Abstract. The process of transition in Central and Eastern Europe is featured by the formation of supply chain networks in agribusiness. Involving exchange relationships among numerous participants of the food sector, supply chain networks are particularly important for the development of the quality aspects. Effective resolution of such a strategic issue requires that supply chain networks are successfully managed. However, it is not clear up to now what the success of supply chain networks actually is. To fill this gap, we present the model of supply chain network success. Implications for food chain management in Central and Eastern Europe are discussed.

Keywords: supply chain management, Central and Eastern European (CEE) countries, success model.

FRAMEWORK OF SUCCESSFUL MANAGEMENT OF FOOD SUPPLY CHAIN NETWORKS IN CENTRAL AND EAST-EUROPEAN COUNTRIES

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1. Introduction

Several studies on the effects of foreign direct investments (FDI) in Central and East-European countries (CEEC) show that particularly foreign investors exert significant efforts to arrange well-functioning supply chains (e.g., Belaya et al., 2012; Swinnen, 2006; Reardon et al., 2007). To raise the level of quality of their suppliers, foreign companies employ business models used in their countries of origin. Specifically, they introduce chain-wide management concepts to optimise inter-firm relationships with local suppliers. Generally this means the tightening of the procurement relationships that leads to the development of vertically integrated firms or vertically cooperating hybrids (Boehlje, 1999). In this paper, we take a closer look at vertically cooperating chain systems or supply chain networks.

A supply chain network generally represents long-term and repetitive, formal and/or informal relationships among firms participating in a particular supply chain. We specifically focus on vertically cooperating chain systems in agribusiness – a sector where quality and safety is perceived as a high priority (Anica-Popa, 2011) and where vertical coordination is especially important for signalling and monitoring these aspects (Menard and Valceschini, 2005). Effective resolution of such strategic issues requires that supply chain networks are successfully managed. However, it is not clear up to now what the success of supply chain networks is.

The proponents of the relational view of strategic management suggest that the success of an individual firm is 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 (Crişan et al., 2011; Gulati et al., 2000; Kale et al., 2002; Dyer and Hatch, 2006).

Brinkhoff and Thonemann (2007) show in an empirical study that the unclear definition of common goals can be regarded as one of the major source for failure of networks. In this context it seems, that the discussion about 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 analyse the role of network-related “collective constructs” such as inter-firm trust, commitment and relational norms (Medlin, 2006, p. 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-organisational relationships has been widely emphasised (e.g. Pitsis et al., 2004; Provan and Kenis, 2007; 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 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.
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around the whole network of relationships. Thus, without simultaneous consideration of goals at the firm and network levels and without an 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.

Based on a literature review, the aim of this study is to theoretically develop a framework that includes the relationships between goal achievement at the firm and network levels, the network management’s goal achievement and the theoretical constructs that are conceptualised as the determinants of goal achievement. In order to fulfil this aim, we first outline the agribusiness in CEEC. Secondly conducting a literature review we provide the theoretical background of supply chain networks. Coming from these foundations, we further theoretically develop and present a framework of supply chain network success. Subsequently, we discuss the framework in the context of food chain management in CEEC. We conclude the article by stating the limitations of our research and further research directions.

2. Agribusiness in Central and East-European countries

Despite planned vertical coordination has been exercised before 1990 in Ukraine and Russia\(^1\), today the majority of transactions in the agri-food chain are coordinated via the price mechanism as arm-length transaction (Гагалюк and Валентинов [Gagalyuk and Valentinov], 2009). Existing contracts are broken quite often to gain a short-term advantage. Gorton et al. (2003) report that medium-size processing enterprises in Ukraine suffered most of all, facing about 12% of existing contracts not realised by suppliers in 2001. At the same time, small enterprises do not use any contracts at all. One reason for this is that contracts cannot be realised due to poor contract enforcement mechanisms. Additionally, Swinnen (2006) defines two reasons for contract breaching in transition countries. Firstly, producers distrust their buyers and are afraid of not being paid for production. Secondly, they may not be able to fulfil a contract because they cannot access basic production factors. As a result of the lack of necessary inputs, expertise, and know-how a shortage of quality supplies has occurred in the agribusiness. Initial private vertical ties did not aim to resolve this issue because most contracts between supply chain partners omitted the issue of food quality. Additionally, many agricultural small and medium sized enterprises (SME) experienced marketing problems because they were poorly informed about the requirements processors and retailers place on agri-food products (IFC, 2004). After all, processors usually offered commodity credits to their suppliers (agricultural enterprises) just to utilise their production capacities.

