

Entrepreneurship, Collective Entrepreneurship and the Producer-Owned Firm

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Abstract - Entrepreneurship is predominantly associated with the activities of an individual actor – the entrepreneur. It has also been related to the concept of firm ownership (e.g. Foss and Klein, 2005). This may lead to the conjecture that a collectively-owned firm is a setting for collective entrepreneurship. However, such reasoning encounters a number of taxing questions. If entrepreneurship is usually related to the individual, how does the collective embody entrepreneurial spirit and lead to effective outcomes? These and other questions will be addressed in this paper, which is mainly based on a review of the literature. The paper starts by providing an overview of the different schools of (economic) thought on entrepreneurship. Subsequently we discuss the implications for the conceptualization of entrepreneurship when it is not carried out by an individual but by a group of people. Finally, the notion of collective entrepreneurship will be framed within the context of the producer-owned firm in agriculture, by considering conditions under which collective entrepreneurship can be attributed to the cooperative.

Keywords – entrepreneurship, cooperative, pro

I. INTRODUCTION¹

While entrepreneurship is considered important for economic development, not much scholarly attention has been given to the issue of entrepreneurship in producer-owned firms, such as in agricultural cooperatives. Entrepreneurship in these types of firms may be called collective entrepreneurship because a producer-owned firm entrepreneurship may be located at the level of the multiple producer-owners and at the level of the jointly-owned firm.

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Cook and Plunkett (2006) have been one of the first to relate the concept of collective entrepreneurship to the agricultural cooperative. They consider collective entrepreneurship as a new phenomenon for agricultural cooperatives and define it as “a form of rent-seeking behavior exhibited by formal groups of individual agricultural producers that combine the institutional frameworks of investor-driven shareholder firms and patron-driven forms of collective action.” (p. 421). In other words, Cook and Plunkett explore the emergence of jointly-owned firms where entrepreneurial activity takes place at different levels of the organization, notably at the level of the individual member-owners and at the level of the jointly-owned firm. Their paper places the interaction between complex organizational structures and the concept of entrepreneurship on the academic agenda. However, the paper does not explore the extent to which jointly-owned multi-level organizations affect the performance of entrepreneurship; neither does the paper explain what impact these different loci of entrepreneurship have on the coherence and therefore manageability of the organization.

Scholars of theory and practice of agricultural cooperatives have claimed that many of these organizations are restructuring towards more “entrepreneurial” organizational model. Nilsson (1999) presents a typology of cooperative models, making a distinction between the traditional cooperative model and a group of four so-called entrepreneurial models. The latter are different from the traditional model (and from each other) in the financial structure they use to attract additional equity capital. Nilsson has named these new structures entrepreneurial models, because when cooperatives seek to become (more) entrepreneurial they need additional risk capital, which they obtain by implementing an innovative financial structure.

Entrepreneurship in a cooperative can reside with the farmers (as owners of the CF), with the managers of the CF, or with both. What are the implications for the efficiency of the organization of placing

entrepreneurship at one or the other level in the organization? Traditionally, cooperatives have been established on the basis of the principle that the members are individual and independent entrepreneurs who collectively decide on the activities of the CF. The latter has always been treated as a dependent firm (Bonus, 1986), that mainly carries out what the members, through the board of directors, have decided. Van Dijk (1999) posits that the double-layer organizational form entails also a two-layer system of entrepreneurship. He then argues that when market conditions for agricultural cooperatives change, as they have in the 1980s and 1990s, the lead in entrepreneurial activities should shift from the member of the cooperative to the CF, or even to the subsidiaries of the CF. The author, however, does not elaborate on what entrepreneurship means in such complex organizational structure, or how a shift in entrepreneurship relates to the ownership structure.

It is the objective of this paper to further explore the relationship between multi-level entrepreneurship and organizational structure, particularly for organizations that are characterized by multiple ownership of assets. More specifically, the paper defines entrepreneurship and the entrepreneurship function; it discusses the characteristics of collective entrepreneurship, and makes a distinction between collective entrepreneurship and cooperative entrepreneurship. In addition, the paper seeks to clarify the distinction between entrepreneurship and quasi-entrepreneurship.

