Working Paper

New institutional economic theories of non-profits and cooperatives: a critique from an evolutionary perspective

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Abstract

Traditional economic theories of social enterprises rely on new institutional economics. Although these theories have an undeniable explanatory power, they display a series of non-negligible flaws. Evolutionary and complexity approaches in economics may help overcome these limits. The object of this article is, in a first time, to review the different new institutional theories applied to non-profits and cooperatives and, in a second time, to present some criticisms addressed to new institutional economics. We concentrate on two controversial aspects of the latter: on the one hand, its underlying hypotheses about individuals and, in particular, bounded rationality and opportunism; on the other hand, its neglect of the emergent and evolving nature of economic phenomena and of the importance of history and the environment in agents' institutional choices. For each criticism, we make proposals, mainly inspired by evolutionary and complexity approaches in economics, in order to overcome these limits.

Key-words: new institutional economics, transaction costs, non-profits, cooperatives, evolutionary economics

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1. Introduction

The notion of social enterprise has aroused, during the last two decades, the development of an extensive literature within which it is possible to distinguish different schools of thought (Defourny and Nyssens, 2012). In the Anglo-Saxon literature, there exists, according to Dees and Anderson (2006), two main schools. For the first one, the "earned income" school, the concept of social enterprise refers, in a first generation of works, to the commercial activities undertaken by private non-profit organizations to financially support their social missions. Hence, the social enterprise is seen, above all, as an original response to the fund-raising difficulties that non-profit organizations are confronted with, whether they are linked to the collect of private donations or subsidies from public authorities or foundations (Kerlin, 2006). In a second generation of research within this same school, the notion of social enterprise has been extended to cover all the organizations that pursue a commercial activity in order to carry out a social finality, whether lucrative or non-lucrative (Austin et al., 2006). The second Anglo-Saxon school of thoughts, the "social innovation" one, highlights the innovative nature of this kind of organization. A particular stress is put on the social entrepreneur's profile, her creativity, her leadership and her dynamism to respond in a novel way to social needs. Finally, according to a European approach[2], social enterprises can be defined as economic organizations arising from citizen initiatives, which carry out a continuous production of goods and/or services and which are characterized by an explicit objective of service to community and/or its members, a decision-making mechanism that does not rely on capital ownership and a limited distribution of profits (Defourny and Nyssens, 2012). We will adopt here this latter conception, although we will sometimes refer to the innovative capacity of social enterprises in this article. Social enterprises are active in various sectors which have been experiencing considerable growth in the past few years (proximity services, recycling, production of renewable energy, development cooperation, fair trade, ethical finance, etc).

The interest of economists has generally been focused on two particular forms of social enterprises: non-profit organizations (NPO) and cooperatives[3]. In order to theorize these two organizational forms, they heavily relied on tools offered by new institutional economics (NIE). The object of this article is, in a first time, to review the different new institutional economic theories applied to NPO and cooperatives and, in a second time, to present some criticisms addressed to NIE. These criticisms correspond to three different levels of analysis: i) the individual level, ii) the level of the firm and iii) the intra-organizational level. For each criticized hypothesis, we make proposals, mainly inspired by evolutionary and complexity approaches in economics, in order to overcome the limits of NIE. These proposals could represent the premises of a new economic conception of social enterprises. We also focus on the status and on the roles that social enterprises take on in these new approaches. Finally, some concluding remarks will end the paper.

[2] This approach is in fact the one of the « EMES European Research Network » (www.emes.net), which gathers the main research teams in Europe dedicated to the study of social entrepreneurship and social enterprises.

[3] Of course, not all non-profits can be described as social enterprises – notice that the case of cooperatives are less subject to disputes. Whether a particular non-profit organization can be considered as a social enterprise depends both on its objective organizational features and the conceptual definition of social enterprise that one uses. However, this is an empirical issue that has to be addressed on a case-by-case basis, which is not the object of the present paper.