Despite the fact that the majority of business transactions are being coordinated via arm-length transactions, verticalisation is an important and growing phenomenon in the agri-food chains of CEEC (Swinnen, 2006; Glaser-Segura, 2010) and quality can be regarded as the main source that catalyses this development (Gorton et al., 2006; Гагалюк and Валентинов [Gagalyuk and Valentinov], 2009). For example, recently in Ukraine the requirements of end consumers with regard to
quality characteristics of food products, their assortment, package features and the way they are offered at a store have improved. To a great extent, the improvement of consumers’ requirements can be explained by the increase in incomes and the development of the retail sector. Given a growing competition in the retail sector, retail companies provide their customers with a range of offers in the style of items, store location, and quality-related offers. Nowadays the biggest players of the Ukrainian retail offer up to 25% of all products as their own brands (Expert Online, 2007). Hence, the importance of brand management for retailers and processors has substantially increased. Being responsible for the quality of the food products the brand owners face the need to vertically coordinate the supply chain. A transition specific problem is that the commodities are often produced by households (State Statistics Committee of Ukraine, 2006), so that the branded processors and retailers have to deal with an enormous amount of suppliers. A leadoff method of solution is exemplified by the dairy sector. The processors deal with this situation by organising their own collecting stations in order to coordinate their suppliers and conduct random quality tests. Furthermore, milk processors assure quality supplies from agricultural enterprises by leasing cooling tanks to them as part of their contracts. These findings correspond to those of the other authors on processors’ farm assistance in other transition countries and sectors, e.g., Gorton et al. (2006) in Moldova and Swinnen (2006) in Bulgaria and Romania.

A further important driver of verticalisation can be seen in the growing importance of foreign investors and their demand for higher quality (Swinnen, 2006). FDI can be found at the farm and processing levels as well as in the retail sector (Stange, 2010). It is observable that the foreign enterprises export their own business concepts. Several studies on the effects of FDI in CEEC (Danciu, 2012; Palmer, 2005; Roberts, 2005; Hanf and Pieniadz, 2007) have shown that foreign investors are working hard to raise the level of quality of their suppliers in order to meet their own global quality requirements. Further on foreign companies impose high (global) private standards to differentiate their products from those of the competitors, i.e. standards work as strategic tools (Rubaeva, 2010; Swinnen, 2006).

The following example from Russia also illustrates how foreign investors can deal with the transition challenges in CEEC. Metro, the second largest retailer in Russia, has opened about 30 outlets and has expanded into central and southern Russia and the Urals (A.T. Kearney, 2008). After entering the country a few years ago, the Metro Group Russia has already installed the Metro Asset Management, Metro Buying Group, Metro Advertising, Metro Group Logistics, and Metro Group IT. The 140,000 listed articles of the twenty-six cash & carry markets and the three super centres are delivered by 2500 suppliers. Only 5% of them are foreign manufacturers, while 20% of the articles are region-specific. The aim is for all of the suppliers to comply with the global Metro quality and supply chain standards. However, in Russia, the international retailers faced an immediate response from local players that were quick to learn modern retail trade methods and forms. In order to successfully compete with these local companies often imitate their strategic approaches (Radaev, 2010).
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2005). Domestic retailers – such as the market leader X5 Retail Group – are expanding their operations, building strength in their supply and distribution chains, and working on customer relations to capture a larger and more robust share of the market (Belaya and Hanf, 2009). One of the difficulties which many retailers experience when entering Russia is the uncooperative behaviour of Russian suppliers (Roberts, 2005). Furthermore Russian supply chains are characterised by distrust and absence of professionalism (Sheresheva and Tretyak, 2004). Tarnovskaya et al. (2007) describe the generally low level of suppliers’ compliance with the norms of the code of conduct. However, the increased competition in global markets has led to the rise of various forms of partnering and inter-firm networks in the former Soviet republics (Möller and Svaln, 2006). The number of such networks is growing: in addition to traditional supplier-buyer relationships, firms collaborate within distribution channels (Möller and Halinen, 1999; Ford et al., 2003; Möller and Rajala, 2007).

