
abstract This article surveys contemporary trends in economic sociology, detailing how the emergence of the social embeddedness metaphor has led to various sub-disciplines in the field. Economic sociology depicts the market as a socially constructed feature, (a) structured by networks of social actors who compete, imitate, exploit, and cooperate with one another, (b) enabled and reproduced by social and political institutions according to (c) the basic rules of capitalist political economy, and (d) perceived and enacted by cognitive procedures and normative regimes entailing ideal types, professional language games, myths, and ritualistic processes.

keywords economic sociology ♦ embeddedness ♦ markets ♦ uncertainty

Introduction

Economic sociology applies a ‘sociological perspective to economic phenomena’ (Smelser and Swedberg, 2005: 3), arguing that economic life is embedded in the larger social structure. Economic sociology is a broad based endeavor to contextualize economic actions, processes and structures in the wider societal context. While they use different emphases, theories, and methodologies, all economic sociologists argue that economic phenomena have to be understood in relation to the social mechanisms that facilitate, form, and maintain them. These practices include shared meanings (culture), institutions, political structures, and social networks (Guillén et al., 2005; Zelizer, 2010). Economic sociologists also reject the notion that the social, political or cultural dimensions of society ‘interfere’ with the smooth functioning of the economy (Zelizer, 1985, 1989). Rather, social mechanisms routinely promote effective economic operation (Beckert, 2007).

Economic sociology deals with a variety of research questions such as how are markets possible? What are the social mechanisms that facilitate cooperation in the economic sphere, especially under conditions of uncertainty? To what extent are social relations important to cooperation and competition in economic exchanges? How do political regimes, national institutions, business networks, and conventions shape local business strategy? What are the social mechanisms that determine economic values? To what extent do the moral order and public perceptions affect

economic values and procedures? These are but a few of the questions that arise from the rich, diverse, developing, and vibrant field of economic sociology.

The link between the economy and society has attracted analytical attention since the founding of sociology. The discipline’s forerunners and founding fathers formulated analytical schema and theoretical problems to determine the relationship between social institutions and economic behavior. For example, Marx was mainly interested in the systemic causes and consequences of economic inequality. Weber’s theory was centered on economic ideas and structures. Durkheim’s division of labor was about the pre-contractual elements of exchange, while Simmel dealt with capitalist life and the emergence of calculability in social relations (see Granovetter, 1990; Guillén et al., 2005; Swedberg, 1994, 1997 for reviews; for a review of political economy see Caporaso and Levine, 1992).

Classic sociologists studied economic phenomena in terms of social classes, status groups, institutional analysis, work and occupations, and economic development (see Guillén et al., 2005; Swedberg, 1994 for a review). The dominant Parsonian paradigm advocated a division of labor in the social sciences that left most aspects of the investigation of economic phenomena to the discipline of economics. This division has led to the emergence of the economy and society paradigm in which the economy is perceived as a self-regulating sub-system (Beckert, 2007: 4; Guillén et

al., 2005). Subsequent theoretical developments led scholars away from a holistic approach and into narrower research areas with key methodological advancements. Throughout this period, different subfields within sociology studied economic phenomena from narrow, specialized foci such as complex organizations, work and occupations, social stratification, professions, economic development, and culture. Arguably, the segmentation of economic sociology into specialized subfields was a key factor in preventing the possible construction of a systematic, comprehensive sociological theory of economic phenomena (Guillén et al., 2005; Swedberg, 1997).

Since the 1980s, however, the 'new economic sociology' has gradually embarked on a novel research agenda: an explicit attempt to create a systemic sociological inquiry into economic phenomena. This significant step forward was essentially facilitated by the publications of White's model of the market as social relations (White, 1981), Burt's analysis of production markets (Burt, 1983), and Baker's (1984) and Abolafia's (1996) studies of financial markets as social relations and cognitions. These publications were formulated as a novel research agenda in Granovetter's (1985) seminal programmatic paper on social embeddedness. Granovetter framed these and other relational studies into an ambitious, meso-level, structural research agenda.

