
Risk mitigation through formalised cooperation: preliminary findings on a sample of Italian network contracts

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The collaboration between enterprises is a widespread phenomenon in the life of companies. Every company necessarily develops economic relations with other organisations in order to identify the best conditions for carrying out its activities and achieving its objectives. These relationships have different forms and intensities. The inter-relationships can produce market exchanges or collaboration agreements that are more intense, coordinated and organised in the medium to long term.

The agreements may give rise to corporate collaborations or partnerships of companies. While retaining their legal independence and competition, they agree to work together on some activities with the intent to improve their performance, taking advantage of external opportunities offered by the complex environmental evolution. In particular, the research question is focused on business cooperation identified in the Italian context, with a specific agreement represented by the business networks contract.

The objective of this work – inserted in Jel classification L14 – is to evaluate the opportunity to assess whether the risks associated with business performance can be mitigated by strategic cooperation as business networks.

The research of an empirical nature is based on the analysis of a random sample of 100 network contracts from the universe of Italian network contracts to 31 December 2015.

The source of the data is the company records kept by the Italian Chambers of Commerce. The research aims to analyse the content of cooperation agreements like network business contracts in order to assess whether the mitigation of specific risks represents one of the factors that encourage entrepreneurs to participate in these forms of association.

In particular, through accurate analysis of network contracts, we intend to develop specific categories of risk that are intended to be reduced by sharing them. Some types of risk mitigated by the network contract include trade, financial, lack of innovation and environmental risks.

The analysis of the survey sample proposes, therefore, to understand how the desire to combat the negative effects arising from specific business risk is the motivating force for entrepreneurs to give up part of their autonomy in order to improve, through collaboration, the overall performance of the business. Managerial aspects associate, therefore, a natural inclination of the human being to find solutions that can reduce or even eliminate the risks associated with their existence or the economic activities carried out by these entities.

Keywords: network, risk mitigation, cooperation.

JEL Classification: L14

1 Introduction

The cooperation between enterprises is a widespread phenomenon in corporate life (Riparbelli, 1962). Each company develops economic relations with other companies in order to enhance their competitiveness and achieve their goals (Villa, 2006, Bruno and Villa, 2011). These relationships can have different forms and intensity. The inter-relationships may lead to market exchanges, or more intense collaboration agreements, coordinated and organised in the medium to long term (Mancini, 2010).

The many economic crises that have occurred have mostly shown that enterprise collaboration is an essential element underpinning competitiveness, highlighting the need to develop links and inter-organisational relationships with other companies and overcoming individualistic attitudes (Capelli, 2012).

In part, overcoming such attitudes is achieved as companies, particularly SMEs, acquire awareness of a chronic lack of economic growth opportunities and resources which can be found in networking, fundamental opportunities to gain market share, extend and integrate the supply chain, reduce costs, expand their product portfolio and integrate and jointly invest in innovation strategies to improve competitiveness (Barringer and Harrison, 2000, Shaw, 2006 Coltorti, 2009).

The formation of the agreements can lead to collaborations and partnerships between businesses, while maintaining their legal and economic independence, aiming to improve performance by exploiting the opportunities offered by the complex environmental evolution. In fact, they look for effective solutions for inter-organisational cooperation to improve production processes and increase competitiveness, leveraging common practices: sharing knowledge and innovation capacity (Butera, 2001 and 2008); sharing the particular risks among the various partners in order to mitigate any negative consequences.

2 Risk management in company development

Administrative management events, an expression of the constant evolution of the business, are the result of strategic and operational decisions taken by the people who work in it. One of the elements that characterises the company's activities is the presence of future events or the consequences of management decisions made. According to Dezzani (1971), future events relating to corporate activity can be examined under two different profiles: the economic effects resulting from the occurrence of such events and the measurement of the degree of knowledge related to the occurrence of the said events observed.

