THE ITALIAN NETWORK CONTRACT: A "NEW" FORM OF NETWORKING WITH "OLD" RULES? GENESIS, DYNAMICS AND CHALLENGES

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1. Introduction

In 2009 the Italian Government introduced a new form of firms' aggregation based upon private contracts: the "network contract". The contracts are registered into the Italian Register of Firms (held by the Chambers of Commerce) so they have also a public value and they can – under certain conditions – assume obligations towards third parties.

The birth of the network contract (NC) was an absolute innovation not only in the Italian landscape, but also at European level and it has been recognized by the European Commission as one of the main best practices in the "Innovation and competence" chapter of the 2011 revised Small Business Act (European Commission, 2008; 2011).

The principal innovation of this new way of networking is the possibility for firms to work together to a shared project by maximizing the positive effects of networking without the rigidity – in terms of bureaucracy and procedures - of other forms of aggregations such as M&A or consortia. After less than 7 years from its introduction into the Italian legislation system, three thousands contracts (one thousand from 2014 onwards) have been registered all along the country involving almost fifteen thousands firms.

The aim of this paper is to analyze the main characteristics of the network contracts both at theoretical (Alberti, 2012; Arrigo, 2013) and practical level (Cafaggi, 2011) and to investigate whether they introduced any concrete innovation in the way Italian firms can act and perform together to generate innovation (Fichter, 2009; Dooley *et al.*, 2016). This paper contributes to the literature investigating the relevance of contracts in business-to-business relationships, that is an under-researched domain in the literature (Möhring and Finch, 2015) and where both relational issues (Macneil, 2001) and governance ones (Zaefarian *et al.*, 2013) deserve more investigation.

Thanks to the PROFILO project funded by the Lombardy Region under the ERGON 2 line of funding, the authors were charged by the Brescia's headquarter of Confindustria (AIB) to make an empirical research that

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involved 17 networks (that account for 78 firms) mainly located in the Province of Brescia in different economic sectors and with different aims and organizational features. Sixteen semi-structured interviews have been carried out from January to April 2014 with the network managers or their deputies (one of them spoke for the two networks he manages). Financial analysis of the balance sheets of the involved firms was also made in order to verify if financial variables can be considered factors through which explain the existence of the network.

After a review of the characteristics of the NC according to the Italian law and the subsequent regulation (Cafaggi, 2011; Rullani F., 2013), the paper will discuss NC within the frame of the EC's Small Business Act published by the EC in 2008 and revised in 2011. We will also analyze the phenomenon under different theoretical perspectives by reviewing the mainstreams that deal with networks (Bathelt *et al.*, 2004; Cooke & Morgan, 1998; Lundvall, 1992; Sammarra & Biggiero, 2008; Muzzi & Albertini, 2015; Dagnino *et al.*, 2015) and giving a particular attention to the discussion about governance models (Capaldo, 2014) and relational issues such as trust (Newell & Swan, 2000; Zaheer *et al.*, 1998) and knowledge sharing (Tsai, 2001; Swan *et al.*, 1999; Alberti and Pizzurno, 2015).

The research wants to answer to three main research questions:

- 1. Why firms decide to adhere to a NC instead to choose another form of formal or informal networking?
- 2. What are the internal conditions under which the NC allow for the reach of positive levels of performance?
- 3. Is there any relationship between the participation to a NC and the financial and economic performance of members?

Performance measurement cannot be defined objectively and any definition used in the literature is explicitly defined in relation to the scope of the researchers (Keong Choong, 2013; Franco Santos *et al.*, 2007). Consequently, in order to measure different aspects of performance, we add – to the classical measures of economic performance – also a subjective evaluation by asking interviewees to grade their overall level of satisfaction associated to participation to the NC, mainly with respect to their expectations (Preti, 1991; Bridge *et al.*, 1998). Thus, we are in search of the newness of this organizational form and we are interested in verifying whether we need new "rules of the game" with respect to other networked organizational forms or we can stick on "old" rules and dynamics as predictors of NCs' success (Becattini, 2000; Rullani E., 2004; Preti and Puricelli, 2013; Preti and Vignali, 2013).

2. The diffusion of network contracts

Network contracts were introduced to our system with article 3 section 4-ter and following of LD no. 5 of 10th February 2009. The first network contract was signed on 31st March 2010 in Tuscany and, since then until Unioncamere's latest data (8th August 2016), the number of networks contracts in Italy amounts to 2999 (+42,8% over the last year) and involve a total of 15187 companies all over the country. More than 63% of businesses that take part in network contracts are capital companies, followed by partnerships (12%) and sole proprietorships (10%).

According to data on network contracts from Centro Studi Confindustria (2016) updated at January 2016, 74.1% of networks consist of businesses within the same region. Under a dimensional point of view, 87,6% of networked businesses employ less than 50 employees, and 45,8% employ less than 10 persons.

Lombardy is the region with most firms involved in network contracts (2630, which make up 17% of the national figure, in a light decline over the last two years: -3%), followed by Tuscany and Emilia Romagna with about 10% each and Veneto and Lazio with 8% each.