Nevertheless, there was no unified approach to contextualize economic actions within society. The new economic sociology was split into specialized research questions and theoretical schools, often using diverse and even divergent theoretical lenses. While some analyzed the structure of the market as a social network using a structural approach with quantitative network models, other scholars studying the relationship between economic markets, cultural frames, and the moral order utilized neo-Durkheimian and culturalist theories in 'soft,' qualitative investigations. By contrast, the main tool for studying the effects of political regimes and power relations on economic performance was a comparative historical approach. The multiplicity of divergent analytical lenses and methods has intensified the theoretical split of the new economic sociology into 'theory camps' (Fligstein and Dauter, 2007), thus thwarting attempts to construct a solidified, integrative sociological theory of economic life.

More importantly, behind the division of economic sociology into different research agendas, there is an epistemic split. The major divide is between instrumental (or structuralist) and constructivist, interpretative approaches to economic action. The former regard economic actors as purposive, rational utilitarian agents whose horizons are

constrained by structural arrangements such as institutions, power relations, or networks (Burt, 1983; Friedman and Hechter, 1988; Hechter and Kanazawa, 1997; Zafirovski, 1999). The latter view economic action as using phenomenological or pragmatic assumptions, where actors interpret their environment to 'make sense' of their economic action.

Proponents of the 'culturalist school' treat the economy as a cultural endeavor and even a moral project in which actors are constantly engaged in intersubjective, symbolic interactions, which in turn are shaped by cultural scripts. In other words, the culturalist school views the economy as an outcome of the social construction of reality (Swedberg, 1997). According to this view, symbolic interaction and sense-making devices play a crucial role in forming economic actions. Furthermore, constructivists typically claim that the distinction between functional and symbolic values is somewhat blurred (Beckert, 2013), and that even modern rational calculability is viewed as a cultural and historical project, maintained by institutional devices and social carriers (Fourcade and Healy, 2007; Guseva and Rona-Tas, 2001).

Moreover, because methodological tools stem from epistemic assumptions, there is a general association in economic sociology between the epistemic communities and the methodological style each camp uses. Researchers who support the structuralist theory, which accepts the postulates of rationality implicitly and explicitly, are more likely to use quantitative network models. By contrast, scholars who adhere to the interpretative viewpoint tend to adopt a qualitative, hermeneutical methodology designed to decipher symbolic meanings in the field. As Rona-Tas (2011: 598) succinctly articulates: 'Our foremost job as sociologists is not to iron out the wrinkles of reality with our theories. Our key task is to see how actors deal with those wrinkles, how they manage what they see as inconsistent, uncertain or incompatible and how that dissonance can force them to come up with new solutions.'

The problem of social order and uncertainty in economic exchange

Durkheim and Malinowski already showed that economic exchange could be facilitated only through 'pre-contractual elements' of exchange, or by embedding economic relations in a sacred, *Kula* alliance. Similarly, Jens Beckert argues that social devices are a necessary condition for the smooth operation of economic exchange (Beckert, 2003, 2007). In his pragmatist approach, Beckert explicitly negates the established distinction in the economic and business

literature between risk and uncertainty, where the former is perceived as the assignment of probability to future outcomes, while ‘uncertainty is understood as the character of situations in which agents cannot anticipate the outcome of a decision and cannot assign probabilities to the outcome’ (Beckert, 1996: 804). Beckert claims that all economic action raises problems of uncertainty, which, in turn, create three obstacles to economic action: the valuation of goods, competition, and cooperation (Beckert, 2007). Moreover, in sharp contrast to the theory of rational choice, Beckert maintains that people even use ‘fictional expectations’ as a narrative to set up economic action on many levels. These expectations range from the narrative of central banks to business strategies, and analyst evaluations of a firm, business plan, or corporate prospectus (Beckert, 2013; White, 1992).