II. ENTREPRENEURSHIP IN ECONOMICS

Entrepreneurship is a huge conundrum for economic theory. It has long been recognized that the entrepreneurial function is a vital component in the process of economic growth (Baumol, 1968), and one of the “well-springs of economic progress” (Buchanan and Di Piero, 1980). All the more striking is the absence of entrepreneurship from received theories in economics. (Micro)economics is directed mainly towards solving problems of optimization, assuming complete information on options in means to ends frameworks and on the outcomes of choice. There is no room for entrepreneurship in such theories where every actor’s moves are restricted by the

dictates of optimality calculations (Baumol, 1993). Stevenson and Harmeling (1990) even posit that entrepreneurship is best studied in the context of theories of change and best kept out of the theories of equilibrium, implicitly stating that economics is ill-equipped to analyze the phenomenon.

Contrary to these observations there is a growing body of literature which seeks to find ways to incorporate entrepreneurship in economic theory and link it to the theory of the firm (e.g. Hébert and Link, 1988; Foss and Klein, 2004; Casson, 2005). Based on this literature, the line of enquiry in the current paper will examine whether entrepreneurship can be attributed to a collectively owned firm. Specifically, we will focus on attribution in the most complex case of collective ownership, namely the producer-owned firm, where the performance of the producers’ own assets and the collectively owned assets are mutually dependent.

Forecasting in economic theory is driven by the premise of the omnipresent force of equilibration which is used to predict outcomes in fitting scarce means to desired ends. Knight (1921) commends this framework for its analytical rigor and explanatory capacity, but challenges it at the same time by stating that equilibrium is the direction in which markets *tend* to allocate resources. Equilibrium is a state which is likely never to be reached. Perfect competition would only hold in a situation where the present state of the world would be exactly the same as the future. In real life this is clearly not the case, as the future is likely to show change from the state of the past and is thus uncertain.

Although all future events entail uncertainty to a certain degree, not all future events are equally uncertain. Knight (ibid) argues that events that have been recorded to happen can be objectively grouped into fairly homogenous classes of cases. These instances (eventually) allow for objective description, can be measured and thus be anticipated. They could even be insured against by trading off the risk of the large loss with the certain payment of smaller fixed sum. These ‘insurable uncertainties’ form a lesser degree of uncertainty to which the more suitable term of risk should be applied. True uncertainties, however, concern future events whose outcomes cannot be objectively classified and for which there is no basis for assigning probabilities to those outcomes (Langlois and Cosgel, 1993).

The contention that uncertainty is a different entity from risk has some profound implications.² Because the fruits of current production can only be enjoyed with future sales of goods, uncertainty influences decision-making in production. In situations where it is difficult to objectively arrive at a classification of possible outcomes, decision-making must be left to personal judgment. Correct judgment of future events will then result in superior allocation of resources as compared to false judgment.

Changes in conditions upset anticipations and create a divergence between costs of production and selling prices, giving rise to the unequilibrium phenomenon of profit.³ Given the nature of profit, judgment cannot be assessed in terms of a marginal product and therefore cannot be traded on the market, nor paid in a wage (Knight, 1921). In order to exercise judgment over the deployment of assets, the decision-maker must have these assets in possession. Judgment is then naturally tied to asset ownership (Foss and Klein, 2004). Consequent to this analogy, profits (or losses for that matter) are the returns to judgment.

Entrepreneurship is thus defined as judgmental decision-making about the deployment of assets in the face of Knightian uncertainty (Foss and Klein, 2005). The actor owning the assets and exercising judgment over the use these assets is the true entrepreneur. This issue of combining asset ownership and judgmental decision-making has

important implications for economic organization. To understand how entrepreneurship relates to the organization of the firm, we must look in more detail at the characteristics of entrepreneurship.

III. THE ENTREPRENEURSHIP FUNCTION

The concept of entrepreneurship as a term is applied in a seemingly endless variety of ways, not only between scientific disciplines, but even within disciplines. The underlying difference lies in the views that are used to portray entrepreneurship. Foss and Klein (2008) aptly differentiate between occupational, structural and functional views. The first refers to a pure personification, focusing on self-employment. Research is generally related to argued factors (or traits) that lead to success or failure of entrepreneurial ventures (e.g. Shane and Venkataraman, 2000). The second approach focuses on firm behavior, attempting to explain why firms, clusters, sectors or even an economy as a whole can be labeled as entrepreneurial. This type of research takes the concept of entrepreneurship into the domain of strategic management (e.g. Gartner, 1988; Lumpkin and Dess, 1996). The third category treats entrepreneurship as a function. The merit of the functional perspective is that it allows closer examination of the instinctive notion that the act of entrepreneurship is not provisional on being fully incarnated as the entrepreneur. Neither is it solely the expression of (strategic) organizational behavior. The functional perspective rather considers entrepreneurship as a function which any economic actor *may* exhibit.