From examining the breakdown of activity sectors (using ATECO 2007 codes), the Centro Studi Confinduatria (2016) stresses that 35,6% of the contracts on a national level in early 2016 includes firms from the services macro-sector (particularly the high-tech services sector) (-9% over the last two years), 29,7% from the industry sector (primarily mechanics), 22,9% from the construction and real estate sectors (+9% since 2014). It is interesting to note how the agri-food sector, which covers 11,4% of networked firms (concentrated in the 14,9% of the networks), actually has a networking presence that is much greater than the sector's significance in the Italian economy (1.9%). The data from the Centro Studi Confindustria also reveals that 75,8 % of networks are made up of business belonging to different macro-sectors (agri-food, service, construction etc).

3. The network contract in the Italian and European landscapes

The aim of the legislator, through the introduction of the network contract was to offer to businesses a tool for aggregation that would be more dynamic and flexible than the previous ones such as the consortium, the temporary business association or the temporary grouping of companies. This legislative will is clear from Article 3, Law 33/2009, which states, with reference to the object of network contracts, that "a number of entrepreneurs, in order to increase, individually and collectively, their capacity for innovation and competitiveness on the market", undertake "to cooperate in

predetermined ways and areas connected with the conduct of their businesses or to exchange industrial, commercial, technical or technological information or performances or to share activities covered by the scope of their business".

It is therefore clear how network contracts, in the will of the legislator, should have a strong focus on strategic innovation and collaboration toward a common goal, which is the qualifying element of the aggregation (Alberti, 2012; Cafaggi 2011). As for this point, it has been observed how this tool can be the answer to a real and perceived need that starts "from below", i.e. from single companies. Moreover, network contracts allows also small and medium enterprises (SMEs) to reach that size scale and know-how availability that can be considered critical to bear and support innovative business development processes (Preti and Vignali, 2013, Verschoore *et al.*, 2015).

From a formal point of view, a network contract must state, in addition to the identification information of the parties involved:

- the strategic objectives said parties intend to pursue;
- the procedures that will assess progress towards said objectives;
- the network plan specifying the individual agreements and arrangements set for the realization of the common goal;
- the rights and obligations of the parties;
- the duration, the procedures set for new partners to join, and
- the decision-making procedures.

The contract may appoint a joint body for its execution and establish a common capital fund for the realization of the network plan. If these two elements are present, the network is said to be "heavy" (Alberti, 2012) to differentiate it from the lighter version where no joint committee and common fund exist. The joint network governing body can be a board or monocratic and also have an additional executive representative, for example, the President of the network, as often occurs in practice.

From the point of view of liability to third parties for the obligations undertaken by the joint body, the legislation provides that the financial liability be limited to the common fund. Two more significant regulatory developments concern the possibility for network contracts to participate in public tenders and the relocation of workers (from a member firm to common NC's activities) for activities relevant to the achievement of the common goal of the contract.

The report "Le Regioni a favore delle reti d'impresa. Studio sui finanziamenti per le aggregazioni" (The regions in favour of business networks. Study on funding for aggregations), edited by RetImpresa and

Gruppo Impresa (February 2014) shows how, in 2010-2013 and from a sample of 77 regional interventions surveyed, the Italian regions have allocated a total of 1.28 billion euro worth of resources potentially in favour of business aggregations, with an absolute peak in 2013 (462 million euro). From a territorial point of view, the funds are distributed homogeneously (48% in the centre-north and 52% in the south and islands). With regard specifically to network contracts, in the observed period, only 496 networks benefited from regional contributions for a total of over 2,300 beneficiary companies. The top three regions financing networks are Emilia Romagna (136 projects), Lombardy (111), and Abruzzo (83), confirming the attention paid by these three regions to the phenomenon of network contracts.

The report data are very encouraging in terms of a criticism frequently made against network contracts over their having spread exponentially just to make use of regional funding and benefits. In fact, although 40% of the contracts to date in the country prove to be beneficiaries of regional grants for a total value of 92 million euro, the data that deserves to be emphasized is the remaining 60% of contracts that did not benefit from any funding. This shows how the value of business networks is perceived by Italian companies regardless of funding.

It is interesting to investigate the relevance of NCs with respect to EU policies. In 2008, the European Commission launched the "Small Business Act" (SBA) initiative for Europe, which aims to create conditions for the sustainable growth and competitiveness of SMEs, which represent more than 98% of businesses in the EU-27 countries (Tunisini *et al.*, 2013) and employ 67% of the workforce.

Business aggregation phenomena are not new in practice and in the literature. Over the years, it has been seen the emergence of various types of networks involving businesses of all sizes: industrial districts (Becattini, 2000; Rullani E., 2004), national and regional innovation systems (Lundvall, 1992), territorial innovation clusters (Bathelt *et al.*, 2004; Sammarra and Biggiero, 2008), innovative environments (Camagni, 1991), innovation communities (Fichter, 2009; Muzzi and Albertini, 2015) and learning regions (Cooke and Morgan, 1998).