Future events that characterise corporate life can have an economic impact - directly or indirectly - that influences positively or negatively the company's management. The consensus of the doctrine of business management, national (Zappa, 1927; Ferrero, 1968; Dezzani, 1971; Bertini, 1969) and international (Haynes, 1895; Landry, 1908; Knight, 1921; Hardy, 1923; Lavington, 1925; Brendl, 1933), is that the risk is the possibility that an event of the present may have negative consequences or, in other words, the risk is the possibility of an unfavourable trend in the occurrence of future events.

However, as regards the second aspect, the evaluation of the degree of knowledge related to the occurrence of observed events depends on the degree of knowledge that the company has with regard to future events. Measurement of the degree of knowledge assumes particular importance when we analyse events that are characterised by uncertainty. For these events, there is no knowledge about the effects that result from business decisions. Therefore, there is an absence of knowledge about the effects of that particular occurrence.

The presence of risk is one of the elements implicit in the business system (Ferrero, 1969). Although it is customary to highlight that the risks are the result of choices that have led to the occurrence of certain events, in reality business risks represent a unitary system. The systematic company activity creates a unit of the economic risk despite the plurality of its possible manifestations. The mobility of the business system confers the status of a dynamic system of the risks incumbent on the company itself, and vice versa. Therefore, we need to clarify that it is necessary to analyse the business risk system, since analysis of the individual risk is only an end in itself.

Each individual risk must be connected to the other risks of which the system is composed.

Dezzani stated that the general economic risk, as mentioned above, is configured as an internal risk relating to the company as a whole and an essential element of the company itself. The general economic risk exists because there is a company, that should take on the character of economic efficiency management. This general economic risk therefore represents the synthesis of the special risks of enterprise and reflects the changing evolution.

The specific risks are, therefore, partial manifestations or portions of the general economic risk. Potentially, every single operation of the management repre-

sents a possible source of particular risks. In other words, individual management tasks, whether active or passive, give rise to particular risks that are components in the general business risk system.

From another point of view, the risk is the synthesis of the economic choices made by the economic entity in business management: it corresponds to different behaviours at different risk levels. In this context, therefore, it is the economic entity that defines the strategic choices useful for ensuring the competitiveness of the business complex, undertaking a series of actions intended to counter the business risks by adopting strategies designed to eliminate the cause of the adverse events or to reduce the significance of the effects.

In order to ensure competitiveness or a stable presence in the market and to confront their competitors in the competitive game, the company's activity is to be developed with the objective of achieving and maintaining over time the economic balance, equity and finance. Among these, functional to this study, is highlighting the relationship between business risks and economic balance intended as the stabilised ability to remunerate appropriately the production factors necessary for the operation of the company.

In particular, in carrying out their activities, companies must achieve and maintain over time a balance between the flow of revenues from sales and the stream of costs incurred through the purchases necessary, through developing economically efficient performance.

In the perspective of this study, the link between risk and cost assumes that the revenue stream is basically sufficient against the costs associated with the dynamics of business and market conditions, as well as with variable requirements of remuneration of factors of production both qualitative and quantitative, that are variously bound to the business, in accordance with the changing economic outlook (Ferrero, 1969).

3 One possible form of mitigation of business risk through collaboration: the network contract

The motivations that drive companies to engage in business collaboration are complex and complicated. In particular, we can summarise as the main reason the search for conditions of greater economic efficiency and obtaining greater bargaining power in the market and in the environment in order to improve their balance over time. We assume that collaborating networking companies intend to put in place a series of initiatives that propose the improvement of their economic position through an expansion process based on collaboration while maintaining their legal and economic autonomy, and not on the collaboration according to optical integration in the group.

One of the reasons that may lead to the creation of forms of network collaboration is exogenous factors that are external to the network. These are collaborations arising from the economic, social and cultural reference of the company,

endogenous elements that come from within companies that belong to other networks (Passaponti, 1975).

The amount of resources available (structural, human and knowledge), the market power, the progress and the automation of manufacturing processes, the need for more financial resources, the availability of results of scientific research or of commercial type investigations and the search for new markets are examples of factors that lead to inter-company collaboration also favouring, among other things, diversification of product range with frequent entry into new sectors (Ruffolo, 1967).