To illuminate the problem of valuation, some researchers study cases that seem to have high levels of uncertainty and lack a quantitative scale of standards of values (Beckert and Aspers, 2011). Examples of such cases include illegal markets (Beckert and Wehinger, 2013), art markets (Lewicki, 2013), wine markets (Beckert and Rössel, 2013) and the funeral home industry (Akyel, 2013). Others have shown that the problem of uncertainty is inherent in any market, even those that have a scale of standards. Baker (1984), for example, shows how price volatility of financial derivatives is affected by the network structure of the traders even when a standard formula sets the price. He found that the social distance among the traders increases prices variation. Likewise, in their study of the credit market in Moscow, Guseva and Rona-Tas (2001) show that the calculation of probabilities (and economic rationality in its formal sense) ‘is not an innate human ability but a social capacity that exists because of institutional arrangements.’

Attempting to resolve economic order: social embeddedness

The term ‘embeddedness’ was first coined by Karl Polanyi to describe the complex relationship between a society and its economic sphere. Polanyi uses the term to define the economy as ‘an instituted process ... embedded and enmeshed in institutions, economic and non-economic’ (Lie, 1997). However, Polanyi’s original notion of embeddedness is too vague (Barber, 1995; Beckert, 2007; Block, 2003) and consists of internal tensions (Gemici, 2008). More importantly, it lacks a clear specification of theoretical tools that account for the concrete mechanisms of embedding and the variations between the

characteristics of contemporary economies (Beckert, 2005).

Granovetter’s frame of embeddedness takes a different approach. He attempts to contextualize economic action in the larger social structure, but also devises an intermediate, network level of analysis between two theoretical extremes: ‘oversocialized’ and ‘under-socialized’ perceptions of social action. In other words, Granovetter emphasizes the relational conception, ontology, and methodology of economic life. Granovetter’s formulation of embeddedness is more a meta-theoretical metaphor than an unambiguous theory. Thus, his formulation of the idea of embeddedness has been subject to a number of critiques, most of which center on the ‘theoretical vagueness’ of the concept and the fact that it is a meta-theoretical metaphor rather than a precise mechanism of explanation (Krippner et al., 2004; Lie, 1991; Portes, 1995).

Zukin and DiMaggio (1990) offer a corrective extension of Granovetter’s formulation and provide more social context by distinguishing among different aspects of it: structural embeddedness, cognitive embeddedness, cultural embeddedness, and political embeddedness. Structural embeddedness describes the social networks that sustain economic relations. It is comprised of the social positions of the economic agents, the organization of real markets and other forms of economic exchange. Cultural embeddedness manifests the ways cultural assumptions are organized and shared. Political embeddedness describes the ways power dispersions and systemic contradictions of the contemporary welfare state affect economic outcomes. Finally, cognitive embeddedness refers to the cognitive devices of economic interaction and to the ways performative techniques bring economic action into existence (Zukin and DiMaggio, 1990).

Structural embeddedness as networks

At the center of Granovetter’s approach is the concept of networks. Networks are perceived as a valuable means for transferring nuanced or ‘fine-grained information’ (Uzzi, 1996, 1997), and social relations are an effective source of ‘enforceable trust’ (Granovetter, 1985, 2005). Sociologists who use the structural formulation of embeddedness, usually operationalized via network models of social structure, are able to demonstrate how the social organization of competition systematically benefits certain economic actors at the expense of others. In other words, while social networks provide a social device for cooperation, social position within a network often provides a competitive advantage. Given that

economic transactions are not only 'embedded' in social devices (Burt, 1983), but are also a social device *per se*, they can be analyzed using basic sociological concepts of power, asymmetric exchange, and social control (Burt, 1992; Uzzi, 1999).

Burt has repeatedly shown how central firms in transaction networks have the benefits of controlling and manipulating, receiving non-redundant information from their disconnected trade and dictating prices to their trade partners (Burt, 1983, 1992, 2000). This was an important step for economic sociology. In sharp contrast to neoclassical economics, where every agent is considered a 'price taker' who cannot control prices through their conduct, studies using network models have found that the structural embeddedness of the firm determines its degree of control over its 'price making' leverage. Economic power, therefore, is a function of the degree of control a firm has (directly and indirectly) in its exchange network. By contrast, firms that are dependent on their trading partners in an asymmetric way suffer from 'network constraint,' which restricts their freedom or 'space of possibility' (Bourdieu, 2005; Burt, 1992, 2000).