The Italian experience of network contracts can definitely be part of this framework as a new business aggregation mode, still in its infancy and therefore still to be analyzed as for the medium-long term effects on the participating companies.

The SBA confirms the Commission's attention to SME issues when it comes to accessing innovation and internationalization and constitutes a strong signal to Member States to strive in this direction. The "Small

Business Act" is based on ten principles to guide the formulation of EU and national policies, as well as on practical measures for their implementation.

The 2011 review of the "Small Business Act" by the European Commission emphasizes the central role, in European policies, of business aggregations in supporting competitiveness and internationalization. In the same document, the Commission gaves a list of "virtuous countries" and best practices for each of the 10 points that make up the SBA. For principle No. 8 "Skills and innovation", Italy is the only European country mentioned as an example of good practice for the establishment of network contracts.

From a structural, formal, and legal point of view, some authors (Arrigo, 2013; Tunisini *et al.*, 2013) propose that network contracts be classified as "formal market exchange relationships", particularly as multilateral contracts with a common purpose (Arrigo, 2013), which fills a legal vacuum at the European level. European private law, in the recent Draft Common Frame of Reference of 2009, does not provide any rules on "multilateral contracts", which means that the Italian experience is definitely of great interest and stimulus for European legislators.

Getting back to the proposed classification, the authors divided market exchanges based on two fundamental dimensions: transactional exchanges (such as dyadic transactions, where service is governed on the basis of economic exchange) and relational exchanges, such as network contracts are. *Relational exchanges*, depending on the degree of awareness of the existence of a network and the will of the parties to take on the relevant opportunities and constraints, can be broken down into unaware, aware and formal.

According to Arrigo (2013), the "unaware" category includes clusters, industrial districts, franchising and licensing, and in general other bilateral contracts that develop within a network-type environment (e.g., subcontracting). The "aware" category can include strategic alliances, supply chain agreements, and umbrella agreements. Finally, the "formal" category includes network contracts, in addition to joint ventures, temporary associations of companies, consortia, newcos, and so on.

What sets network contracts apart from other formal aggregations is the element of flexibility; to pursue its objective (generate innovation and competitiveness), a network contract utilizes a formal instrument only, the network plan, but the parties have full autonomy regarding the details of the plan and its formulation. However, next to the obvious advantages, this raises a number of issues that originate from several characteristics of collaborations between companies (Tunisini *et al.*, 2013). In particular, it is possible to mention the indeterminacy of the relational context and the difficulties involved in a) planning the results of the network process, b)

protecting the know-how of individual companies, c) appropriating the know-how produced within the network and d) governing the network, considering also the relationship of trust between members (Newell and Swan, 2000). These issues will be dealt with extensively in subsequent sections of this paper.

4. Sampling and methodology

This study used a multiple case study design. Case studies are effective for describing and expanding the understanding of a phenomenon (Stake, 1995). The birth of network contracts and their evolution is still not well investigated and case-study design, focused mainly on 'how' and 'why' dimensions, suits these areas of enquiry well (Eisenhardt, 1989). Furthermore, multiple-case design following a 'replication logic' has the advantage of being more compelling and robust than single case studies (Yin, 2003). Finally, a multiple case study enables the researcher to explore differences within and between cases.

Out of the 113 contracts active in the province of Brescia as of 3rd November 2013, our sampling strategy was to select networks in which there was at least one company member of Associazione Industriale Bresciana (AIB, the local branch of Confindustria) so as to maximize the expected redemption rate of the interviews. Through this process, 31 network contracts were selected that include, in total, 42 companies associated with AIB. These companies were sent a research presentation and outreach email by AIB President.

16 interviews were conducted during the first months 2014 representing 17 network contracts (one interview was done on two networks, the company in question being the leader in both), with a final 55% redemption rate, which confirms the effectiveness of the strategy implemented.

The 17 network contracts included in this research involve a total of 78 companies of which 57 in the province of Brescia. Business prevalence reflects Brescia's industrial fabric: 9 of the networks investigated include manufacturing companies; 2 ICT companies; and then one network in each of the following areas: business services, research and innovation, biotechnology, renewable energy, and agribusiness.

The composition of the networks is fairly homogeneous as for activity type (ATECO codes), only occasionally do service companies enter into collaboration with manufacturing or commercial companies. In general, there does not seem to be a crossing of different types of activities.

The networks under investigation are fairly recent: 10 were set up in 2013 (5 in the first semester), 3 in 2012 and 4 in 2011.

The investigation was conducted through documental analysis, semistructured interviews with the network managers (where present), or with enterprise owners included in the study, and financial analysis. The questionnaire for the interviews was made up of a total of 12 questions (cut down to 8 in the case of telephone interview) aimed at investigating:

- the activities carried out by the firms under investigation;
- the process which led to network creation;
- the governance structure;
- the organisational models;
- the benefits and the obstacles met so far in meeting the objective set in the network programme.