2. New Institutional Economics and its two subdivisions

According to NIE, that relies on the precursor work of Coase (1937), firms are institutions that constitute coordination forms substitutive to the market and that allow to minimize transaction costs. In effect, transactions realized on the market are costly: they involve prospection costs, costs linked to the negotiation of a contract, etc. Hansmann (1996) designates these costs by the expression “costs of contracting”. In the case of the firm, however, a unique long-term contract, which subordinates the employee to the employer in exchange of remuneration, replaces the multiple short-term contracts negotiated on the market, which limits transaction costs. Nevertheless, the relationships within the firm are not cost-free either, due to the existence of costs related to the delegation of tasks and to the monitoring of the staff, to the collective decision-making and to risk bearing. These costs are called “costs of ownership” (Hansmann, 1996). The institutional choice between the market and the firm will, hence, be determined by the comparison of their relative costs.

2.1. The contractualist approach

On the basis of this contractual vision of the firm, NIE can be broken down into two schools of thoughts which offer a sensibly distinct interpretation of the concepts of contract and transaction costs. For the first one(Akerlof, 1970, Alchian and Demsetz, 1972, Jensen and Meckling, 1976), the raison d’être of organizations lies less in the relative superiority of its coordination mechanisms compared to the market than in the need for controlling agents’ behavior in a context of asymmetric information (Bacchiega and Borzaga, 2001). Thus, the essential task, according to this approach, is to define contracts such that they generate the appropriate incentives to limit opportunistic behaviors stemming from institutional failures – “contract failures” or “market failures”. These failures, in turn, arise from the asymmetric distribution of information between agents. The firm is thus considered as a “nexus of contracts”, which has lead some authors (Bacchiega and Borzaga, 2001, Lemaître, 2009) to qualify this stream of “contractualist”. The best-known example of use of contracts as instruments to create the right incentives and, consequently, supervise agent’s behavior, is given by agency theory (Jensen and Meckling, 1976). The latter analyses the relationships between “principals” and “agents” – typically, the owners and the managers – by seeking to determine the best way to bring objectives of the agents taking part to the production process into alignment with their principals’. It is worth noting that in this approach, there is no real opposition between the firm and the market. The firm is simply a specific contractual arrangement, which does not establish any subordination relationship, but merely free contractual relationships. In that respect, it is an extension of the neoclassical vision of society as a system of free relationships between autonomous and equal agents. What is more, the firm has no real existence as a collective entity (Coriat and Weinstein, 2010).

2.2. Transaction cost economics

As for the second school of thought, it criticizes this vision of the firm as a mere “nexus of contracts” and supports the existence of a clear discontinuity between the principle of the market and the one of the firm, which implies a hierarchical link. Furthermore, whereas the contractualist vision sees contracts as optimal instruments – given the available information, agents can negotiate contracts such that the optimum or the "second-best" is reached – , the theory known as "transaction cost economics" concentrates on the agents' inability to negotiate complete contracts that would cover all the contingencies. Transaction cost economics (TCE), as theorized by Williamson (1975), 1985), relies on three essential postulates: i) agents' bounded rationality, ii) the presence of specific assets and iii) the possibility of opportunistic behaviors. The concept of bounded rationality, introduced by Simon (1955), implies that the agents' cognitive capacity to process information from their environment is limited. Bounded rationality is precisely the reason why complete contracts are impossible to write. Agents are also supposed to be opportunistic, that is, they will cheat whenever they have the opportunity, contrary to agents of the neoclassical model of the market, in which such behavior would be detected and sanctioned due to the hypothesis of absence of uncertainty. According to Williamson, this opportunism represents a key element in the issue of organizations, all the more when a transaction implies specific investments that make the parties depend on each other. In effect, in such a case, there might be "hold up", i.e. an agent may monopolize all the benefits of the transaction. Hence, the firm is perceived as a particular institutional arrangement characterized by a hierarchical principle, a "vertical integration" as Williamson (1975) say it, « according to which it is the management of the firm that has the decision-making power in case of events that are not anticipated in contracts, and which allow to limit the risks related to opportunism » (Coriat and Weinstein, 2010: 61).

It should be mentioned, finally, that some authors have sought to reconcile the two subdivisions of NIE through an attempt of formalizing governance structures in contractual terms (Grossman and Hart, 1986, Hart and Moore, 1988). This attempt is known as "incomplete contracts" theory. It does not present an explanation of the presence of firms fundamentally different to the one of TCE[4], but it does display some distinctions. First, it permits an extension of TCE by integrating in its analysis the role played by property rights. Secondly, it seeks to provide a unified explanation of costs and benefits of integration in a firm, while TCE requires two distinct types of explanations (Coriat and Weinstein, 2010). Thirdly, contrary to TCE, incomplete contracts theory keeps unchanged the standard behavioral hypotheses of substantive rationality and maximization, which leads it to define another explanation to the incompleteness of contracts[5].