Industry collaboration is also an example of how companies can act to put in place a series of events intended to reduce risky behaviours that may be carried out in the future, not just because the partnership aims to act on the double front of achieving revenues and a more flexible production capacity but also in terms of sharing them and making costs and charges related to the acquisition of inputs flexible and elastic, that in other cases would be considered rigid and fixed (Dezani, 1971). From this vantage point, the firms involved in forms of collaboration propose, therefore, to share part of their business risk with a "subject" understood not as a separate legal entity but merely as a centre of allocation of rights and obligations by sharing the risk associated with specific activities with other network partners.

In 2009, specific regulations were introduced into Italian law to support inter-cooperation by formalising the company contract network. Specifically, it is an agreement under which "several entrepreneurs undertake to cooperate in order to increase both individually (and) [...] collectively [...] their innovative capacity and competitiveness in the market".

The network partners commit to each other, based on a common framework program, to work in predetermined forms and contexts with regard to the management of their companies, exchanging information of an industrial, commercial, technical or technological nature or jointly creating one or more activities that are part of each company's business objective. (Rosenfeld, 1996; Gavirneni et al., 1999)

The business networks are used to make both forms of coordination "to read", where the economic activities of each company are coordinated independently, through drawing up a contract and, for more intense forms of coordination, in which participants implement a joint economic activity, or a phase or specific project, within the production process.

The network contract is seen, therefore, as a formalised form of cooperation through which it is intended to improve the operational, economic and financial performance of each partner (Huxham, 1996; Bititci et al., 2004), as well as presenting itself as a useful tool to reduce the possible negative consequences of risky assets through the sharing of certain activities and their effects.

In a network contract the equity risk is not configured because there is no provision of equity with the result that there is no risk of non-return (non remuneration) of the capital provided as equity.

If, on the one hand, it is true that participation in the network contract does not qualify as provision of venture capital, it is also true that agreement to the network contract determines the chance to compete, like the capital of the transferring decision making and activities undertaken within the network. These reasons, however, are not considered sufficient to configure the risks associated with participation in a network such as risks to the asset, and in particular low income, since already highlighted is the lack of risk capital in the strict sense.

In support of the statement, it emphasises, moreover, that what is being discussed is not a corporate entity but a simple contract (network contract) used to regulate a common task by several companies that jointly contribute to the determination of common initiatives.

No equity risks resting in the hands of those who are not owners of the company is bound by constraints of a different type from the transfer of equity capital. It is, in fact, the risks affecting their own production of future wealth in ways different from those that characterise the constraint of full risk that can result in a failure to obtain wealth.

For these reasons, the risks weighing on companies within the network contract, relating to the same contract, have an additional capital nature. In view of the costs incurred for common network activities, there is no certainty of achieving any economic benefit in terms of higher profits.

The risk, therefore, in the network contracts can be analysed from two points of observation. On the one hand, the network collaboration gives rise to new risks for the partners and, on the other, the collaboration has as its main objective the contrast of adverse events associated with risky assets. In particular for network contracts, the positive effects on risk mitigation resulting from joint activities are greater than the negative effects of risks arising from the decision to create partnerships in the network.

In the case of network contracts, the aim of the creation of the partnership is not to eliminate the general business risk, because it is an unavoidable risk inherent in the business activity, but to mitigate particular risks that contribute to the breakdown of the overall risk of the company.

In particular, through participation in network contracts they will seek to mitigate the negative economic consequences arising from specific business risks. Among the actions that can be taken to eliminate the risks, preparatory measures and intervention have to be taken that are intended to create a generic company's ability to react to risky events that may occur in the future. As part of this general attitude of the company to respond to and neutralise their effects, a series of measures can be implemented that are designed to address the business risks by seeking a proper balance between the elasticity of the structure of applications in line with market expectations and rigidity of the corporate structure that comes naturally to every business unit.

In this area, actions can therefore be taken that are designed to act on the formation of the revenue or on cost containment.