Collectively, network analysts have created a solid body of research that is an antidote to the atomistic view of the economy. In addition, they have demonstrated how relational patterns create power inequalities between economic actors, resulting in differential returns (Burt, 1983, 1992; Podolny, 2005; Talmud, 1992, 1994; Talmud and Mesch, 1997). This strand of research negates the notion of a perfect competition model and pure rationality. These scholars usually assume that the choices of rational agents are constrained by the structural arrangements of opportunities. Using network models is an effective analytical tool for demonstrating that 'imperfect competition' (in the form of structural embeddedness) facilitates both economic trade and the micro-power relations of asymmetric exchange (Burt, 2000).

Nevertheless, network analysts did not go far enough. Arguably, network analysis has cured economic accounts of the ideal image of perfect competition. However, it neglected the very nature of resource flow in a network and the 'relational work' (Zelizer, 2012) actors engage in when sharing interpretations and intentions (Beckert, 2003). Another weakness in the structural approach is its implicit assumption that the actors' rational calculations are bounded solely by network variables. However, this is not the only context in which social agents must choose between socially defined alternatives (Callon, 1998). In other words, proponents of the structuralist perspective of embeddedness typically overlook the economic impact of cognitive frameworks, the

moral order, and the political control of the economy.

Beckert further argues, 'The notion of embeddedness has led economic sociology to pass over the question of the foundation in action theory from which to understand action in economic contexts.' Beckert attacks the sociological conceptualization that 'simply appropriates the rational actor model' (Beckert, 2003). In other words, the parsimony and uni-dimensionality of the structural approach to embeddedness come at the expense of ignoring the richness and complexity of economic transaction (Emirbayer and Goodwin, 1994). This, in turn, has arguably led to disagreement among network analysts as to 'what networks actually do' (Fourcade-Gourinchas, 2007), because the actual enactment of the tie in a network remains hidden from the structural researcher. In order to fill this gap, Zelizer (2012) suggested a concept of 'relational work' to denote the mental accounting, buffering, selecting, and negotiating of economic ties at the micro level.

Another flaw in the structuralist approach is its attention to the immediate context of direct and indirect ties. However, these ties are overlaid by multiple layers of embeddedness, as Krippner succinctly contends: 'Every transaction, no matter how instantaneous, is social in the broader sense of the term: congealed into every market exchange is a history of struggle and contestation that has produced actors with certain understandings of themselves and the world that predispose them to exchange under a certain set of social rules and not another. In this sense, the state, culture, and politics are contained in every market act; they do not variably exert their influence on some kinds of markets more than others' (Krippner, 2001: 785). Moreover, Krippner argues that 'quite paradoxically, the basic intuition that markets are socially embedded – while containing an important insight – has led economic sociologists to take the market itself for granted. As a result, economic sociology has done scarcely better than economics in elaborating the concept of the market as a theoretical object in its own right' (Krippner, 2001; Krippner et al., 2004). Similarly, Portes (1995) attacked the vagueness to the 'meta-theoretical assumption, which is often erroneously treated as an explanatory mechanism *per se*'.

In addition, the cumulative evidence in economic sociology has documented the prevalence of other forms of instrumental business conduct. Such instrumental vehicles include interlocking directorates, relational management, social coordination, cooptation, and learning devices that economic firms construct to facilitate performance. By conceding that capitalists often pursue relationships to further business goals, we indirectly gain a deeper appreciation

for the limits of markets (Curruthers and Uzzi, 2000; Zuckerman and Sgourev, 2006). There is also an analytical tension between those who view the market as a relational form (Podolny, 2005; White, 1992, 2002), and those who depict social embeddedness as a social overlay on top of the market (Burt, 1983, 1992; Mizruchi, 1992; Mizruchi and Schwartz, 1987; Uzzi, 1996, 1997, 1999). For the latter, the market remains a theoretical *lacuna* (Portes, 1995). (For an elaborated extension, see the Polanyi symposium in Krippner et al., 2004.)