3. New Institutional Economics and theories of non-profits

The main economic theories of NPO (Krashinsky, 1986) and of cooperatives (Platteau, 1987, Hansmann, 1999) have amply relied on the NIE approach, both in its contractualist version and in the TCE version. As regards NPO, a first research tradition stems from the work of Hansmann (1996), 1980), who argues that these are less likely to exploit market failures than their for-profit counterparts due to their non-redistribution constraint of benefits, which gives them a competitive advantage for the

[4] That is why we did not present incomplete contracts theory as a third subdivision of NIE.
[5] About the distinctions between TCE and incomplete contracts theory, see e.g. Coriat and Weinstein (2010), Gibbons (2005), Kreps (1996).

production of goods and services characterized by a high degree of trust and unobservable quality, such as health care or education. Using the terminology of the contractualist theory, the non-redistribution constraint mitigates the “high-powered” incentives linked to profit maximization, which discourages opportunistic behaviors (Glaeser and Shleifer, 2001).

A second important contribution to the economic literature on NPO is the one of Weisbrod (1975). For him, NPO represent a private answer to the inability of the State to face the heterogeneity of demand for public goods. In effect, the State, according to the famous Hotelling-Downs model (Downs, 1957), concentrates on the median voter’s preferences and, hence, does not respond to the needs of consumers who want a higher level of public goods. In order to increase their utility, the latter will thus turn to non-profit firms to satisfy their needs, given their trust capital linked to the non-redistribution constraint.

Ben-Ner (1986)’s work constitutes the third main economic explanation of the presence of NPO (see also Ben-Ner and Van Hoomissen, 1992: , for an extention of this analysis). Its peculiarity lies in its focus on the creation of NPO by demand-side stakeholders (consumers, government, donators…) in order to maximize the control they have on them in a context of asymmetric information.

Clearly, these three approaches rely on the argument according to which NPO satisfy consumers’ demands more efficiently than other organizational forms because they succeed in limiting the opportunistic behaviors that could arise from imperfect information, in perfect coherence with the new institutional analysis.

4. New Institutional Economics and theories of cooperative firms

Regarding cooperatives, there exists a broad literature that explains the emergence and the performance of this kind of organizations using new institutional arguments.

As far as the reasons for the emergence of cooperatives are concerned, the arguments for NPO are also largely valid for cooperatives (Spear, 2000). In effect, although cooperatives can, in many cases, distribute profits, this distribution is constrained in various ways (Levi, 2005), the limitation of the redistribution being, indeed, one of the cooperative principles. In addition, this surplus generally goes to the members of the cooperative themselves. Hence, cooperatives are supposed to be less likely to exploit information asymmetries. This represents a competitive advantage to provide certain goods and services, as in the case of NPO. Hansmann (1999) and Spear (2000) also insist on the attractiveness of the cooperative form to allow producers or consumers to face monopolistic or oligopolistic situations in which firms misuse their market power. Finally, recent results (Balestri, 2011, 2012) show that a democratic property structure – implying equal individual voting rights and the absence of barriers to entry for new members – permits to reduce the risks of violation of the non-redistribution constraint, which explains that enterprises that display this kind of structure are more efficient for the production of public goods than traditional firms.

In addition, some authors highlight several aspects specific to workers cooperatives that negatively affect their performance. These can be classified in three categories that, according to Hansmann (1996), represent the costs of ownership : i) the costs of monitoring, ii) the costs of collective decision-making and iii) the costs of risk-bearing. The first category essentially refers to the agency problem. If the output is the result of a collective effort and if individual contributions are not easily measurable, the free-rider problem may arise. In such a perspective, it is optimal to designate a supervisor who is in charge of work monitoring and who, in addition, receives the net surplus of the activity (Alchian and Demsetz, 1972). In other words, it is relatively more efficient to assign the property rights as well as the rights on the residual surplus to a unique agent, the capitalist owner. As for the costs of collective decision-making (Hansmann, 1996), they increase with the heterogeneity of the voters' preferences. Now, while the capital owners are likely to display homogeneous interests – the maximization of their return on investment –, workers may present more complex and divergent sets of preferences. Finally, as far as the costs of risk-bearing are concerned, Jensen and Meckling (1979) argue that, due to the impossibility for workers to diversify their risk, contrary to capitalist shareholders – a worker cannot split up his work into a large number of activities –, the productivity level would be inefficient. On the top of that, there may be a tendency to under-invest resulting from the relatively higher cost of capital for a cooperative compared to a traditional firm, a phenomenon known as the workers' horizon problem (Furubotn and Pejovich, 1970, Uvalic, 1986).