The functional perspective can be found in various lines of economic thinking on entrepreneurship. Most commonly it is considered in the functional aspects of management, leadership, alertness, or innovation. Although these functional aspects support empirical identification of the entrepreneurship function, they ascribe adjective qualifications to it. Moreover, they invoke exclusive properties to the entrepreneurship function, when empirical observations indicate otherwise (Thornton, 1999). Despite the fact that these mentioned functional aspects attempt to illuminate the entrepreneurship function, the question still remains what the entrepreneurship function is.

Contrary to the mentioned functional aspects, judgment is not a qualification. Judgment can be found in *any* circumstance of decision-making under uncertainty within *any* actor. Judgment could be

² The concept of uncertainty is difficult to grasp. We are still to face a great debate on modes of describing uncertainty and individual behavior in making choices. Opponents to the concept of uncertainty, notably Arrow (1951), argue that Knight's uncertainties seem to have a lot of similarity with ordinary probabilities, especially in the sense that Knight describes how uncertainties are reducible by the consolidation of many cases, analogous to the law of large numbers.

³ It should be noted that the notion of profit contrasts with the concept of rent. In ascertaining economic rent, productivity of different resources or of a resource in different uses are compared (Rumelt, 2005). The common treatment of rent is to ascribe it fully to the scarce factor, and then to treat that factor as separately owned, so that rent becomes part of the firm's costs. If the scarce factor is then traded, rents are capitalized and no profit is shown, corresponding to the zero-profit condition of neoclassical theory. Rents, unlike profits as risk, unlike uncertainty, would persist in static equilibrium.

exercised independently from other elements of the entrepreneurship function, whether decision-making involves leadership, creativity and innovation, alertness or not (Foss and Klein, 2008). It is thus judgment that constitutes the essence of the entrepreneurship function.

Though the entrepreneur represents the single actor exercising the entrepreneurship function, the latter's characteristics do not confine it to a single actor. Entrepreneurship as a function can be made transferable, for instance through an employment relationship. Effectively, the transfer of the entrepreneurship function entails the delegation of decision-making rights to subordinates, allowing them to exercise their own judgment, though in a derived form from that of the original judgment of the asset owner (Foss, Foss & Klein, 2007).

In sum, entrepreneurship is the function of judgment decision-making under uncertainty over the deployment of assets. Entrepreneurship is a function rather than an attribute of economic actors, and it is expressed through ownership and control over assets. We now arrive at the question how entrepreneurship can be attributed to the firm, and whether this is influenced by its organizational form. For this enquiry we need to briefly examine the facets of ownership and control of a firm.

IV. THE ENTREPRENEURSHIP FUNCTION AND ORGANIZATIONAL FORM

Ownership of a firm is in an economic sense a straightforward phenomenon, implying the possession of property rights over a firm's assets. The exercise of control over those assets is decidedly more complex. The exercise of control over assets is practiced through two distinctive components of control, namely decision control (ratification and monitoring) and decision management (initiation and implementation) (Fama and Jensen, 1983). The entrepreneurship function thus consists of three different components: ownership, decision control, and decision management. These components can reside with one person, or can be distributed over different people in a complex organizational structure (see Figure 1).

← The Entrepreneurship Function →			Type of Firm
Ownership and Control <i>Owner/Manager</i>			Single Proprietor
Ownership <i>Shareholders</i>	Control <i>Managers</i>		Limited Liability Company (Ltd)
Ownership <i>Shareholders</i>	Decision Control <i>Board of Directors</i>	Decision Management <i>Managers</i>	Public Limited Company (Plc)

Figure 1: The Entrepreneurship Function Divided

To demonstrate the ramifications of organizational form for the entrepreneurship function, we just have to look at the two opposing cases of the manager-owned firm and the publicly listed shareholder-owned firm (the Plc). In the Plc, control is delegated to the managers of the firm to such an extent that the firm's owners exercise decision control to a limited extent (e.g. via ratification at the Annual Meeting). The board represents the owners and takes up the lion's share of decision control. The managers fully exercise decision management. The entrepreneurship function in the case of the Plc is thus divided over different organizational layers, viz. shareholders, board and managers.