Overall, “Western style” business concepts are gaining importance. In the agri-food business, particular attention is paid to the establishment of modern procurement concepts, i.e. chain management, as well as to food quality and safety by international standards (Dries et al., 2004). As a result of these changes, verticalisation, i.e. formation of supply chain networks in agri-food chains, is seen as an important and growing phenomenon in the CEEC (Swinnen, 2006).

3. Supply chain networks and strategic chain management

A supply chain network is represented by the long-term and repetitive, joint and cooperative behaviour of companies that are related by vertical product and information flows in the supply chain in order to provide a product or service to the end consumer. The objective of most of the supply chain networks is to produce higher quality and/or higher efficiency by cooperation rather than by full integration of the supply chain or by market transactions (Lazzarini et al., 2001; Neves, 2003; Zylbersztajn and Farina, 1999). Supply chain networks can be characterised as pyramidal-hierarchical inter-firm collaborations (Jarillo, 1988) which possess a focal firm that coordinates them. The focal firm is recognised by the consumers as “responsible” for the specific food product (Hanf and Kühl, 2005). In the case of the processor-owned brand, the focal firm is the processor, and in the case of the distributor-owned brand, it is the retailer acting as the focal company. Within such pyramidal-hierarchical strategic networks (Jarillo, 1988) the focal company (or chain captain) is liable with its reputation for each product being produced by its supply chain network. The increasing importance of reputation can be observed, for example, by the retailer’s efforts to create a brand for its own company (Hanf and Hanf, 2007). Since the chain captain is liable without limitation for the correctness of the production, i.e. for all credence characteristics, it (chain captain) must be familiar with the network’s structure to avoid any type of defect within the entire network.

Hence, the focal company has to set incentives to create a situation in which every actor has the self-interest to secure the sustainable stability of the whole network (Picot et al., 2003). On one hand, these incentives must be of monetary nature to
create a short-term win-win situation (i.e. higher profits). On the other hand, the incentives have to be of non-pecuniary nature to create a long-lasting “unique relationship proposition” which cannot be imitated easily by competitors. Exclusive benefits can include higher profits or joint growth in the future. Nevertheless, for some participants of the network this might be just to stay in business. The cooperation in supply chain networks relies on confidence and understanding. These characteristics have to grow over a long time and create the space to achieve a superior joint solution of a problem (Hanf and Kühl, 2005).

Especially in the food business, where numerous SMEs are active, cooperative networks give those enterprises the chance to concentrate on their core competencies. By cooperating, SMEs can better exploit their core competencies and reduce at the same time the inherent risk by focusing on single activities. In turn, the focal company has to consider that such companies do not dispose of a sophisticated IT-infrastructure and high manpower. Additionally, single SMEs do not dispose of a sufficient quantity of commodities in order to supply the whole demand of the network. Particularly for agricultural goods the total amount of supply needed has to be delivered by various suppliers. For this reason, cooperation has to be installed being managed by the focal company itself or by a system supplier.

Structuring of exchange relationships with the supply chain partners requires that the focal company properly deals with the problems of two domains, cooperation and coordination (Gulati et al., 2005; Hanf and Dautzenberg, 2006; Xu and Beamon, 2006). Because problems of cooperation arise due to the conflicts of interests, the cooperation task is to align the interests of the participating actors or, in other words, motivate them to work together (Gulati et al., 2005). The accomplishment of this task is typically addressed by the implementation of partnering strategies that generally aim to design the relationships within the supply chain (Mentzer et al., 2000).

The problems of coordination appear as a consequence of uncertainty about the actions of interdependent actors. Therefore, coordination is related to joint actions and can be generally referred to as the alignment of actions (Gulati et al., 2005; Payan, 2007). The fulfilment of this task involves gaining or transferring knowledge about the behaviour of interdependent actors and the character of existing interdependencies. The alignment of actions in supply chain networks is addressed by implementation of the supply chain management strategies (Simatupang et al., 2002).