In the last question of the questionnaire, both in the case of face-to-face and telephone interviews, interviewees were asked to express an overall score on their experience as part of the contract, on a scale of 1 to 10. Some of the respondents gave a medium/low score for the network activity carried out so far, due to the young age of the network itself, which has not allowed full deployment in terms of operation. However, the average score (8.16) received for already operative networks – or specified prospectively – reflects an excellent level of satisfaction and confidence in the instrument and in the type of collaboration which can be established as a result of it.

The face-to-face interviews lasted on average 1 hour and 20 minutes, while the phone ones 35 minutes. Both kind of interviews were tape recorded and verbatim transcribed.

5. The financial analysis

Starting from the n. 78 companies included in the relational analysis, due to the presence of the financial statement, the financial analysis is performed on n. 66, Data, provided by database AIDA - Bureau Van Dijk, are referred to years 2012-2010. Because of for the network there is not a compulsory request to drawn up the financial statement, the analysis is performed on the aggregated values.

Deepening the financial results of the entire population, it becomes obvious the economic importance of business networks. More specifically (*Table 2*), the networks have examined cumulatively revenues for more than one billion euro (1.2 billion in 2012). Although you can count some of the new or newly established companies, the prevalence of the entities participating in the network is established on the industrial, income and financial and, in some cases, represented by the leaders of their respective sectors.

Such considerations are further reinforced by deepening the further economic and financial characteristics of the entire population. Generally, there was a situation of equilibrium being all positive economic results. In detail, the added value, although slightly down over the period examined, is high (an average of 25.1% of sales) to highlight the ability of companies to create wealth through the conduct of its business. Even the gross operating profit (EBITDA), the main indicator of income with financial value that expresses the ability of operations to generate cash flows, it is positive and is positioned on discrete values (on average 12.5% of sales). Finally, operating income from ordinary operations, like other interim results, is adequate (average 6.9%): in this case, as for the previous interim results, the dynamics of the triennium is in contraction. The management and complementary accessory contributes marginally and so positive (average 0.5%) to the income Total operating. Borrowing costs have content (average 0.9%) and do not absorb significant resources income. The positive results reported are summarized in the overall result of the management. The aggregate net income is positive (on average 4.1% of sales) and, although similar to those already mentioned, is in decline, it is balanced with respect to the principal profitability.

Moving on to investigate the appearance asset, invested capital also shows that the phenomenon of networks generally involves actually well structured. Overall, total investments in place by the entities participating in the network far exceeds the one billion euro (1.3 billion on average in the period investigated).

Deepening the structure of the individual networks, it highlights the existence of a significant dimensional heterogeneity between the networks and, in certain cases, also in the networks themselves.

Comparing the results between networks is immediately apparent that there are networks with very significant economic dimension. The majority of the networks still presents a rather low profile size. In particular, only for n. 2 networks, the combined turnover of the companies is between 10 and 20 million euro.

What is an element of absolute importance in the deepening of the economic-financial characteristics is represented by the dispersion of the results in the network (Tables 3 and 4), ie between undertakings involved in the same contract. In the first place, in each of the three networks with the largest cumulative revenues, there is the presence of an economic size significantly greater than the remaining participants. Secondly, the variability is particularly accentuated even within the two networks of size with turnover between 10 and 20 million. Even in these cases it is evident

the presence of an enterprise with turnover significantly greater than that of the other. Finally, the situation of small and micro networks is heterogeneous. In fact, in five cases the variability in the network is particularly low, being the coefficient of variation between 0.1 and 0.4. What remained five cases, the dimensional variability in the network is, however, high.

The comments made in relation to the variability between networks and networks with reference to sales and net income are also found with reference to the additional variable investigated and represented by the investment.

In conclusion, descriptive analysis of the results shows in the first place that the networks are further characterized by the presence of a leader of economic size. Homogeneity among the participants is reflected primarily in smaller networks.

However, none of the variables considered (turnover, net income, capital invested) can be considered, at first glance, a proxy through which to explain the existence of the network. In other words, the analysis of the data suggests that the economic dimension does not represent a factor that can promote, or otherwise, restrict the formation of the network.

6. Networks' taxonomy: organisational methods and strategic objectives

Starting from the definition of the objectives and content that the legislator gives to network contracts (specifically: increasing capacity for innovation and competitiveness through collaboration in the management context of the various companies, the exchange of information and commercial, technical or technological services or joint management of one or more businesses) a set of concrete operating principles can be found in the procedure that the networked enterprises have implemented and included in the various network contracts.

According to Alberti (2012) and to the "Quarto Osservatorio Intesa Sanpaolo – Mediocredito Italiano sulle reti d'impresa" (Intesa Sanpaolo – Mediocredito Italiano "fourth observatory on business networks", 2014), the following operating principles seem to be particularly relevant: increased production efficiency, trade promotion, R&D, conception and design, creation of a collective trademark, internationalisation, adoption of production protocols and supplier selection. Therefore, it emerges how the business activities forming the subject matter of the contract are mainly focused on upstream stages of the value chain (the most widely used principles do not include those related to coordination of the commercial offer and selection of end customers, which are found decidedly lower down

in the list). This is demonstrated by the fact that 74% of the contracts are concluded with suppliers which supply goods or provide instrumental services to other enterprises (Alberti, 2012).