The shares of revenues tend to act on the elements that can lead to ups and downs in the revenue stream. In other words, a series of activities designed to stabilise the economic flow resulting from sales may need to be implemented. Decisions can be taken that are designed to make the company's offer more flexible so they can be configured:

- diversification of production;
- access to new markets.

Sector diversification, geographical reference and categories of customers represent a number of examples intended to act in this direction.

In particular, the offer often grows with the network and the ability to compete without there being an increase in the volume of activity that accompanies the expansion of individual companies. Development of activity within certain limits can be achieved by using the existing unused capacity. Moreover, in the long term to support certain production volumes, new investments must be made that are reflected in the structural dimensions of the companies growing them and causing an increase in the return over the investment period. Such production choices increase the fixed costs rather than the variables by configuring a situation that is ill-suited to the demanding requirements of a production that is elastic and adaptable to the changing environment and market conditions.

Intervention in terms of costs tends to mitigate the rigidities that characterise the production structure by attempting to transform inputs into rigid elastic inputs, the use of which changes in response to changes in demand. When continuing with the action intended to impact on the costs, it is necessary to consider the willingness to share with others the charges involved in transactions for which individual companies would lack the resources to commit, or because they are considered too cumbersome and risky in relation to the benefits that can be reflected in the overall revenue (Williamson, 1975; Hart and Moore, 1990). Manoeuvres intended to act on the costs and revenues are increasingly integrated and combined with each other, bringing out the complex nature of business management as well as providing for the management and mitigation of business risks.

The creation of a network contract supports the pooling of resources, whether financial, technical or human, in order to obtain advantages in terms of cost containment for investment and running costs, as well as for controlling risks and timing performance of certain activities and allowing access to the results in the research and development activities not otherwise accessible to businesses, especially SMEs (Mezgár et al., 2000; Antonelli et al., 2006). From this observation profile, containing and mitigating the risks can be understood as the ability to develop economies of scale, accompanying companies towards the efficiency of production processes, logistics and trade.

In the context of the network contract, economies of scale are achieved particularly if:

- plants are increased in size;

- unit costs reduce if the quantity of production increases, due to increased management and worker efficiency;
- funding is obtained with greater ease;
- investment in advertising and marketing is increased.

These activities together offer the reduction and dispersion of business risks. The network aims, therefore, at a limitation of the risks, especially for new businesses, because it makes the separation between the resources invested in the network business and the assets of their members.

Ricciardi (2010) states that under the economic profile of the companies, due to a combination of factors such as economies of scale, networks and learning as against process innovation show an overall reduction in operating costs compared to those incurred in the case where production is carried out in full within each individual company. In this respect, there is a lower incidence of fixed costs resulting in a more flexible cost structure with positive effects on operational risk and, consequently, the company's value. In this situation also, it determines a reduction of the financial risk as it reduces the financial needs of businesses. The share of investments also establishes a division of risk, or at least a reduction. In addition, it also detects faster implementation of the result of the cooperation, producing a risk-spreading technology.

4 The analysis

The objective of this study is to evaluate the ability to understand whether the particular risks associated with the business activities can be mitigated by a strategic cooperation achieved through inter-network contracts. The research aims to analyse the content of the typical, existing Italian network contracts, in order to assess whether the mitigation of specific risks is one of the factors that encourage entrepreneurs to participate in these forms of association.

In particular, through accurate analysis of network contracts, we intend to identify specific categories of specific risks that, through collaboration, network contracts want to tackle. By way of example, some types of risk mitigated with the network contract include commercial, financial, environmental and lack of innovation.

The analysis in question proposes, therefore, to understand how the desire to counteract the negative effects arising from a specific risk represents the impetus for entrepreneurs to concede some of their autonomy in order to mitigate risk and improve, through collaboration, the overall performance of their businesses. In other words, it is necessary to appreciate the natural human inclination for finding solutions that can reduce or even eliminate the risks inherent in any economic activity.