In summary, the advantages and the drawbacks of cooperatives are, again, evaluated against their institutional specificity – the collective property – and against their ability to minimize transaction costs. Moreover, starting from this kind of analyses, some new institutional authors, following Williamson (1975), 1985), interpret the lower frequency of cooperatives on markets as an evidence for their relative inefficiency compared to hierarchical organizations. The underlying idea is that market competition selects the optimal institutions through an "efficiency test". In this perspective, the fact that workers cooperatives do not spontaneously emerge from voluntary agreements between individuals indicates, according to Jensen and Meckling (1979), that democracy in enterprise is less efficient than other configurations that survive on the market. Hence, cooperatives would constitute marginal forms of organizations, « whose weight is bound to shrink and fade away as market regulation is perfected and competitive pressures increases » (Borzaga et al., 2011: 23).

5. A Critique of New Institutional Economics

The new institutional theory offers an undeniable explanatory power as far as the emergence of institutions in general, and of social enterprises in particular, is concerned, and it is not about denying it outright. That said, we think that its fundamental postulates present non-negligible flaws. Hereafter we review these limits by distinguishing three levels of analysis to which they apply: the individual level, the level of the firm and the intra-organizational level. At the individual level, these limits concern the hypothesis of bounded rationality and the one of opportunism. At the level of the firm, as well as the neglecting of dynamic processes and of the impact of macroeconomic factors, such as the environment or history, in the analysis of the emergence of institutions. Some criticisms presented here are not specific to economic theories of social enterprises, although these do not escape them, since they largely refer to new institutional postulates, as we have shown it. To highlight this last point, we will try to apply the critic arguments to the particular case of NPO and cooperatives.

Table 1: criticisms NIE and proposals.

Level of analysis	Criticized hypothesis	Proposals
Individuals	Opportunism	*Version 1*: introduction of **intrinsic motivations**
		Version 2: explanation in terms of **group selection**
	Bounded rationality	Introduction of **learning processes**
Individual organization	Neglect of non-contractible elements	Explanation of the emergence of firms in terms of **routines**
Intra-organizational	Neglect of the environment and history	Concepts of **institutional complementarities**, **frequency-dependence** and **path-dependence**

5.1. Hypotheses about individuals: bounded rationality and opportunism

5.1.1. Bounded rationality

A first category of criticisms often addressed to NEI concerns the vision of the individual that backs it up and, notably, the hypothesis of agents' bounded rationality[6]. Indeed, Williamson invokes it mainly to justify the incompleteness of contracts, whereas there is no room in his theory for the learning processes that this notion would imply if it were entirely accepted (Foss and Klein, 2010). Hence, it is incoherent to invoke, on the one hand, the concept of bounded rationality as a necessary condition to analyze contracts and governance structure and, on the other hand, to assume that agents make substantively rational choices between the different institutional arrangements (Dow, 1987, Furubotn, 2002). This first criticism is very general and largely exceeds, while including it, the field of social enterprises.

5.1.2. Opportunism

A second criticism about the vision of the individual targets the motivations attributed to agents and, more specifically, the notion of opportunism. There exist two versions of such criticism: the first one

[6] The arguments presented here about rationality are *a fortiori* valid and, in fact, even stronger for the contractualist vision and the incomplete contract theory, as they continue to postulate perfect rationality.

consists in contesting the idea that agents present purely extrinsic motivations (Frey, 1997). In effect, NIE assumes that individuals are merely driven by external forces, such as the perspective of a monetary reward, contrary to “intrinsically” motivated agents, who undertake a task for itself. This argument does not reject the existence of opportunistic or agency problems, but claims that there exist other ways of solving such problems than through the implementation of monetary incentives, sanctions and monitoring devices. Advances in social psychology (Deci et al., 1999) and in experimental economics (e.g. Fehr and Gächter, 2000) empirically support these claims.