When decision control and decision management are divided between the firm's governing bodies, the owners have fully delegated decision management. This permits the managers to take decisions over asset deployment without bearing any financial risk. Assuming effective control mechanisms that counter moral hazard, managers will direct their decisions to the (expected) demands of the majority of shareholders. As the number of shareholders increases, decision-making will require a larger degree of objective verifiability in order to provide the transparency in decision-making that is required to obtain consent of the shareholders. The firm then develops towards a state where uncertainties are avoided.

If the assumption regarding effective control mechanisms is relaxed, managers will have more freedom in decision-making, as shareholders will not be able to assess every step of the management. This

situation increases the likelihood that managers will, in pursuit of their own interest, make decisions that deviate from shareholder interests. This can for instance be related to the phenomenon of empire-building by managers or in the widespread failure to reap merger benefits. As managers do not bear the ultimate responsibility regarding the results of its own actions, they have no incentive to correctly judge over investment decisions. Although it may seem that managers make decisions under uncertainty, they basically avoid uncertainties, resulting in quasi-entrepreneurship. In the case that managers follow their own interests without taking the interests of the owners into account, they pursue false entrepreneurship.

In the case of the manager-owned (or owner-managed) firm, the entrepreneurship function resides exclusively with a single person, giving rise to entrepreneurship in its purest form. In exercising judgmental decision-making, the manager will take the continuity of the firm into consideration as strongly as possible.

Although the entrepreneurship function in a Plc is divided, it can in potential approximate the structure of the entrepreneurship function of the manager-owned firm. Through making structural linkages in decision-making between owners and managers, the entrepreneurship function will be brought together. In practice this is seen in the case of activist shareholders who demand influence over decision-making at the board room level. It also applies to cases where managers demand a mandate from shareholders for decisions that are fundamentally important to the firm.

In conclusion we contend that firms that share decision-making between the owners and managers are entrepreneurial. Firms that allot all responsibilities regarding decision initiation and implementation to the managers and a large share of ratification and monitoring of decisions to the board are not entrepreneurial. The firm will then either resort to uncertainty avoidance in its decision-making, or to inefficient allocation of resources.

Now we have defined entrepreneurship and the entrepreneurship function, and have related those concepts to the organizational structure, we may proceed to present in more detail what it means to have entrepreneurship (a) reside with a group of

people and (b) reside at different levels in the organizational structure.

V. DEFINING COLLECTIVE ENTREPRENEURSHIP

We use the term collective entrepreneurship when the decisions about deployment of assets are taken not by an individual but by a group of people. The need to take decisions as a group results from the joint ownership of assets. Joint ownership leads to joint decision-making. This implies that it is not the judgment of the individual that applies, but the combined judgment of a group of individuals. The intra-group differences in judgment over the proper use of the joint assets bear on the efficiency of the decision-making process. The more heterogeneous the judgments, for instance about what constitute good investment projects, the more difficult the decision-making process.

Some authors have used the term collaborative entrepreneurship. Miles et al. (2005) use the term collaborative entrepreneurship to define collaboration among entrepreneurial firms in a community or network of firms. In their view, collaborative entrepreneurship is the matching of underutilized resources with unexplored market opportunities to commercialize a constant stream of innovation in a community of networked firms. The emphasis in collaboration among the independent firms in the network is on value creation through continuous innovation (and not on value distribution). Within the community of networked firms there is much trust as members treat ideas as a common resource and collaboratively exploit capabilities.

Both collaborative entrepreneurship and collective entrepreneurship comprise of three types of relationship. First, the jointly owned venture is an economic entity, with economic relations between co-founders, who provide resources such as labor, skills, knowledge, experience and capital, in exchange for some share of the return to the enterprise. Second, there is an organizational relationship among co-founders, and between co-founders and joint venture. Finally, collective and collaborative entrepreneurship involve interpersonal relationships. Collaboration is often embedded in existing social and personal relationships with friends, neighbors, family, or other community members. Typical examples of collaborative entrepreneurship are strategic alliances,

for instance among firms that share a part of their R&D activities, or among firms that collaborate in tightly coordinated supply chains (Child et al., 2005).