The network view of the markets: coordination in the face of uncertainty

For structuralists, social networks are an effective route for cooperative behavior and sharing privileged information and contextual knowledge, creating trust, and reducing risks, and uncertainty (e.g., Burt, 1992; Nahapiet and Ghoshal, 1988; Uzzi, 1996, 1997; White, 1995). Unlike information, knowledge involves interpretation in accordance with an epistemic culture or social context (Aspers, 2006, 2009). While *information* is typically described as easily articulated and transferred, standing objectively as a 'social fact,' *contextual or tacit knowledge* is transferred only by social interaction among people and resists 'objective' codification (Knorr-Cetina, 1981, 1999). Knowledge is a building block of markets. Darr and Talmud (2003), for example, compared an inter-organizational network in markets for emergent technologies, in which products are fully customized, to a network within a more standard mass market. They found that the inherent problem associated with the transfer of contextual and non-standard knowledge tightened the structure of micro-level ties, putting technological experts at the center of communication.

Network analysts have often attempted to demonstrate that market uncertainty is mitigated or managed through social ties in a variety of different contexts (Powell, 1990). They were able to show how quasi-integration via social networks enjoys both economies of scale and operational flexibility, which are necessary to confront market uncertainty (Jones et al., 1997; Powell, 1990; Uzzi, 1997). A typical example is Podolny's (1994) study of relational management among investment banks. He posits that organizations overcome the problem of market uncertainty by adopting a principle of exclusivity in selecting exchange partners. The greater the market uncertainty, the more the organizations engage in exchange relations with those of similar status with whom they have transacted in the past.

Social networks often serve as a partial function-

al equivalent to an institutional setting. Guseva and Rona-Tas (2001) found that Russian banks lack the institutional underpinning for the transformation of uncertainty into calculative, probabilistic risk. Consequently, the banks face higher degrees of uncertainty. As a result, they rely on trust, extending their existing social ties, forming other relationships, and even exploiting their customers' own networks.

The general claim in the network literature is that stable social relations in the form of networks provide an effective way to mitigate uncertainty at the individual and collective levels, and are a flexible governance structure of concrete economic constraints. A counter-argument is that uncertainty facilitates creativity and innovation (Beckert, 2013; Stark, 2009). Vedres and Stark (2010) trace a network topology that encourages creativity called the 'structural fold,' in which actors operate as multiple insiders in overlapping groups and thus can generate new knowledge by recombining resources.

Network structures vary dramatically across national, industrial, and business contexts, thus providing rich contexts for a conditional specification of network strategy. Moreover, social networks are only a single building block of the market. As I will demonstrate in the next section, economic sociology takes into account cultural and institutional mechanisms as well.

The structure of networks is not the only relevant aspect of social embeddedness that affects price. Shared cognition is a valuable social asset in assessing values, especially when multiple sources of evaluation exist, when limits are set by moral practice, or when the values at stake are ambiguous. This means that in some markets, assigning economic value to artifacts requires intrinsic or contextual knowledge of the commodity or the actors.

From cultural views of the markets to moralized markets

Economic sociologists reject the idea that economic actors make perfect rational choices based on perfect and complete knowledge and information about the consequences of their alternatives. Rather, they claim that economic actions, especially under conditions of uncertainty, are shaped by institutionalized conventions, customs, norms, shared cognitions, expressive symbols, and taken-for-granted scripts used as a 'toolkit' or entrenched repertoires of action (Bandelj, 2008; DiMaggio, 1994; Zelizer, 2010). Furthermore, these cultural repertoires serve as protective social devices against risk or an uncertain future (Beckert, 1996). These economic mental models, conventions, or *habitus* eliminate the need