With regard to the relationships included in this investigation, most of the networks were established to meet research and development objectives for new industry technologies (9 networks), to meet objectives for the development of new business opportunities (5 networks), objectives for the general sharing of knowhow and skills (2 networks) and purchase cost optimisation objectives (1 network). It is however difficult to perform a rigid taxonomy in this sense, because, beyond the objective specified in the deed of incorporation of the network, almost all the respondents specified that they pursued more than one objective and all made reference, in a more or less explicit manner, to an improved competitive positioning. These findings are in line with the stream of research that analyses the multiplexity of networks ties (Ferriani et al., 2012) that develops over time and gives a measure of networks' relational complexity. A recent investigation (Bertani, 2013) has suggested a classification of network contracts based on three types of subject matter: product-oriented, market-oriented and service-oriented contracts. The product-oriented type includes all those contracts having the purpose of increasing the competitiveness of the network operators through product innovation and processes and services predominantly in the manufacturing industry. The market-oriented type includes contracts envisaging a complete or partial review of the entire offer process. The service-oriented networks focus on the promotion of integrated services such as tourism and energy services and those for assessing corporate compliance or for property consultancy.

For the same reason highlighted above, it is not easy to sort out the networks according the classification scheme proposed by Bertani (2013). However, the data collected during the interviews allow to infer that:

- 6 of the network contracts analysed can be defined as being productoriented, as they aim at innovating the product or service offered on the market both in terms of new patents and through the integration of technical-specialist skill;
- 7 networks can be classified as being market-oriented, because they envisage a more or less intensive review of the offer process. In this category, we find networks which have aroused the most appreciation from the market up to now: the supplementation of the offer and the chance to have a single representative seem to have significantly increased the commercial profits of the network;

 the remaining 4 networks fit into the service-oriented category, as they aim to supplement the offer of high quality services.

From an organisational viewpoint, the researches conducted so far on the matter (Alberti, 2012; Preti and Vignali, 2013; Rullani, 2013; Tunisini *et al.*, 2013) and the results of our empirical investigation show the variety of network structures that is found in the contracts. In fact, there are:

- networks between equals, in which all the members are connected and contribute in a comparable way (Jenssen and Nybarr, 2013; Verschoore et al, 2013);
- networks in which a leading company, i.e. a larger enterprise or one which is closer to the market, has grouped together a series of its qualified sub-contractors, and
- multi-leading business networks, which are based on the assumption of several larger companies which share and qualify a selected supplier portfolio (Lee *et al.*, 2010).

Therefore, the network contract presents itself as an instrument suitable for managing both horizontal and vertical networks (Tomlinson, 2010). Horizontal networks are those established between suppliers of the same or a similar level or between end producers or distribution companies (Alberti, 2012). In vertical or industry networks, on the other hand, the objective generally concerns more efficient administration of one part of the chain and these networks undoubtedly have a more favoured governance, due to the fact that the enterprises are used to collaborating along the chain itself.

With regard to the network structures, most of the contracts included in the investigation are organised as networks of equals (8 out of 17 networks), 5 as networks led by a leading enterprise and 4 as multi-leading business networks. Therefore, we see substantial equality between horizontal and vertical networks. In addition, also network operators that are direct competitors can benefit from joining together as a network: in fact, in at least in three cases, that they have preferred to divide up the clientele in order to offer, each for its own portion, the mix of products and services that best represents each one's competitive advantage.

7. Strengths and criticalities

In the description given in the above paragraph, explicit reference was made to the objectives of the network contracts as declared publicly in the deed of incorporation of the network itself and in the answers to the specific question of the questionnaire. However, the empirical investigation has made it possible to go into detail on the individual business combinations and

check the actual operating mechanisms and the criticalities of each network included in the analysis.

In line with information highlighted in the literature (Tunisini *et al.*, 2013), therefore, it is necessary to investigate the relation between the form and substance of the contract, i.e. with which content the instrument – the potential of which has been highlighted on a number of occasions in this research – has been filled in practice.

Specifically, it will be investigated to what extent the main criticalities of extra-contractual collaborations are resolved, therefore if the formalisation of the network contract allows the networked enterprises to overcome the typical issues of inter-organisational relations.

In general, a collaboration network that has not been formalised is intrinsically vague for its member enterprises, in that the set of relationships appears potentially seamless and may also include a series of unwanted relationships, for example due to interdependencies within a chain. Another element of uncertainty of the inter-organisational collaborations lies in the difficulty in planning and forecasting the results of the relational process of the network, which by its very nature is based on and shaped by interaction (Munksgaard, 2015).

A third problem concerns the difficulty in protecting know-how and the various strengths of the enterprises collaborating with each other, to the extent to which the network operation involves strategically sharing the know-how and skills for which each company excels (Tiwana, 2008; Cantner and Graf, 2006; Phelps *et al.*, 2012). Strictly connected to this is the problem of the exchange in the opposite direction, i.e. the extent to which the collaborating businesses manage to make use of the know-how produced in the collaboration.