There are at least three main differences between collective entrepreneurship and collaborative entrepreneurship. First, in collective entrepreneurship the income of the member firms depends to a large extent on the performance of the jointly-owned firm. In collaborative entrepreneurship the jointly-owned firm is much more independent. Often, the joint venture is sold, after a while, through an IPO, thus becoming independent from the parent companies, or it is acquired by one of the parent companies. Second, collaborative entrepreneurship is more dynamic than collective entrepreneurship. Alliances are often temporary, and/or partners change often. Alliances could even take up a network form. Third, in collaborative entrepreneurship the emphasis is mainly on (a) learning and knowledge exchange or (b) complementary assets. In collective entrepreneurship, traditionally the emphasis has been on economies of scale and scope through joint investment in tangible assets, while more recently joint learning has become important.

VI. COLLECTIVE ENTREPRENEURSHIP AND PRODUCER-OWNED FIRMS

A cooperative has often been described as a two-layer system, consisting of a group of individual firms (farms in the case of an agricultural cooperative) who establish an association which subsequently sets up a firm to perform economic activities for the benefit of the members of the association (Draheim, 1955). Following Van Dijk (1999) we call the individually owned firm the member firm (MF) as the owners are members of the cooperative, while the jointly-owned firm is called the cooperative firm (CF). The MF is also a locus of entrepreneurship, as the owner (the farmer) has to decide individually, using her individual judgment in the face of uncertainty, about the deployment of the assets in the MF.

The key characteristic of the system of collective entrepreneurship in producer-owned firms is that the deployment of the individually-owned assets of the MF and the deployment of the

jointly-owned assets of the CF are interdependent.⁴ This means that the decisions of the individual member-producer about their on-farm activities and investments have to be aligned with the decisions on the activities and investments of the CF to obtain the best result (i.e. the highest performance). This alignment (or coordination) requires intensive communication between MFs and CF as well as joint-decision-making. This need for intense coordination between MFs and CF makes collective entrepreneurship in producer-owned firms into a special type of collective entrepreneurship. We may call this cooperative entrepreneurship.

Is there is difference between cooperative entrepreneurship and collective entrepreneurship in a joint venture? A joint venture is a legally independent firm owned by two or more partners who have provided equity and other assets, share in the profits, and jointly control the firm. The typical joint venture is 50 percent owned by company A and 50 percent owned by company B, giving both companies equal decision rights. However, a joint venture may have more than two owners and the shares (and thus decision rights) may not be distributed evenly over the owners.

While formally a cooperative may have only two members, it is more common for a cooperative to have a larger membership. Traditionally, decision rights were distributed according to the one-member-one-vote system.⁵ However, more and more deviations from this system can be found. Some countries, notably the Netherlands, have always used some form of proportionality in decision rights, linking the number of votes to the volume of patronage.⁶ Still, the cooperatives that apply proportionality have been keen on avoiding too much decision rights in the hands of one member. Cooperative that have completely abandoned the one-member-one-vote systems are the so-called new generation cooperatives, in which decision-rights are tied to volume of transaction (and to ownership shares as the latter are directly tied to delivery rights). Thus,

⁴ Interdependency means that there are complementarities between the activities (or decisions) of two economic actors. Doing more of activity A has a positive affect on the performance of activity B (Roberts, 2004).

⁵ This decision-making model is still advocated by the International Cooperative Alliance (ICA).

⁶ See Van Bekkum and Van Dijk (1997) for an overview of European countries applying proportional voting.

these new generation cooperatives are approximating the joint venture model of allocating decision rights.

Still, a major difference between a joint venture and a model of cooperative entrepreneurship remains. The activities of the joint venture are usually not crucial for the viability of the parent companies. Although at its establishment the activities of the joint venture were in line with the activities and interests of the parent companies, it is usually no problem when the joint venture develops non-related activities, as long as they are profitable. Thus, in a joint venture the activities of the jointly-owned firm and those of the parent firms are not necessarily interdependent and the relationship between parents and jointly-owned firm often turns into a financial participation. In the cooperative entrepreneurship model, however, the relationship between MFs and the CF continues to be a complementary one, where the performance of the individual MFs crucially depends on the quality of the services provided by the CF.

