabilities of network members	Please indicate your opinion about the following statements: (From "strongly disagree" to "strongly agree")
	1. Most of our *suppliers* easily agree if we ask them to perform certain tasks to meet our requirements
	2. Most of our *customers* easily agree if we ask them to perform certain tasks to meet our requirements
	3. Most of our *suppliers* know what they have to do to meet our standards
	4. Most of our *customers* know what they have to do to meet our standards
The level of use of non-coercive power by the focal company	**1. To make your *suppliers* comply with your standards, how often do you use premiums/bonuses?** (From "very infrequently" to "very frequently")
	2. How often do you provide your *suppliers* with specific recommendations that help them meet your requirements? (From "very infrequently" to "very frequently")
	3. To make your *customers* comply with your standards, how often do you use premiums/bonuses? (From "very infrequently" to "very frequently")
	4. How often do you provide your *customers* with specific recommendations that help them meet your requirements? (From "very infrequently" to "very frequently")
The level of trustful relationships among network members	Please indicate your opinion about the following statements: (From "strongly disagree" to "strongly agree")
	1. Most of our *suppliers* believe that our decisions are beneficial for them
	2. Most of our *customers* believe that our decisions are beneficial for them
	3. We always inform our *suppliers* about our next steps in cooperation
	4. We always inform our *customers* about our next steps in cooperation
The level of transparency among network members	Please indicate your opinion about the following statements: (From "strongly disagree" to "strongly agree")
	1. We are knowledgeable enough about decision-making styles of our *suppliers*
	2. We are knowledgeable enough about decision-making styles of *our suppliers' suppliers*
	3. We are knowledgeable enough about decision-making styles of our *customers*
	4. We are knowledgeable enough about decision-making styles of *our customers' customers*

Latent construct	**Measure (manifest variable)**
The level of interdependence among network members	Please indicate your opinion about the following statements: (From "strongly disagree" to "strongly agree"; reverse coded)
	1. If it was necessary, we could substitute our *suppliers* quite easily
	2. If our *suppliers* wanted, they could substitute us by another partner quite easily
	3. If it was necessary, we could substitute our *customers* quite easily
	4. If our *customers* wanted, they could substitute us by another partner quite easily
	5. If it is necessary, our *suppliers* easily find common language with each other
	6. If it is necessary, our *customers* easily find common language with each other