Lastly, serious governance problems often occur in collaborations which have not been formalised, at least for those collaborations without high bargaining power differentials between the parties.

With regard to these four points, the network contract can be identified as a "relational container" (Macneil, 2001), as well as a legal one (Möring and Finch, 2015), which can offer the instruments to overcome at least a part of these problems.

The vagueness of the relational context of reference

The network contract offers the possibility to establish well-defined boundaries for the collaborations: of the contracts included in the investigation, many do not provide for the possibility of new members entering, precisely because they have been created around a specific innovation project or well-defined competitive requirements that need a stable and "secure" relational environment. Other contracts, on the other hand, which came into being in relation to an idea rather than a project, make the contract itself a strength for seeking out new partners who can bring the skills required to transform that idea into a concrete project.

The managers of Network 3 and 9 says:

"the contract for us is an opportunity to stabilize and norm relationships that already existed among us" and "in this way [through the contract] we can be almost sure that no information about our project will be given to our competitors...it is expensive to break this rule for network members, we put a specific comma on that"

Under a completely different perspective is the approach of Network 16. Its representative says:

"In order to get new and specific knowledge for improving our project we established a set of activities that imply the seek for new partners and collaborations, we need fresh competences....we need to be open"

The difficulty in planning the network business activities and the uncertainty of results

The contract envisages the possibility to set forth genuine rules of conduct and the rights of the individual networked enterprises, even establishing principles of fair competition for activities, which fall outside those expressly included in the network. In this way, the actions of the individual enterprises can be interpreted in the light of a shared set of rules and as part of a collective strategy, which, among other things, also makes it possible to identify any misconduct, or conduct which does not comply with the conditions agreed upon.

As the quotation for Network 9 in the previous paragraph already shows, breaking rules is for some networks not only unfair, but it also generates monetary fines. It could be better understood by considering that firms belonging to Network 9 used to be competitors (and still are, in specific geographical areas), so they had to fix severe rules for dividing the market between them. Its manager say:

"We have a lot of procedures, too many maybe....but still...sometimes a piece of information goes in the wrong hands, so we introduce more procedures to fix it. We need to be sure that partners respect the agreements...we also have a third party consultant for those stuffs..."

Representatives of Networks n. 6 and 7 give less importance to rules and they say almost the same thing:

"We have some rules, but coordination is made day-by-day" (N. 6) and "at the moment we don't have that much rules and procedures, we still go on by solving everyday problems on the phone" (N. 7)

The protection of know-how

The contract makes it possible to regulate the contents of sharing between the companies of the network and the mechanisms of use of the skills developed as part of the collaboration process, making the relationships more stable and "protected", as underlined by many of the enterprises interviewed. Specifically, this attention to sharing information is deemed one of the most significant aspects of the network contracts by those companies that have chosen to share the supply network or distribution channels. Indeed, the representatives of Networks 2, 4 and 11 give a lot of relevance to know-how protection, also because they are planning to get a patent for their products, as soon as the prototype would be ready. They are building a critical mass of prospect customers by putting together their databases and contacts on the market, so the agreements are very rigid and were written by a lawyer. Other networks, like n. 1 and 13 are not so interested into this issue:

"Nowadays know-how is available almost everywhere, we just have do to a better job than others....and before them!" (N.13), and "We want to support firms to share know-how, we have to give the good example" (N.1)

Network governance

The contract allows different forms of administration, from which to choose the one that is best able to support the objectives and processes of the network. In practice, most networks chose a joint governing body made up, usually, of a member of each networked company; however, certain networks are geared towards a monocratic type of body represented by the President of the network. The analysis performed also shows how the latter networks are the most dynamic, both in terms of promoting the network trademark and joint activities. The president of Network 2 say:

"If I want to make things going, I have to control almost everything....sometimes it is quite stressing....it seems I'm the teacher at the kindergarten! Big men on whims! However we are working hard and this is my role...keeping them happy and focused"

It should also be noted how certain networks, and specifically the more active ones from an operative point of view, have hired dedicated human resources to manage the activities under the contract. The most frequent figure is the network manager, who often supports the network president and who, in at least two cases, also performs the role of sales director for the

network. In one case, a technical director for the network has also been put in place, who oversees the integrated offer to the customer by the networked enterprises and who is also the purchasing manager.

8. Looking for "new" rules?

The network contract instrument therefore serves to facilitate the collaborations between enterprises in many respects, protecting the diverse nature of the individual companies and leaving the parties to select freely the coordination and decision-making mechanisms to lead the interactions. The network contract provides members of an explicit framework of structural embeddedness (Granovetter, 1992; Jones *et al.*, 1997) as it integrates social mechanisms on how to « coordinate and safeguard exchanges in networks, for it diffuses values and norms that enhance coordination among autonomous units, and it diffuses information about parties' behaviors and strategies that enhances safeguarding customized exchanges. » (Jones *et al.*, 1997, 924)

However, although the network contract instrument is relatively new, we are already experiencing, in some cases, a process of excessive formalisation even in the very implementing condition of the contract. Without a doubt, a high level of formalisation in essence and the precision in regulating the collaborative situations offers the networked enterprises a high level of protection and a guarantee for the fulfilment of the mutual obligations, but this aspect most certainly risks jeopardising the efficacy of the contract itself. The networks which complained about their activities "coming to a standstill" (not many in actual fact), are actually precisely those which describe very detailed rules or whose history shows that there had been no mutual collaboration before the establishment of the contract.