Therefore, our aim is to address the following research questions:

Q1: Are the risks specific to the undertaking mitigated through strategic cooperation such as network contracts?

Q2: Among the aims of the network contract, is there is a specific interest in mitigating business risk?

The study of risk mitigation of relations and forms of cooperation was also carried out by analysing the content of network contracts.

The main steps followed for the development of this project are the following:

- definition of a random sample of analysis;
- collection of actual contracts drafted for each network of selected enterprises;
- study and evaluation of the content of such network agreements;
- systematic analysis, representation and formalisation of the data collected.

The exponential growth of the network agreements – in March 2016, 2699 network contracts are active, involving 13,518 enterprises – has imposed the need to formulate a test sample, given the impossibility of analysing too large a universe in terms of time and necessary resources. It is therefore considered reasonable to restrict the universe of reference by extracting a random sample which offers the advantage of being bias-free (technically, bias or distortion) and allows rigorous assessment of the reliability of the results or, in other words, it allows accurate verification of the relationships between the results provided by the sample and the characteristics investigated in the network contracts population that make it up (Anderson et al., 2010).

To this end, a random sample of 100 network contracts has been extracted through screening, based on the bibliographic database of the Register of Companies of the Italian Chambers of Commerce.

The sample comprised 100 randomly extracted network contracts involving a total of 585 companies, which shows an average number of 5.85 member companies.

The analysis of the study sample, by sector of activity of the companies that comprise it, highlights the results contained in the following table.

Table 1 The sectors of activity of the companies of the sample analysed

Business sector	Number of companies	Percentage of total %
Agriculture	90	15.3%
Trade	60	10.3%
Industry	242	41.4%
Services	166	28.4%
Tourism	17	2.9%
Other	10	1.7%
Total	585	100%

In the relationship between the type of activity carried out by each participant and the work of other network partners to distinguish between horizontal

networks of companies operating in the same field of production or in related areas, and vertical networks between companies linked together according to an optical production or distribution chain also undertaking complementary or interdependent activities, 66% of the networks analysed in the sample falls into the category of horizontal, while the remaining 34% belongs to the vertical model.

The sample considered was therefore able to produce evidence enabling subsequent generalisations about the universe of network contracts. The phases of this research include the application of scientific methodology in the classification of observed facts and integration between inductive and deductive analysis (Mill, 2013; Canziani, 2014), enabling the identification of common traits to define the characteristics of networks and general principles that characterise the collaborative tool analysed.

The decision to carry out probability sampling provided each network contract with the same chance of being chosen (Gobo, 2004) to be part of the sample, due to the randomness of the extractions made through the use of random number generation software. Each extract number was combined with the network contracts listed by progressive date of signing of the creation of the network contract.

This method provides for the selection of the sample according to convenience criteria or practical reasons, for example because the elements to be sampled are more easily accessible, or for cost reasons, or because in a certain area there are volunteers available, etc. A sample of convenience selected with these criteria, although it has the advantage of speed, but subject to a strong bias, can provide little reliable data and can be easily spoiled by systematic errors.

The sample component was analysed in accordance with four different degrees of analysis:

1. explicit presence of risk mitigation as the main reason for entering the network contract;
2. explicit reference in the strategic objectives or network program of the will to mitigate the negative consequences of a risk by means of the express indication of the "risk" word;
3. presence in the strategic goals of any intent to cover a risk, even if not expressed clearly;
4. reading of the strategic objectives in order to classify any risks that are intended to be combated by signing the network contract.

With reference to the degrees of analysis above, the following considerations are highlighted.

None of the 100 network agreements taken as a sample and analysed presents as the main motivation of the collaboration the wish to combat, or at least reduce, a particular common corporate risk to all network partners.

In relation to the explicit reference in the strategic objectives or the network program to some joint initiative designed to alleviate the negative consequences

of a risk with the express indication of the word “risk”, the evidence produces discouraging results.

Among the 100 agreements analysed in only one situation, the strategic objective reveals signs of a clear and expressed will to engage in forms of cooperation in order to counteract a risk.