In the process of structuring of long-term exchange relationships within an SCN, the focal company has to take into account that problems of cooperation and coordination appear at the three different levels, i.e. the firm, dyadic and network levels of collaboration (Duysters et al., 2004). In order to preclude or solve problems arising at the three levels, it is necessary to address the partnering and supply chain management strategies simultaneously as components of the overall collective strategy.

A number of studies (Astley and Fombrun, 1983; Bresser and Harl, 1986; Sjurts, 2000) have addressed collective strategies as the type of strategies that are implemented by collaborating organisations to deal with variation in inter-organisational environment. In the network context, collective strategies aim not only...
to shape network processes and relationships but also to ensure the achievement of the specified network outcomes (Sydow and Windeler, 1998). Therefore, a collective strategy can be subsumed as a framework of activities to achieve network goals.

The achievement of goals in any activity generally implies the success of that activity. Indeed, goal achievement underlies most interpretations of success and performance (Ariño, 2003). Studies on (supply chain) networks that derive implications for (supply chain) network management and collective strategies try to propose ways for improvement of network functioning, i.e. they directly or indirectly deal with the issue of network success. However, paradoxically, most studies take the issue of network goals for granted and consider network goals rather implicitly, i.e. as if the goals set in networks were known. Additionally, even those studies which explicitly take into account network goals in fact analyse how goals of single firms in a network are achieved and ignore the notion that a network as any collaboration is characterised by common goals alongside with individual goals. As such, we contend that our knowledge of the supply chain network’s success is incomplete because wide elaborations on common goals are missing while individual goals receive enough attention. Furthermore, without a complete understanding of goals, the soundness of inferences drawn from the relationships between goals and other theoretical constructs will be disputable. As a consequence, the picture of the supply chain network’s success will be blurred and the validity of the derived implications for the network management and the strategies adopted in networks will be brought into challenge. In order to help overcome this challenge, we further represent the model of supply chain network success.

4. The model of supply chain network success

4.1. Supply chain network goals

As it turns out from the above discussion, the success of a supply chain network encompasses the construct of network goals to be achieved as well as the constructs of factors affecting the achievement of networks goals. The current section theoretically elaborates on these constructs[3].

Generally, in order to consider network goals a multiple-constituencies approach is needed because there are multiple parties to a network, including each participating firm as an independent organisation, the network’s management – primarily the focal company, and the community – particularly end consumers, non-governmental organizations, and the government (Ariño, 2003, p. 68). Similarly to Ariño (ibidem), we concentrate only on the goals of network members and network management by assuming that they are constrained by the goals of other constituencies and, therefore, reflect them insofar as they are constrained by them. Furthermore, specific network goals considered depend on the particular constituency
assessing the achievement of those goals (Provan and Kenis, 2007), i.e. a focal company and the other network members in a supply chain network. This implies that we rather exemplify goals and do not consider a certain goal a priori as the correct one because each presents a potentially valid point of view.

Further, considering network goals, one has to address the differentiation between network levels. Just as literature takes notice of co-existence of common and individual goals in inter-organisational relationships and networks (Van de Ven, 1976; Wathne and Heide, 2004; Winkler, 2006), we argue that the supply chain network’s goals encompass network-level and firm-level goals\(^4\).

We understand the network-level goals as the predefined set of outcomes which can be achieved only if all the network actors work together to achieve them. The achievement of such goals can be regarded as the essence of collaboration (Huxham and Vangen, 2005). Although joint action does not automatically imply the need for common goals (Chen et al., 1998), collaboration with common goals creates long-term collaborative advantages and is even necessary (Pitsis et al., 2004). An agreement on network-level goals among the network members creates the initial conditions for collaboration and stabilises the network relationships because common goals serve as an integrating mechanism (Winkler, 2006). Provan and Kenis (2007, p. 2) provide examples of network-level goals in the public sector, e.g. strengthened community capacity to solve public problems, regional economic development, responsiveness to natural or man-made disasters, etc. In the food industry of Western economies, supply of organically produced food can be considered as an up-to-date example of a network-level goal in organic supply chain networks. In the agribusiness of CEEC, the current network-level goal in most supply chain networks is the achievement of chain quality, i.e. undisrupted supplies in quantity and quality. Such goals address increasing consumers’ demands and the risk of food scandals and therefore require tight collaboration of all network members (Hingley, 2005). Providing solutions for such complex issues requires multilateral coordination and more than just achieving the goals of individual organisations (O’Toole, 1997). Thus, single firms entering the network have to take into account that the network has not only its rules which should be followed but it also has network-level goals which require investments in time, effort, and money.