Heterogeneous views among a group of owners of jointly-held assets on how to use these assets may have several implications for the outcome and efficiency of the decision-making process. The impact is particularly dependent on the options that owners have to withdraw their ownership share. Following Hirschmann (1969), we argue that when exit (i.e. selling one's share of the jointly owned assets) is difficult, owners are more likely to engage in the decision-making process ('voice'). This is typically the case in agricultural cooperatives as members do not easily withdraw; they have invested in their cooperative over the years, their shares may not be easily transferred (or not at all), and alternative trading partners may not be available. This commitment of members of the cooperative to engage in decision-making about the deployment of the assets they jointly own leads, in our model, to more entrepreneurship. Similarly, those cooperatives where decisions are increasingly made by managers, without involving the owners in the decision-making process, are less entrepreneurial.

VII. COLLECTIVE ENTREPRENEURSHIP AND RESTRUCTURING OF THE COOPERATIVE

Collective entrepreneurship is a phenomenon typically present in producer-owned firms. Not only are the assets of the CF owned by a group of producers, formally associated in the cooperative society, also the traditional organizational feature of bottom-up decision-making makes the cooperative an example of true entrepreneurship. However, cooperatives have experienced a number restructuring processes of the last decade, which affect extent of entrepreneurship in the organization.

First, cooperatives have become larger and more international, making it more difficult for the cooperative to really engage (all) members in the decision-making process. The larger the cooperative, the more layers of representation there will be between the individual member and the board of directors. Large cooperatives increasingly mimic the corporate governance structure of Plc's. This, eventually, will lead to lower entrepreneurship in the cooperative as the managers of the CF will either avoid making risky investments or will increasingly pursue their own interests.

Second, cooperatives have become more market oriented, increasing their effort in responding to customer demands. This, at instances, has led to a shift from producer orientation towards customer orientation. As customer orientation requires knowledge and skills of marketing, the judgment of the (marketing) managers becomes relatively more important than the judgment of the MFs (the owners of the CF). If this shift in strategic orientation means that owners and managers no longer jointly decide on future projects, it also entails a loss of entrepreneurship.

Third, cooperatives have developed hybrid ownership structure in order to be able to attract additional equity capital. Inviting non-members to become owners could lead to a loss of entrepreneurship when these new owners have different interests than the members. Having diverging interests among the owners will either lead to laborious decision-making or it will lead to managers taking advantage of the situation by pursuing their own interests. However, when the new owners - if allowed by the membership - take an active stand in the decision-making process (similar to that of activist shareholders in Plc's) the extent of entrepreneurship may be increased.

Finally, the current trend of establishing many new small cooperatives, either outside of even within existing cooperatives, leads to an increase in entrepreneurship. In small cooperatives, members have a direct line with the managers, often discussing not only strategic but even operational decisions. Commitment of the members is high, leading to strong involvement in the decision-making process. Investment decisions are the outcome of judgment of both owners and managers.

VII. CONCLUSIONS

In this paper we have defined entrepreneurship as judgmental decision-making over the deployment of assets in the face of uncertainty. Real entrepreneurship requires that the owners of the assets make the decisions about the use of the assets. In many firms, however, owners and managers have become alienated, leading to low entrepreneurship or even quasi-entrepreneurship.

In the producer-owned firm, commitment of owners to the decision-making process has always been high. Due to a shift from producer orientation towards customer orientation, commitment is decreasing, leading to lower entrepreneurship. Still, an extension of ownership towards non-members could reinforce entrepreneurship in the cooperative. Also the rise of many new small cooperatives offers a promising route towards more entrepreneurship.

The paper only begins to unravel the concept of collective entrepreneurship. One issue for further study that is both important and promising in terms of useful results deals with the decision-making processes within the association of owners of the producer-owned firm. When the membership becomes more heterogeneous, and particular groups of members are formed, an interesting dynamics of coalition building will appear. The implications of this political process for entrepreneurship are, to our contention, a fruitful direction for further research.