for complex calculations (especially those of search, measurement, and costs) that are rare resources in any social action (Bourdieu, 2005: 85). Surely, cultural interpretations and enactments depend on the social position of the actors. Business people, for example, may be accustomed to playing the role of entrepreneurs enjoying the beneficial roles of the middle man (DiMaggio, 1994), just as some immigrant or ethnic groups may be accustomed to (Portes, 1995). By contrast, those in the lower classes may adhere to a working-class culture (DiMaggio, 1994) or to cultural tastes and styles used to express their status group (Bourdieu, 2002). The economic mentality or *habitus* is socially structured and determined, and therefore, confined (Bourdieu, 2005: 84). 'It is conditioned and limited spontaneity,' which is affected by 'conventional, conditional stimuli' (Bourdieu, 2005: 85). Conceivably, cultural repertoires take a more prominent place especially under uncertainty. Bandelj (2008) illustrates this point by using the case of the cultural objects of the public debates surrounding foreign investment in post-socialist Slovenia, where institutional settings were radically transformed. Given that economic consequences are uncertain, and may be conceived by social actors who use 'multiple, even contradictory' scripts, public debates are shaped by the 'social identities of actors and historical and macro-structural conditions of post-socialism' (Bandelj, 2008: 671).

Culture is not an abstract system, but socially entrenched repertoires (Bandelj, 2008; Zelizer, 2010). The impact of culture on economic life is mitigated through institutional and social interaction because economic culture is fortified by institutional devices, operated via ongoing frames, that are reinforced by the social relationships of individuals and organized groups who jointly construct their cultural tools in the sphere of the market (Biggart and Beamish, 2003). A more recent culturalist claim is that the market is not just an 'exchange arena,' but a cultural and institutional project that not only defines economic action, but also shapes the collective identity of societies. A prime example of this viewpoint is Fourcade and Healy's (2007) paper on the moral views of market society. Fourcade and Healy shift the culturalist frame to a more radical viewpoint. They depict markets as cultural phenomena and moral projects, setting an agenda to study the mechanisms and techniques by which such projects are realized in practice. They demonstrate the moral elements of market society by pointing out the role of markets in the creation of moral boundaries between persons or societies, defining the moral virtue of the 'modal person.' Market society also has normative aspects regarding policy prescriptions and

other institutions of a calculative agency, which raises epistemic ideas such as 'efficiency' into a moral virtue. In addition, economic policy and discourse are full of normativity. 'In both their commonsensical and more elaborated forms, ideas about fair prices, fair wages, fair competition, and now fair trade are predicated on moral views about what things are really worth or how much power is too much' (Fourcade and Healy, 2007: 303). This approach is demonstrated in Marion Fourcade's study of three major legal cases about environmental pollution. Fourcade (2012) links the conditions under which detrimental moral action is linked to monetary valuation. She points to the general position of money as the metric for subjective value in society, and the rhetorical devices actors use in order to extract monetary value where value is hard to ascertain.

Cognitive embeddedness: intersubjectivity and sense-making

Precisely because *homo economicus* does not operate in a social vacuum, economic action is embedded in the ways in which actors perceive their economic world, interpret it, and re-enact it with others. Cognitive embeddedness refers to the 'social structuration of worlds of meaning whose enactment is based on interpretations' (Beckert, 2003: 771). Cognitive frames are affected and molded via economic interactions, where intersubjective definitions of the situation are explicitly or tacitly constructed. In addition, economic policymaking takes place at various levels following the guidance of professional economists in academia, industry, or government agencies.

More specifically, a growing interest in financial sociology has drawn attention to the investigation of the manner in which economic writers, professional analysts and consultants such as academic economists, bankers, bloggers, and traders construct financial institutions, products, and markets, and how they frame financial documents. Borrowing from Bruno Latour's Actor-Network-Theory (ANT), mainly applied in the sociology of science and technology, Michel Callon (1998) proposed the *performativity* concept to denote the construction of economic settings, actors, and institutions by narratives such as academic economics. *Performativity* is an activity that creates what it describes. Callon considers the science of economics not merely as an abstract form of knowledge, depicting an already existing economic ontology, but as a set of textual and social mechanisms that contribute to the formation and maintenance of economic practices,

specialized arenas, and institutions (MacKenzie et al., 2007: 2). This approach depicts markets as 'evolving reified abstract construction that orient [*sic*] actors in their efforts to coordinate successfully, and stressing the necessarily inter-subjective nature of markets' (Biggart and Beamish, 2003: 458). The materialization of business models is a typical case of performativity. Doganovaa and Eyquem-Renaultb studied the role played by business models in the innovation process of entrepreneurial firms. They illustrated the multiple forms of business models that are used, and concluded that the business model 'is a narrative and calculative device that allows entrepreneurs to explore a market and plays a performative role by contributing to the construction of the techno-economic network of an innovation' (Doganovaa and Eyquem-Renaultb, 2009: 1559).