Having noted the almost complete absence in the strategic objectives of the network contracts of any reference to the desire to reduce the negative consequences of a particular risk of the business, a check has been made for any claim that suggests a willingness by network partners to undertake joint actions to mitigate the specific business risks. This relates to activities and actions that are not expressly performed, and content analysis has changed from objective to subjective. This assessment was a discretion on the part of the writer. Reading and analysis of the strategic objectives and the network program of the contracts making up parts of the samples were, therefore, subject to evaluation by the research team highlighting the following results.

Table 2 Shares “not obvious” risk mitigation in the strategic objectives of the network contracts

	Network contracts	Percentage
There are no joint activities in the strategic objectives that refer to risk mitigation actions	6	6%
In strategic objectives there are common activities that refer to risk mitigation actions	94	94%
	100	100%

In 6% of the cases analysed, among the reasons that led the partners to networking the presence was found of reasons that can be traced back to some initiative to counter specific risks associated with its activities.

In the remaining 94% of the sample, however, the partners highlighted, among the reasons that led them to build the network, the will to engage in common activities, the effects of which allow mitigation of business risks by sharing with each partner part of the negative events associated with the conduct of specific activities.

The analysis is conducted in terms of actions to mitigate the risks associated with the trend of revenue volumes, with reference to the control both of management and of production costs.

Table 3 Common activities designed to mitigate the risks on the revenue side

Type of activity	Number of contracts *	Percentage of total contracts characterised by risk mitigation actions
Diversification in production	17	18.1 %
Diversification in sectors/markets	62	66.0 %

*Multiple answers are possible.

Table 4 Common activities designed to mitigate the risks in terms of costs

Type of activity	Number of contracts *	Percentage of total contracts characterised by risk mitigation actions
Research and Development	48	51.1 %
Production	24	25.5 %
Business/Promotional	63	67.0 %
Logistics management	5	5.3 %
Training	8	8.5 %
Environmental protection	4	4.3 %

*Multiple answers are possible.

5 Findings and discussion

The data emerging from the analysis of the extracted sample allows a trend to be highlighted in terms of common network activities able to mitigate corporate special risks and to provide an initial framework about the link between the network contracts and the general enterprise risk which coordinated a system of specific risks.

In particular, the multilevel analysis performed indicates that the mitigation of specific risks does not represent a widespread motivation that is obvious and exclusive and that leads to the establishment of network contracts. Only one contract mentions the mitigation of specific risks as an element relevant to the decision to enter into the network agreement. In 94% of cases analysed reasons are still present that may be attributed to the partners' intention to achieve a mitigation of specific risks through collaboration. The reasons can be oriented to improve the volume of sales or to carry out actions for cost volume control and limitation.

In terms of actions to mitigate risks related to fluctuations in the revenue flows, as in 66% of the cases analysed, the partners aim to counter the risks associated with the inability to diversify productive sectors or market outlets individually. Less significant, however, are the case studies in which the mitigation of

risks on the revenue side aims to achieve product diversification: only 18% of the analysed contracts show this motivation.

In terms of the motivations that drive the network partners to establish collaborative agreements with the aim of implementing measures designed to absorb the negative consequences of actions that can create effects on the cost structure of the company, the following evidence emerged.

In 67% of the contracts analysed containing specific risk mitigation measures, it is shown that the partners plan to carry out joint initiatives in commercial or promotional areas with the intent to achieve synergy and better performance in terms of sales skills. In about 51% of the contracts analysed however, companies are focused on the implementation of joint research and development activities aimed at containing the risks related to an activity that typically has high uncertainty about the results achieved compared to initial investments. In particular, among the 48 contracts in which this purpose emerges, in 6 agreements the common activities of research and development - with their positive economic effects in terms of spreading risk - is the only motivation that prompted the partners to enter the network contract. In approximately 25% of the cases analysed, joint activities intended to improve the performance in production by proposing to contain their costs. In a small number of contracts, more residual motivations emerge, intended to mitigate the specific risks associated with the management of specific business tasks, such as logistics management, employee training and environmental protection.