REFERENCES

- Arrow, K.J. (1951), "Alternative Approaches to the Theory of Choice in Risk-Taking Situations", *Econometrica*, Vol. 19 Nr. 4, October, p. 404-437
- Baumol, W.T. (1968), "Entrepreneurship in Economic Theory", *The American Economic Review*, Vol. 58, No. 2, Papers and proceedings of the Eightieth Annual Meeting of the American Economic Association (May) p. 64-71
- Baumol, W.T. (1993), "Formal Entrepreneurship Theory in Economics: Existence and Bounds", *Journal of Business Venturing*, (8), p. 197-210
- Bekkum, O.F. v., and G. v. Dijk (1997) *Agricultural co-operatives in the European Union : trends and issues on the eve of the 21st century*. Assen, Van Gorcum.
- Bonus, H. (1986), "The cooperative association as a business enterprise: a study in the economics of transactions." *Journal of Institutional and Theoretical Economics / Zeitschrift für die gesamte Staatswissenschaft* 142, no. 2(1986): 310-339.
- Buchanan, J.M. and A. Di Pierro (1980), "Cognition, Choice, and Entrepreneurship", *Southern Economic Journal*, 46(3): 693-701
- Casson, M (2005), "Entrepreneurship and the Theory of the Firm", *Journal of Economic Behavior and Organization*, Vol. 58, p. 327-348
- Child, J., D. Faulkner, and S. Tallman (2005), *Cooperative Strategy. Managing Alliances, Networks and Joint Ventures*. Second Edition. Oxford: Oxford University Press.
- Cook, M.L., and B. Plunkett (2006), "Collective Entrepreneurship: An Emerging Phenomenon in Producer-Owned Organizations." *Journal of Agricultural and Applied Economics* 38(2): 421-428.
- Dijk, G. van (1999), "Evolution of business structure and entrepreneurship of cooperatives in the horti- and agribusiness." *Finnish Journal of Business Economics* 48(4): 471-483.
- Draheim, G. (1955), *Die Genossenschaft als Unternehmungstyp*. Göttingen.
- Fama, E.F. and M.C. Jensen (1983), "Separation of Ownership and Control", *The Journal of Law and Economics*, Vol. 26 Nr. 2, June, p. 301
- Foss K., N.J. Foss and P.G. Klein (2006), "Original and Derived Judgment: An Entrepreneurial Theory of Economic Organization",
- Foss, N.J., and P.G. Klein (2005), *Entrepreneurship and the Economic Theory of the Firm: Any Gains from Trade?*, S.A. Alvarez, R. Agarwal, and O.

- Sorenson (eds), Handbook of Entrepreneurship Research; Interdisciplinary Perspective, New York, Springer, pp. 55-80.
- Foss, N.J. and P.G. Klein (2008), "Entrepreneurship: from Opportunity Discovery to Judgment", Centre for Strategic Management and Globalization, Copenhagen Business School
- Gartner, W.B. (1988), " 'Who is an Entrepreneur?' is the wrong question", American Journal of Small Business, Spring pp 11-32
- Hébert, R.F. and A.N. Link (1988), "In search of the Meaning of Entrepreneurship", Small Business Economics, Vol. 1 Nr. 1, March, p. 39-49
- Hirschmann, A.O. (1969), Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States, Cambridge: Cambridge University Press.
- Knight, F.H. (1948), "Risk, Uncertainty, and Profit", Houghton Mifflin Company
- Langlois, R.N. and M.M. Cosgel (1993), "Frank Knight on Risk, Uncertainty, and the Firm: A new Interpretation", Economic Enquiry, Vol. 31, p. 456-465
- Lumpkin G.T. and G.G.Dess (1996), "Clarifying the Entrepreneurial Orientation Construct and linking it to Performance", The Academy of Management Review, Vol. 21 Nr. 1, January, p.135-172
- Nilsson, J. (1999), "Co-operative Organisational Models as Reflections of the Business Environments." Finnisch Journal of Business Economics 48(4): 449-470.
- Roberts, J. (2004), The modern firm : organizational design for performance and growth. Oxford: Oxford University Press.
- Rumelt, R.P. (2005), "Theory, Startegy, and Entrepreneurship", in Alvarez, S.A., R. Agarwal and O. Sorensen, eds., Handbook of Entrepreneurship Research, Dordrecht: Springer.
- Shane, S. and S. Venkataraman (2000), "The Promise of Entrepreneurship as a Field of Research, The Academy of Management Review, Vol. 25 Nr. 1, January, p. 217-226
- Stevenson, H. and S. Harmeling (1990), "Entrepreneurial Management's Need for a more 'chaotic' Theory", Journal of Business Venturing (5), p. 1-14
- Thornton, P.H. (1999), "The Sociology of Entrepreneurship", Annual Review of Sociology, Vol. 25, August, p. 19-46

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