Not refuting this notion, we believe that goals of individual organisations, i.e. firm-level goals in a network, have to be addressed simultaneously with network-level goals. Under firm-level goals we understand the goals which single firms want to achieve themselves by participating in a network. Such goals might include access to resources or markets, increased sales, risk reduction, etc. Non-achievement of goals of the particular network members can bring about an endeavour by those members to exit a network implying substantial losses (Jap and Ganesan, 2000) or even a network’s collapse if those members cannot be equally substituted (Park and Ungson, 2001).

A sustainable network will, thus, only be established when benefits occur for the actors in the network (Kaiser and Edwards-Jones, 2006). Hence, attempts to achieve
individual goals can influence the achievement of common goals and vice versa. In this respect, collective strategies implemented in networks have to involve the accomplishment of two tasks that were mentioned above, the alignment of interests and the alignment of actions. These tasks can be also regarded as network goals or, better said, sub-goals because they are set by the supply chain network’s management to enable the intentional achievement of network-level and firm-level goals.

Specifically, the goal of *alignment of interests* involves minimisation of the level of conflict in a network, reduction of the risk of opportunistic behaviour by network actors, promotion of trustful relationships among actors, and assurance of actors’ commitment to network relationships. The importance of the goal of alignment of interests can be subsumed under the above examples of the Ukrainian and Russian food supply chains where the local suppliers’ distrust made it problematic for retailers to invest into relationships on a long-term basis. The goal of *alignment of actions* encompasses arrangement of appropriate level of communication among network members, synchronisation of actions in the supply chain, and responsiveness to customer needs. The above example of poor knowledge about the customer requirements by the Ukrainian agricultural SMEs emphasises the importance of appropriate information transfer along the supply chain. Additionally, the use of collecting stations in the Ukrainian dairy sector shows why the actions of supply chain actors should be synchronised. Nevertheless, the extent to which goals of the different network levels as well as the alignment of interests and the alignment of actions are achieved depends on a range of factors stemming from the network relational characteristics. As it can be seen further, only by considering those factors properly can the supply chain network’s management ensure sustainable success of the network.

### 4.2. Framework of supply chain network success factors

Generally, the network’s success factors belong to three types of relational characteristics inherited in networks: network structure, network membership, and tie modality (Gulati et al., 2000). 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 (idem, p. 205). Based on the literature on management of inter-firm relationships and networks, we operationalise characteristics of supply chain networks, i.e. structure, membership and tie modality, by the respective constructs that aim to reveal the essence of each of those characteristics (see Figure 1).
4.2.1. Network structural characteristics

1. Supply chain networks consist of a multitude of participating firms along the food chain. Therefore, the embedded upstream and downstream flows of resources and information have to cross various stages of the chain. The involved firms differ widely in size. As a result, supply chain networks are highly complex systems (Brito and Roseira, 2005; Căcescu and Dumitru, 2011; Goerzen and Beamish, 2005) and they bear the high risk of failure. Hence, reducing complexity is one of the most important tasks in chain management (Ulaga and Eggert, 2006). In our opinion, the structure of
supply chain networks can be characterised by levels of chain transparency and interdependency among actors.

Because of the complex nature of food supply chains, their structure is often not made public to all network members, and a feeling of anonymity appears. Furthermore, such network structures bring forward asymmetric information (Hanf and Dautzenberg, 2006). Overall, the missing transparency of the network structure increases the probability of free-riding. Thus, the level of chain transparency gains in importance as one of the factors that impact the achievement of SCN goals. The focal company has to take measures to reduce anonymity and encourage the other network members’ identification with the network (Zaheer and Bell, 2005).