However, as regards a first general overview of the activities of network contracts, by empirical evidence emerging from the sample, the formalisation of the cooperation agreements through network contracts is not due to a sole desire to distribute, among the various partner, costs of operational activities and related specific risks nor represent a new and different methods used to counter the company specific risks.

6 Conclusions

Generally in the world of network contracts, the findings of the present analysis confirm the role of the network contract as an instrument designed to regulate the conduct of joint activities aimed at achieving the following common results:

- operational efficiency through action to streamline the value chain activities (Bartezzaghi, Rullani, 2008);
- enhancement of the knowledge possessed by each partner through sharing it with the other partners (Ricciardi, 2006);
- access to tangible and intangible resources under more advantageous conditions than common purchases, including those of a financial nature (Scalera, Zazzaro, 2009);

- internationalisation enabling new market segments to be reached (Resciniti, 2009).

Previously recognised business theory analysed, therefore, that company-specific risks are mitigated through strategic cooperation instruments such as network contracts. However, the analysis of the content of the contracts, in fact, suggests a more detailed reflection. The network contracts, in reality, do not seem geared solely to mitigating business risks specifically but are the expression of the rationalisation initiatives and much wider targeted optimisation in order to share material, human and financial resources, intended to achieve economies of scale adapted to reducing the operating costs of the individual partners.

In other words, the distribution of risk between the partners and the consequent mitigation of company specific risks associated with the possible negative effects of normally operating enterprises represent, therefore, an incidental element meriting further assessment and are not the main proceedings under which the parties will develop a form of strategic collaboration network.

Actually mitigating specific risks – part of the broader corporate risk system – has a positive effect on the evolution of the company, enabling improved overall performance due to the establishment of the best operational conditions that are reflected positively on the economy of management, by thus enabling alleviation of the general business risk.

References

- ANDERSON D. - SWEENEY D. - WILLIAMS T. (2010), *Statistica per le analisi economico-aziendali*, Apogeo, Milano.
- ANTONELLI, D. - CASSARINO I. - VILLA A. (2006), *Analysing collaborative demand and supply networks of SMEs* in International Journal of Networking and Virtual Organizations, Vol. 3 No. 2.
- BARRINGER B.R. - HARRISON J.S. (2000), *Walking a tightrope: Creating value through interorganizational relationships* in Journal of Management, Vol. 26 No. 3.
- BARTEZZAGHI E., RULLANI E. (2008), *Forme di reti: un insieme diversificato*, in AIP (a cura di), Reti d'impresa oltre i distretti, Il Sole 24 Ore Libri, Milano.
- BERTINI U. (1969). *Introduzione allo studio dei rischi nell'economia aziendale*, Corsi, Pisa.
- BITICI U. - MARTINEZ V. - ALBORES P. - PARUNG J. (2004), *Creating and managing value in collaborative networks* in International Journal of Physical Distribution & Logistics Management, Vol. 34 No. 3/4.
- BRENDL O. (1933). *Immaterielle werte und Risiken*. Institut für Welthandelslehre an der Hochschule für Welthandel, Vienna.
- BRUNO G. - VILLA A. (2012), *An ontology-based model for SME network contracts*, in Confederated International Workshops On the Move to meaningful Internet Systems, OTM 2012, Springer, Berlin.
- BUTERA F. (2001), *Il campanile e la rete. E-business e piccole e medie imprese*, Il Sole 24 Ore, Milano
- BUTERA, F. (2008) *Il cambiamento organizzativo* (parte II), Laterza, Bari.
- CANZIANI A. (2014), *La ricerca nelle scienze sociali Note metodologiche e pre-metodologiche*, Economia Aziendale Online, Pavia.