This reflection opens the way to two kinds of consideration. On the one hand, the fundamental role of *flexibility* (Provan & Kenis, 2008) which becomes one of the key words of the success of the networks. On the other hand, the significance of *previous collaborations* (Paier & Scherngell, 2011) between the enterprises belonging to the same network and also being used to collaborate in general, or having been involved in joint projects in the past. In this sense, the success, or lack thereof, of past experiences of collaboration does not seem relevant, to the extent that two of the most active networks, which have been more successful in terms of network performance have had negative experiences of collaboration in the past under different forms of network contract. Previous involvement in collaborative projects seems to prepare the companies for the information sharing process, removing part of the traditional barriers to collaboration itself from the outset. This result can

be cross-checked with the data offered by the "Quarto Osservatorio Intesa Sanpaolo – Mediocredito Italiano sulle reti d'impresa" (Intesa Sanpaolo – Mediocredito Italiano "fourth observatory on business networks", 2014). According ot the Osservatorio, the membership of an economic group is not a particularly significant predictor for the probability of being involved in a network. From these considerations it can be deduced how the discriminating factor is not so much the fact of being involved in formal networks (such as economic groups, precisely), but rather the fact of having taken part in actual collaborations, in which real sharing of information and skills was required. The Observatory data also shows how being part of a business cluster is not a significant predictor of the probability of being involved in a contract. In this case, the phenomenon can be explained by considering the fact that the contract might by viewed by the enterprises in the business cluster as an overlapping of a network structure on top of one that is already present in the local area.

Previous collaborations, outside of the scope of the contract, between enterprises which then become members of the same network, can undoubtedly facilitate the dynamics of the network. This is because it has been amply demonstrated in the literature (Zaheer *et al.*, 1998; Newell and Swan, 2000) how interactions which are repeated over time form the basis for the creation of trust, which in turn has a series of positive effects on relational and transactional dynamics in general. However, it is important to note how collaboration in the past is not in this particular case a guarantee for the success of the networks.

In our sample, in certain cases, the network contract was incorporated into already existing networks along the value chain or in trade, but did not have an effectively positive result. In other cases, on the other hand, previous collaboration certainly constitutes a further bond for successful networks. The distinction between these two situations therefore seems to be the presence of a strong, shared network project, which thus brings an important plus for existing collaborations and constitutes a significant element of differentiation in terms of the content of the relationships and the organisational methods, compared to collaborations which existed previously. With regard to the nature and characteristics of the network project, it is important to make a further distinction, building on the taxonomy proposed by Preti (1991; Preti and Puricelli, 2013) concerning the nature of collaborations between companies. These authors underline two dimensions characterising the collaborations: the size of the interorganisational investment -i.e. the level of investment in the organisational structure and in the operating mechanisms – and the priorities of the agreement, and identify the true essence of group entrepreneurship when investment is high and when the objective is directly management related, i.e. aimed at having a direct impact on the production processes and supply and commercial processes. When the aims of the agreement are instead different and the collaboration aims to pursue objectives that only have an indirect impact on the activities of the enterprises involved, then the authors identify the category of "apparent collaborations" which are characterised by poor operative drive.

Of the networks analysed, just two of them declare to have among their objectives the aim to gain benefits from public funding, even if many include this benefit in the advantages of the network contract, especially the detaxation of profits, which makes it possible to create reserves to dedicate to investments. The data of the Intesa Sanpaolo-Mediocredito Italiano Observatories (2014) allows inferring that the networked enterprises have a stronger tendency to invest than non-networked enterprises.

Among the further conditions of efficacy of the networks, it is therefore undoubtedly necessary to include the presence of a strong motivated and *motivating leadership* (Jenssen and Nybakk, 2009; Muzzi and Albertini, 2015; Landsperger *et al.*, 2012) that is very present in the day-to-day business of the enterprises party to the contract. In this sense, the monocratic governance proves to be the most effective instrument to lead a network under conditions of efficacy, certainly in an initial phase like most of the contracts forming the subject matter of the investigation. The less performing networks, also from an organisational viewpoint – for the information on economic performance referred to above – are those currently led by collective bodies that meet once a month on average. We have already reported about the role of the president of Network n. 2 in the previous section. A completely different situation emerges in Network n. 16:

"It seems nothing really changes over time....any improvement is made thanks to personal initiatives of partners. We do have a committee that should manage the network....but it is almost impossible to make them sitting around a table more than once a month...and it's not enough...absolutely not"

The issue of the performance of the enterprises in networks is deserving of further in-depth examination, at least with respect to their performance before becoming a party to the contracts. Both the annual Banca Intesa-Mediocredito Italiano Observatories (2012-2014) and the Confindustria Research Center (2016) show how the recourse to the network contract is not a strategy to face negative economic results. Specifically, the data from the Fourth Observatory show how the networked enterprises have a better

competitive positioning compared to non-networked enterprises both in terms of presence abroad with export business, and greater inclination towards patenting and quality certifications. It is hard to find the correct causal relationship between competitive positioning and network membership, in that, as has already become clear, it is totally premature to identify an above average performance indicator in network membership. However, it is perhaps possible to highlight a sort of "input selection": it could in fact be hypothesised that enterprises with better competitive positioning, and therefore with consolidated competitive advantages, implemented growth strategies and greater inclination towards innovation, also have an increased opening to business networks under the form of the network contract. However, these causal relationships need to be investigated further when the contract instrument has progressed further.