Additionally, the network structure is characterised by interdependencies among network members. Generally, interdependency is created when decisions and actions by one partner influence the decisions and actions of partnering firms (Theuvsen, 2004). In a complex supply chain network with multiple actors, the number of both interactions and interdependencies is very high. Furthermore, network functioning is not only related to the current ties, it is also related to ties with potential partners. Because the increase in interdependencies and their magnitude is mainly disproportional at the different stages of the supply chain, dealing with interdependencies is an extremely difficult task. Thus, the level of interdependency among actors can have substantial effect on the achievement of SCN goals.

4.2.2 Network membership characteristics

Although research on networks focuses primarily on the interrelationships of firms, single enterprises can be regarded as initial elements because collaborations do not exist without them. We operationalise the network membership characteristics via the constructs of network-level capabilities and general cooperativeness of actors. Network science highlights that collaboration is determined by the complementary abilities of the involved firms (Khanna et al., 1998). However, in the food supply chain networks, the need for and the explicit knowledge of firm strategies, culture, and values differ with the firm size, i.e. the strategic management of farmers differs significantly from that of retailers or large manufacturers. Additionally, the core competencies and resources of the involved firms often differ, precluding additional rents from collaboration (Dyer and Hatch, 2006). In this context, the existence of network-level capabilities, i.e. abilities of the actors to work in a network gain in importance. These capabilities include necessary resources, managerial skills and abilities to establish learning routines, build up unique and network-specific knowledge, use modern information technologies, ensure strategic and cultural fit, etc.

It is also important to notice that collaborations do not inevitably create advantages for the involved firms; instead, especially during their establishment, they absorb resources. Therefore, without the firm’s willingness to cooperate or, in other words, their general cooperativeness we assume that the collaboration does not prevail. Furthermore, since supply chain networks are formed to last over a long period, general cooperativeness is not only essential at the beginning of collaboration
but throughout the whole period. Because collaboration demands that enterprises adjust their own actions with the ones of their partners, general cooperativeness means also that the enterprises are willing to abstain from some of their managerial freedom. Thus, firms have to recognise collaboration not as a constraint but as a means to overcome limitations of their resources, as a unique source for pursuing strategic goals and achieving efficiency gains (Zaheer and Bell, 2005).

4.2.3 Tie modality

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). In this context, it is important whether inherent distinctions among actors are smoothed in the way and to the extent that the negative consequences of relationships are precluded. We, therefore, define the use of power and the conflict resolution as the constructs that characterise tie modality in a supply chain network.

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). Overall, it is feasible to use power to overcome problems of opportunistic behaviour by the network members. The important issues in this respect concern power distribution and selection of appropriate power mechanisms. Power can be distributed equally or unequally. Nevertheless, as long as it is clear who carries the responsibility and the decision rights for a certain task, and as long as the partners accept the power distribution, the power distribution itself is not a problem. However, if it is unclear or a partner does not accept the distribution, opportunistic behaviour arises. If a partner perceives an inequity, the willingness to invest in collaboration decreases, seriously affecting its outcome (White and Siu-Yun Lui, 2005). Furthermore, to achieve partners’ compliance, it has to be decided which type of power to use, i.e. coercive or non-coercive. Several studies (Leonidou et al., 2008, Payan and McFarland, 2005; Pelău, 2008) emphasise that the use of non-coercive power (e.g. rewards, recommendations, etc.) has positive impact on the relationships among actors while the use of coercive power (e.g. punishment, sanctions, etc.) negatively affects the relationships.