A direct link can be here established with the issue of social enterprises. Various authors have, in effect, argued that the specific nature of social enterprises was shaped by altruistic or reciprocal behaviors. In Gassler (1998: 174)’s terms, « non-profit organisations are best seen as the product of altruism with a Kantian ethic and the presence of market failures ». In this perspective, Rose-Ackerman (1996: 714) notes that « Donors' underlying motivations have implications for the funding strategies of nonprofits ». She also highlights nonprofit managers’ altruistic motivations and ideological commitment and argues that these managers prefer a nonprofit form because the legal constraints on NPO represent a guarantee against possible investors who do not share the founders’ convictions and would enter the firm merely with a lucrative purpose, threatening at the same time the realization of the social mission. In addition, according to the author, the non-redistribution constraint, perceived here as a screening device, makes it easier to attract workers whose objectives and values are in line with managers’. Consequently, these workers would need less monitoring and, in exchange of a greater certainty that their efforts contribute to achieve their altruistic objectives, may accept lower remunerations. The nonprofit firm thus benefits from a quality advantage as well as a cost advantage (Rose-Ackerman, 1996).

The presence of intrinsic motivations and its effects on productivity and satisfaction at work within social enterprises has also been empirically tested. Becchetti et al. (2012), for instance, show, through an analysis of salary differentials for a sample of workers in italian social cooperatives, that more intrinsically motivated workers receive significantly higher salaries, which indicates a higher productivity. Borzaga and Tortia (2006) highlight a positive correlation between the level of intrinsic motivation and satisfaction at work. Finally, Benz (2005), from US and British data for the nineties, shows that nonprofit workers are generally more satisfied at work than their counterparts in the for-profit sector, observation that cannot be attributed to monetary compensations or fringe benefits. Consequently, the author infers that these results support the idea that NPO offer substantial non-monetary benefits.

This first version of the criticism of the notion of opportunism is compatible with the hypothesis of methodological individualism, in which new institutional theories are rooted. This version can thus be easily assimilated into new institutional theories. In this perspective, as a response to the criticism, several authors have sought to introduce intrinsic motivations in the new institutional analysis of social enterprises. For instance, authors like Francois (2001), Besley and Ghatak (2005), Valentinov (2007), 2008) or Naegelen and Mougeot (2011) revisit several aspects of principal-agent theory within NPO and public organizations integrating agents’ intrinsic motivations.

However, there exists a much “tougher” version of the criticism developed by evolutionary scholars, which consists in explaining altruistic behaviors in terms of group selection. This explanation clashes with methodological individualism because it involves supra-individual levels of analysis and, therefore, cannot be internalized by new institutional theories. (Van den Bergh and Gowdy, 2003, Henrich, 2004). Group selection refers to the fact that « the fitness of every member of a group depends on a characteristic of that group that is not isolated in an individual. Proponents of group selection argue that groups characterised by genuine, i.e. non-kin and non-reciprocal, altruism may outcompete groups composed of selfish individuals » (Van den Bergh and Gowdy, 2003: 70).

5.2. Neglect of evolution, emergent processes, environment and history

We have already mentioned that NIE neglects learning processes and the evolution of preferences at the individual level. In the same line, but more generally, NIE does not take into account the emergent nature of economic phenomena nor the evolution and the adaptive trajectories of institutions and organizations in particular. It also underestimates the importance of history and the influence of the context and the environment. In effect, the new institutional analysis as developed by Williamson is essentially a problem of comparative statics (Hodgson, 1996), that is, the comparison of transaction costs in two governance structures or more at a certain point in time, technology and production processes being given. It thus dismisses straightaway the dynamic aspects of efficiency. However, a growing number of authors support the radically dynamic and evolving nature of economic systems in general and of the firm in particular, against the vision of the economy as an equilibrium at rest. These authors situate themselves in so-called economic heterodox traditions – in particular, evolutionary and complexity economics – see e.g. Beinhocker (2006) for an extensive literature review –, but also in a more historical tradition within NIE itself, whose figurehead is Douglass North (North, 1990, 2005). Evolutionary economics highlights, in particular, the possible analogies existing between biological selection processes and economic phenomena.