- CAPELLI F. (2012), *With the crisis of enterprises, a new humanism is necessary. Neo-humanism and human formation in the contemporary society*, Bicocca University Papers, Milano.
- COLTORTI F. (2009), *Medium-sized firms, groups and industrial districts* in Beccatini G., Bellandi M., De Propriis L., *The Handbook of Industrial Districts*, Edward Elgar, Cheltenham, UK and Northampton, MA, USA.
- DEZZANI F. (1971), *Rischi e politiche d'impresa. Contenuto e relazioni*. Giuffrè, Milano.
- FERREO G. (1968), *Istituzioni di economia d'azienda*, Giuffrè, Milano.
- GAVIRNENI, S. - KAPUSCINSKI R. - TAYUR S. (1999), *Value of Information in Capacitated Supply Chains*, Management Science, Vol. 45 No. 1.
- GOBO G. (2004), *Generalizzare da un solo caso? Lineamenti di una teoria idiografica dei campioni* in Rassegna italiana di sociologia.
- HAYNES J. (1895), *Risk as an economic factor*. The Quarterly Journal of Economics.
- HARDY C.O. (1923), *Risk and risk – bearing*, University of Chicago Press, Chicago.
- HART O. - MOORE J. (1990), *Property Rights and the Nature of the Firm* in Journal of Political Economy, Vol. 98 No. 6.
- HUXHAM C. (1996), *Creating collaborative advantage*, Sage Publications, London.
- KNIGHT F. (1921), *Risk, uncertainty and profit*. Hart, Schaffner & Marx, Houghton Mifflin Co., Boston.
- LANDRY A. (1908), *Manuel d'économie*, Giard et Brière, Paris.
- LAVINGTON F. (1925), *An approach to the theory of business risk*. The Economic Journal.
- MANCINI D. (2010), *Il sistema informativo e di controllo relazionale per il governo della rete di relazioni collaborative d'azienda*, Giuffrè, Milano.
- MEZGAR I. - KOVACS G.L. - PAGANELLI P. (2000), *Co-operative production planning for small- and medium-sized enterprises* in International Journal of Production Economics, Vol. 64 No. 1.
- MILL J. (2013), *Sistema di logica deduttiva e induttiva*, Utet Libri, Torino.
- PASSAPONTI B. (1975), *Politiche di aggregazione aziendale*, Colombo Corsi, Pisa.
- RESCINITI R. (2009), *La competitività* in Valardo R., Dalli D., Resciniti R., Tunisini A. (a cura di), *Un tesoro emergente: le medie imprese italiane dell'era globale*, Franco Angeli, Milano.
- RICCIARDI A. (2006), *Le reti di imprese* in Izzo F., Ricciardi A. (a cura di), *Relazioni di Cooperazione e reti di imprese. Il caso della Campania*, Franco Angeli, Milano.
- RICCIARDI A. (2010), *Strategie di cooperazione tra aziende e mitigazione del rischio operativo: i vantaggi competitivi delle reti di imprese* in *Scritti in onore di Vittorio Coda*, Egea, Milano.
- RIPARBELLI A. (1962), *Correlazioni ed interdipendenze fra organismi aziendali*, Corsi Editore, Pisa.
- ROSENFELD S. A. (1996), *Does cooperation enhance competitiveness? Assessing the impacts of interfirm collaboration* in Research Policy, 25(2).
- RUFFOLO G. (1967), *La grande impresa nella società moderna*, Einaudi, Torino.
- SCALERA D. - ZAZZARO A. (2009), *Do inter-firm networks make access to finance easier? Issues and empirical evidence* in Cafaggi F. (a cura di), *Contractual networks, inter-firm cooperation and the Small Business Act*, Edward Elgar, Cheltenham.
- SHAW E. (2006), *Small firm networking: an insight into contents and motivating factors*, in *International Small Business Journal*, Vol. 24 No. 1, pp. 5-29.
- VILLA A. (2006), *Reinforcing industrial districts: Need for a structured approach* paper presented at Information Control Problems in Manufacturing.
- WILLIAMSON O.E. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*, Free Press, New York.
- ZAPPA G. (1927), *Tendenze nuove negli studi di ragioneria*, Tipografia Libreria Emiliana, Venezia.