Nevertheless, inter-organisational relationships are often characterised by conflict that originates from inherent interdependencies among parties. Unless conflict is so serious that the relationship dissolution is unavoidable, it has to be resolved to establish good working conditions for further collaboration. An understanding of how conflict is resolved is important because the impact of conflict resolution on the relationship can be productive or destructive (Mohr and Spekman, 1994). Thus, the manner in which conflict is resolved in a network has implications for the supply chain network success. For example, the mechanisms of joint problem solving and persuasion are suggested to have a positive impact on the achievement of network goals while such conflict resolution mechanisms as harsh words, domination, smoothing over or ignoring the issue are seen as counter-productive (ibidem).
5. Discussion: implications for food chain management in CEEC

As outlined earlier, the coordination of the vertical food product flows tends to be complex and multifaceted in Central and East-European countries. Also, there is clear evidence that chain management is being introduced and supply chain networks are being formed. Due to growing importance of the phenomenon, in analogy to Gagalyuk et al. (2010) we suggest that there is a need for its in-depth research to clarify how supply chain networks can be better managed. Thus, the model presented in this study can be considered as one of the efforts on advancing the framework for strategic chain management in the agribusiness of CEEC.

A major handicap for the establishment of vertical coordinated chains in the agri-food business in CEEC is the high degree of volatility with frequent break-offs of exchange relationships in order to please short-term pecuniary advantages. To overcome this barrier we consider as one of the most important aspects of our model the differentiation between firm-level and network-level goals. Although both have to be achieved to ensure the supply chain network success, it is often forgotten in research and practice that collaboration is about common goals. In particular, common or network-level goals become important today, when there is a shift from competition between single firms towards competition between supply chains or networks. To sustain competitive advantage for the whole supply chain network, it is necessary that non-imitable and non-substitutable assets such as routines and knowledge which are unique to the relationships are being created. In this context, common or network-level goals serve as glue that holds the network members together and makes them act in the best interests of all the parties.

Another drawback originates from the fact that supply chain network are deliberately formed by a focal actor – often foreign investors – and that this dominant company initiates implementation of the collective strategy and sets the network-level goals. Due to their past experiences often the other (network) firms are suspicious regarding the ‘real’ intention. This suspicion is furthered by the unclear formulation of the common goals so that the other network actors often have only an abstract idea of those goals. Further, they tend to recognise network-level goals as firm-level goals of the focal actor and, as a consequence, abstain from investing into their achievement. However, it is especially in the interest of the focal company that the other network actors work together to achieve network-level goals. It is therefore important that the participants of the supply chain network do not perceive network-level goals as something abstract. Instead, network-level goals have to be explicitly set by chain management. Otherwise the reason for collaboration will vanish for the other actors as soon as their firm-level benefits from collaboration slightly decrease.

A further important setback for the establishment and functioning of supply chain networks in CEEC is the notion that in the agribusiness of CEEC contracts are still often broken, inducing costs for one of the parties and leading to supply disruptions. Not least of all, such difficulties arise due to unfavourable institutional environment: property rights are weakly protected, contract enforcement is poor, etc. Hence, explicit and clearly formulated network-level goals are not only an initial
condition for collaboration, but an integrating mechanism which functions throughout the whole period of collaboration. Nevertheless, a conflict between long-term orientation of supply chain management and the need to produce high returns on investments in short terms must be considered. To solve this dilemma, focal companies have to establish long-term relationships with suppliers. Tighter relationships with partners help minimise risks of business environment and provide substantial feedback to newly installed business models. Thereby, setting of network-level goals explicitly can be especially helpful.

However, difficulties in establishing long-term relationships are not limited to poor contract enforcement. Firms in CEEC face high adjustment costs to the ongoing restructuring processes at the procurement and the distribution stages. This facilitates the strong cost orientation of most firms. As a result, different firms exhibit varying attitudes towards such network-level goals as chain quality, i.e. network-level goals will not be in the focus of all firms that contribute to the supply. Thus, appropriate consideration of network structural characteristics, i.e. chain transparency and actors’ interdependency, gains in importance because different levels of chain transparency and interdependency are persisting. To overcome this heterogeneity, we propose that the chain management has to be divided into a strategic part and an operative one (Hanf and Hanf, 2007). It should be much easier to formulate an integrated and consistent management system with such a division. The strategic chain management will bear traits that are oriented to the long-term, i.e. all instruments fortifying the network should be involved. In particular, the bundle of instruments should allow for: 1) the explicit setting of network-level goals, 2) the alignment of firm-level goals with network-level goals, 3) the alignment of interests of single actors, and 4) the alignment of actions of single actors. The operative chain management will be more short-term and efficiency oriented paying not so much attention to the explicit setting of network-level goals and focusing more on 1) the alignment of interests of single actors as an initial condition for cooperation, and 2) the alignment of actions to ensure expected firm-level benefits.