5.2.1. An alternative vision of the firm

In this perspective, a new vision of the firm has been developed, no longer based on transaction costs, but on knowledge and competences (Nelson and Winter, 1982, Dosi and Marengo, 1994, Hodgson, 1998a). According to this view, « the “main, but not the exclusive” factor explaining the existence, boundaries, nature, and development of the capitalist firm is the capacity of such an organization to protect and develop the competences of the groups and individuals contained within it » (Hodgson, 1996: 254). The firm is thus perceived as a competence reservoir, « a tool for coordinating and processing knowledge » (Coriat and Weinstein, 2010: 77, our traduction). At the heart of this analysis lies the concept of routines. These are problem-solving procedures repeatedly applied by firms to adapt to their environments. They represent « durable repositories of knowledge and skills » (Hodgson, 1998a: 44) or, in Nelson and Winter (1982: 99)’s words, the « organizational memory » of the firm, and also constitute their main « replicator », that is, the economic equivalent of genes in biology, which allows more adapted routines to spread out through imitation processes, personal mobility, etc.

Consequently, this approach offers another explanation of the existence of firms in market economies: these provide relatively protected and unified cultural spaces to allow for learning, both individual and collective. They also provide an appropriate framework for the forming of elements that, though non-contractual, are necessary for the negotiation and the conclusion of contracts, such as trust or moral norms (Hodgson, 1998b). Conversely, purely contractual relationships formed on the market do not allow neither for the realization of such learning nor for the development of non-contractual aspects. « Because of the lack of a common business culture, with appropriate conceptual frames, norms, values, and objectives, there exists a lack of communicative competence in the market » (Hodgson, 1996: 260). The relevance of this analysis of the firm in terms of learning and competences seems even more obvious when it is related to the radical uncertainty, in Knight (1921)'s sense, which characterizes the real world. Like any other institution, the firm finds its raison d'être partly because it permits to reduce uncertainty by providing a structure for certain operations of daily life (North, 1990).

Of course, hybrid explanations are plausible, as long as they do not display internal incoherency. Several authors have sought to reconcile contractual and competence-based approaches. Langlois (1992) and Teece and Pisano (1994), for instance, put a stress on learning processes and « dynamic capabilities » while acknowledging a certain role played by transaction costs. A phenomenon as complex as the firm should not be apprehended by a unique universal factor, but rather requires some theoretical pluralism.

That said, a point essential to our concern remains to precised: given this reflexive framework, why do some managers decide to create social enterprises? A beginning of answer may lie in the double observation at the root of the evolutionary approach (Coriat and Weinstein, 2010) : contrary to traditional theory, in this approach « i) firms differ and ii) they differ permanently. These differences not only concern the "nature" of firms, but also their performances. Either in the short- or the long-run, no "convergence" is observable. The "variety" is thus essential to the world of firms. It is neither accidental nor temporary, but constituents of their very being » (Coriat and Weinstein, 2010: 78). Hence, « each firm possesses a singular set of routines that constitutes its own "core competency" » (Coriat and Weinstein, 2010: 79). In coherence with this analysis, it may be possible to argue that social enterprises adopt this kind of organizational form because it allows for the development of competences and routines that are particularly well adapted to respond to the challenges they seek to take up. It allows them to create the resources and the appropriate corporate culture to pursue their complex and diversified missions. This vision of the firm thus not only explains the organizational diversity on the market, but also the variety within the sector of social enterprises itself. In effect, the latter display very diverse objectives and, as a result, develop specific and sometimes very different routines and competences.

5.2.2. Emergent economic phenomena and influence of history and the environment: notions of path dependence, institutional complementarity and frequency dependence

In continuity with what has been previously said, but at a more intra-organizational or macro level, NIE and, more generally, the whole traditional economic tradition, have neglected the emergent nature of economic phenomena. In effect, according to standard theory, deeply rooted in the hypothesis of methodological individualism, the macro level simply consists in the aggregation of microeconomic data, postulating, when needed, the existence of a representative agent. This conception underlies today the whole approach of « New Classical macroeconomics », derived from the walrasian theory of general equilibrium, which seeks to construct its macroeconomic models on rigorous microfoundations[7]. On the contrary, for the evolutionary perspective, macroeconomic aggregates are endogenous patterns of the system as a whole that « emerge » from complex and dynamic interactions of the micro elements, between each other and with their environment, so that the whole cannot be explained by the simple sum of the parts (Beinhocker, 2006). Thus, while standard theory exclusively considers efficiency at the micro level to explain economic change, the evolutionary approach, though admitting the importance of the latter, recognizes that other factors, situated at other levels of analysis, affect economic evolution. It insists, in particular, on the existence of an intermediary level between micro and macro levels, the meso level, where the interactions between economic entities take place, and supports a vision capable of apprehending the existing mutual interactions between the different levels (Van den Bergh and Gowdy, 2003, Dopfer et al., 2004, Dopfer, 2005, Foster, 2011).