9. Conclusions

According to the Italian Government the NC is a private agreement between two or more enterprises to jointly perform one or more economic activities to increase their potentials for innovation and competitiveness. The Italian regulation provides thus only a framework scheme identifying the essential content of the contract, leaving to the parties' freedom to customize it, which makes this model suitable for any kind of business activity and sector. Members can decide for instance whether to give the network a legal subjectivity or not, to create a common banking account and how to make common expenses. This freedom risks to collapse in a sort of jungle and generated several misunderstanding among firms and their consultants that supported them in the process of registering a contract. For these reasons, some of the interviewed NC are not satisfied with the experience, but it has emerged that the main reason is due to their ignorance about all the potentiality of the instrument.

However, the inner flexibility of NC allowed for the creation of several different kinds of networks: we have product-oriented networks, market and service-oriented ones in almost all economic sectors: from agriculture to innovative services, and evidence showed that also firms coming from different sectors participate to the same NC, by supporting knowledge crossfertilization.

The economic and financial analysis carried out through AIDA database gave us also some interesting insights about the size of firms that participate to NCs: in biggest NC it frequently happens that the biggest firm acts as the leader of the contract, whereas in smallest networks we found more homogeneity in terms of size among members. In general, however, the

majority of firms involved in our sample are SMEs and this confirms that NC goes towards the direction indicated by the EC that strongly wanted to support SMEs innovation. This issue gets more relevance by looking at the composition of European industrial setting: SMEs account for 99% of EU27 firms and employ 67% of people, and micro and small firms alone for 98,7% of the entire population (Tunisini *et al.*, 2013). The relationship between being networked for firms and their economic and financial performance - analyzed through balance-sheets flow and ratios (Teodori, 2008; 2009; 2012; Carini, 2010; Veneziani, 2009) - is still controversial: all members have positive economic and financial performance, but the data available at the moment do not allow for understanding the correct causal relationship between performance and membership.

Going back to our research questions, our investigation – even if this an explorative study – supports other evidences (Preti & Puricelli, 2013; Preti & Vignali, 2013) in highlighting the fact that the network contract provides members of a general frame of reference where they can shape their own way of working together. In this perspective, firms decide to build up a contract because they feel themselves more secure and because, in this way, they can formalize agreements and protocols of interaction. In this sense, we can argue that network contracts could be definitely considered as a "new" form of inter-organizational networks, even if this issue deserves more investigations.

In order to answer to our second research question, we had to go through governance structure and relational issues. Our results show that, in order to get positive results according to members' satisfaction (that probably will lead to positive economic performances), the network needs high levels of flexibility in the operative activity, high levels of trust among members, a very clear and shared innovative project and a strong and motivating leadership at least at the beginning of the common experience. It seems thus that the conditions for an effective governance of NCs are a mix of different sets of "rules": those that support interaction in inter-organizational networks (flexibility and trust) and those that manage successful projects in Project Management domains and innovation communities that is a sound project and strong leadership (Muzzi and Albertini, 2015).

10. Limitations and future research

This paper presents several limitations: first, as a qualitative and explorative research, it is hard to extend the results and the conclusions to all the network contracts active in Italy. Our results are coherent with other studies and researches made by colleagues and research institutes, however

in the Italian scenario a comprehensive study on this topic is still missing. Second, the majority of firms included in our multiple case study approach are located in the province of Brescia that is a very industrialized province in the North of Italy, so they do not represent the variety of socio-economic contexts that exist in the Italian peninsula. Furthermore, another cases selection bias deals with the fact that all interviewees are members of AIB, so they have, to some extent, a common background. These issues limit the generalization of our results. Further investigation is needed on the topic and two trajectories are, on our opinion, the potentially more interesting ones. On one side, a quantitative survey submitted to all the firms involved in NCs in Italy, in order to draw a precise picture of the situation and of actual performance of the networks. On the other side, it would be very interesting to perform a social network analysis (SNA; Wasserman & Faust, 1994; Scott, 2012) among a subset of NCs in order to analyse their internal structure and dynamics. Unfortunately, SNA sampling methodology of snowball sampling on primary data makes it quite hard to have good data outside a controlled setting, but some preventative measure could be implemented in order to get a complete dataset.

The table listing the networks whose members were interviewed together with the tables representing the network turnover and investment are available in the appendix (http://www.sidrea.it/italian-network-contract/).

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