Correspondingly, different levels of strategic importance will be attached to leveraging the network’s success factors which represent network member characteristics and tie modality. Symptomatically for CEEC, collaboration with suppliers can be established based on suppliers’ general cooperativeness and reputation quests. Consider a strong reputation effect of a well-known multinational brand on small local suppliers. Additionally, being engaged in cooperation with multinationals is perceived as an advantage because farmers believe they minimise their perceived income risk by working together with financially strong foreign companies as opposed to some local ones. However, to establish strategic chain management, the suppliers’ willingness to cooperate has to be maintained over a long period. Therefore, it will not be enough to just provide them with prompt cash payments. Instead, future benefits from collaboration have to be outlined.

Concluding, the development of specific implications for the food chain management in CEEC requires empirical testing of the model presented in this paper. At the current stage, our model represents a more holistic proposition concerning the
factors that have to be taken into account by chain management in the process of creating and guiding a successful supply chain network. Nevertheless, we were able to outline some possible directions to achieve success for supply chain networks in the agribusiness of CEEC.

6. Limitations and future research

The main contribution of our article is the establishment of a solid framework for future research on studying the role of goal achievement for management of agri-food supply chain networks. However, as in any study the findings of this research should be seen within the context of some limitations which could stimulate further research. We put the special focus of our research on the position of a focal company. The focal company represents the managerial center of the supply chain network and is expected to manage the whole network in order to realize the strategic objectives. Another limitation of our research could be seen as the absence of empirical validity or time series data. We are aware of the fact that in examining supplier-buyer relationships one needs to take into account the dynamic nature of exchange relationships, since they change over time. Last but not least the common question of generalizability of the results of this article has to be raised.

The limitations of this study could stimulate further potential directions of research on the role of goal achievement for management of agri-food supply chain networks. The findings of our research are quite intriguing. Thus, we think that it would be worthwhile to further investigate these findings in more detail. There is still a lot of room for further research to increase the understanding of the role goal alignment play in chain management. We hope that both academics and professionals would be interested in further investigations of this area of research, which would increase the effectiveness of practical and theoretical implications. We developed new measurement scales for the latent constructs in our article. Nevertheless, the theoretical perspectives of other researchers could also provided valid contributions to the refinement and further development of these measures. We suggest testing our model using the developed survey tool other empirical settings. Future research may explore the situation from not only the focal company’s perspective, but also from the perspectives of other supply chain members. Data gathered from different groups of companies (retailers, food processors, raw material suppliers, intermediaries, trading companies) might provide more information on how to manage supply chain networks successfully. It would be interesting to know whether the studied concepts change over time and whether the phenomenon of dynamism of networks has any impact on those developments.

It should be noted that despite the discussed limitations, the current article provides valuable insights into the concept of goal alignment in supply chains and networks and their role for chain management.
Notes

[1] Although the transition process differs widely in the agribusiness of different Central and East-European countries, we use Ukraine and Russia as examples to identify the remaining challenges more clearly.

[2] At the firm level, problems of single firms participating in collaboration are taken into account. Those problems primarily include the issues connected with resource endowments and cooperation capabilities. At the dyadic level, problems that arise between two collaborating firms are analysed while the network level of analysis deals with issues of collaboration of more than two firms.

[3] The following model is based on the elaborations of Gagalyuk et al. (2010) which were tested in the German fish sector.

[4] We acknowledge the existence of various levels of analysis in networks. However, our focus on the network as a whole enables us to ignore the dyadic level of analysis. In this context, Provan and Kenis have stated that although all networks comprise a range of interactions among participants, resource allocation as well as coordination and control of a joint action require that the focus is on the network as a whole. These interactions are distinct from operational links, which are often dyad based including sharing of information or joint programs (Provan and Kenis, 2007, p. 3). Thus, in our opinion, collaboration at the dyadic level entails goals that are derived from the network level and that serve as an operationalisation of network-level goals, unless two firms collude to pursue goals that are distinctive from those of the network level.

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