In this perspective, supra-individual factors, such as the influence of history or of the economic environment, notwithstanding the fact they are generally neglected by NIE, turn out to be crucial elements to explain agents' institutional choices and the diversity of organizational configurations. As for history, its influence on institutional choices can be adequately captured by the concept of path-dependence. This notion, which was first applied to technological change (David, 1985, Arthur, 1989, Arthur, 1994) and then extended by North (1990) to the field of economic and social institutions, refers to the fact that current institutions are partly determined by historical trajectories and past institutional choices. For instance, Everett and Minkler (1993), who look into the case of nineteenth-century England, show that the relatively weaker presence of cooperative firms, even if the latter were at least as efficient than their capitalist counterparts, can be explained by a past environment that was unsuitable to their proliferation which, through the phenomenon of path-dependence, still persists today.

As for the economic environment, two notions may help comprehend its effects on institutional and organizational choices: the one of institutional complementarity and the one of frequency dependence. The literature on institutional complementarities (Aoki, 2001, Amable, 2000, Boyer, 2005) focuses on the existing interactions between institutions. The presence of complementarities between institutions refers to reinforcing mechanisms between institutional arrangements, so that the presence of each one permits or fosters the existence of the others. It clearly appears that it is not sufficient, in order to assess the efficiency of a particular institution, to consider it in isolation, but that it is necessary to take

[7] For a critical vision of the approach of microfoundations in macroeconomics, see e.g. Colander (1996), Gowdy (1992), Foster (1987), Weintraub (1977).

into account the interactions that it maintains with its institutional environment. For example, Gagliardi (2009) concentrates on the Italian case to show empirically that cooperative firms tend to benefit from the expansion of local banking markets more than non-cooperative organizations: the positive impact of the development of local credit results in a higher growth rate for the former than for the latter, which seems to support the existence of a complementary relationship between local banking institutions and cooperative firms.

Regarding the concept of frequency dependence, stemming from biology, the idea behind it is that the weaker presence of an organizational form on the market may not necessarily be due to an intrinsic inferiority in terms of efficiency, but might be explained by the fact that it has not reached a critical mass of similar units in the population. According to this argument, the higher numerical density of an organizational type does not imply a superior efficiency. In line with this idea, Dow (2003) argues that cooperative firms are more efficient when they form industrial or regional clusters due to economies of agglomeration. In effect, they can thus build reputation and relations of trust with the different stakeholders – providers, clients, financial institutions, etc. They can also reinforce their negotiating power vis-à-vis third parties. Furthermore, it gives them access to resources that are unattainable for isolated firms. Various reasons might explain the formation of clusters: imitation of prosperous organizations, support to already installed firms – technical or financial assistance, etc –, the establishment of a collective response to problems that are common to the industry or the region… Well-known examples of such phenomena with respect to cooperative firms are the Mondragon cooperative group in the Basque region of Spain and the clusters of social cooperatives in Northern Italy.

This institutional/evolutionary perspective, as it takes into account the effects of history and the environment, is perfectly compatible with theories that highlight the importance of history and socio-economic contexts to explain the diversity of configurations of the Third Sector in various countries, promoted by authors such as James (1987),Kerlin (2009) or Salamon and Anheier (1998). The latter, considering that traditional theories of nonprofit organizations are not able to reflect the manifest diversity of this sector among countries, have developed a “social origins theory” that explicitly relies on the concept of path-dependence: the historical evolution of socio-economic environments is a major determinant of the forms that the nonprofit sector takes on. They draw on Esping-Andersen’s work on social protection systems to build, in a comparative approach, a typology of four “nonprofit regimes” that correspond to different combinations of the role of the State and the one of the Third Sector, and to a particular structure, composition and financing of the latter. Each of these four regimes are characterized by two key dimensions: the extent of government social welfare spending and the size of the nonprofit sector. In addition, they put a particular stress on the importance of power relations between different social classes in the explanation of these different regimes.

6. The status of social enterprises in evolutionary and complexity economics

Far from contemplating social enterprises as relatively inefficient organizational forms destined to progressively disappear, as do certain new institutional authors, the evolutionary perspective proposed here, both at the level of the individual firm and at the intra-organizational level, is able to apprehend them with their specificities and their complexity. They do no longer respond to failures of other traditional actors – the market, the State – for the provision of certain goods and services, but are perceived positively, for their intrinsic resources and qualities. That is why this perspective could contribute, parallel to other research lines such as the one of social entrepreneurship, towards the consolidation of supply-side theories of social enterprises.

What is more, evolutionary theories would allow to argue that the presence of social enterprises constitute one of the essential elements of the sustainability of our economic systems. To support this statement, we first have to mention that, in addition to biology, a major source of inspiration for evolutionary economics lies in so-called complex systems theory (von Bertalanffy, 1969, Beinhocker, 2006, Arthur et al., 1997), whose object of study concerns systems made of a multiplicity of interconnected elements and presenting emergent properties. Of course, our economic systems share these characteristics. Now, any complex system needs variety. « The variety of the system represents in a way the reservoir in which it draws to ensure its balance and a certain margin of adaptation » (Durand, 2006). According to Durand (2006), this margin of variety, or redundancy, permits to respond to the challenges that systems need to take up, in particular i) the establishment of a good coordination of their behaviors, ii) the implementation of adapted solutions to disturbances from their environment as well as iii) the learning of new behaviors or the ability to innovate. In this perspective, various empirical studies found a clear correlation between diversity and stability in complex systems such as ecosystems (Tilman et al., 1997, McCann, 2000) or conglomerates (Prahalad and Bettis, 1986). In what follows, we rely on the recent work of Ulanowicz et al. (2009) and Goerner et al. (2009), who provide the mathematical conditions necessary to the sustainability of any complex system of matter/energy. According to these authors, two fundamental parameters contribute to the vitality of a complex system: efficiency and resilience. Efficiency is defined as the ability of the system to process energy, matter or information flows of the concerned nature – biomass for an ecosystem, electrons for a electric network, money for an economy –, while resilience refers to its stock of diversity of actions to recover from a disturbance, a shock or a change in the environment, i.e. its redundancy in Durand's terms. These parameters are both correlated to the level of diversity and connectivity of the system, but in an opposite way: whereas resilience increases with diversity, efficiency diminishes with the latter. The authors show that the long-run sustainability of a system heavily depends on these two aspects, they are both necessary. Indeed, this sustainability can be defined as an optimal balance between its efficiency and its resilience.

Favoring one of the two criteria to the detriment of the other leads, sooner or later, to the collapse of the system. Applied to the economy, this theory tends to show that if one considers efficiency as the unique criterion of vitality of the economic system, as traditional new institutional theories tend to do, one inexorably leads society to a large-scale economic instability. Based on these results, Goerner et al. (2009) advocate the development of local networks of small enterprises and the implementation of constraints on giant corporations. While they do not mention social enterprises, we think the latter directly contribute to the diversity of an economic system due to their intrinsic characteristics and, hence, help enhance its resilience. As a result of the organizational diversity they imply and their explicit integration of diverse objectives – economic, social, environmental –, they offer tools that allow to face the radical uncertainty that characterize our environments as well as their latest evolutions, illustrated by climate change or globalization, among many other phenomena.

7. Conclusion

We have sought to show that, despite their definite virtue, new institutional theories and, particularly, the ones of NPO and cooperatives, are incapable of apprehending important aspects of economic reality, notably the consequences of the hypothesis of agents' bounded rationality, non-opportunistic behaviors – although, as we have seen, part of the contractualist approach seeks to respond to this failure through the inclusion of intrinsic motivations – as well as its dynamic aspects, both at the level of the firm – learning processes and development of competences – and at meso- and macroeconomic levels – impact of history and the environment. We presented here some aspects of the paradigms of evolutionary and complexity economics that were useful to help respond to these limits. We think they provide relevant heuristic frameworks for the development of innovative theoretical and empirical research on social enterprises, which could potentially contribute to the enrichment of existing theories, although these frameworks are still to construct.

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