Callon's theory has excited intense debate in economic sociology. On one hand, it has been heralded as a compelling tool for analyzing the social impact of economics on the construction of financial markets (e.g., MacKenzie, 2003, 2011; MacKenzie and Millo, 2003), but on the other hand it has also been criticized as a danger to the sociological critique of economics (Fine, 2003). Moreover, students of economic cognition found that even the pitfalls of economic and financial theory contribute to successful performance. In a counter-intuitive argument, Millo and MacKenzie claim that the deficiencies of academic and financial economic models are often deemed successful precisely because of their inaccuracy. Economic and financial models thus contain the inherent capacity for 'interpretative flexibility' (Darr and Talmud, 2003), which can leave space for social interactions to fill in confusions or gaps with concrete, negotiated meaning. Furthermore, Millo and MacKenzie (2009) attribute the growth of the modern financial risk management industry precisely to the augmented inaccuracy and unreliability of risk models. They even argue that the remarkable success of contemporary financial risk management methods is attributable primarily to their communicative and organizational usefulness, and less to the accuracy of the results they produce. Millo and MacKenzie (2009) corroborate Beckert's (2007) argument that institutional practices and conventions are merely social devices to protect against uncertainty and unintended economic consequences. Using primary documents and interviews, Millo and MacKenzie demonstrate how financial risk management became an integral part of key market practices.

Similarly, Buenza and Stark (2006) criticize and challenge those who advocate a behavioral approach to finance by identifying the root of systemic risk in the calculative tools used by the actors, rather than in

their individual biases and limitations. More particularly, they analyze the opportunities and dangers created by financial models. Through ethnographic observations in the derivatives trading room of a major investment bank, they found that traders use models in reverse to guard against possible errors in their financial estimates of their rivals. Academic economists developed the theoretical basis for modeling practice, which is known as 'backing out' (MacKenzie and Millo, 2003). Nevertheless, such 'reflexive modeling' produces 'cognitive interdependence.' When enough traders overlook a key issue, their positions send the wrong message to the rest of the market. The resulting lock-in brings about arbitrage disasters. In a comparable way, Buenza and Garud (2004) conceive of financial analysts as makers of 'calculative frames' as a cognitive device. They revealed that economic reports offered a new 'calculative frame,' allowing investors to analyze firms in a context of uncertainty, even when no stable information or shared predictions about a firm's future exists. Successful framing creates temporary markets, attracting investments that will fuel the bubble. Over time, if mismatches emerge between the predictive time frame and the real pattern of an asset's conduct in the market, the bubble will collapse.

How, then, is consensus reached in a global single financial market? Knorr-Cetina and Bruegger (2002) address this question by studying how actors construct global transactions through computer-mediated communication. They refer to this process as a 'global microstructure,' a distinct form of a market coordination mechanism that supplements relational or network forms of coordination. Their research reveals how 'the reciprocal interlocking of time dimensions has brought into view a level of inter-subjectivity that points beyond network perspectives' (Knorr-Cetina and Bruegger, 2002: 944).

It seems that there is noticeable variation in the power of performativity. Some economic contexts are more inclined to be 'performed' than others. Aspers shows that a performativity approach is more efficacious for analyzing non-standard markets than standard ones (Aspers, 2007, 2011). Likewise, Fourcade (2009) contends that the efficacy of economic performativity depends on other kinds of embeddedness. She shows that the difference between the position of economists in France and the US is explained by various national, institutional, and intellectual historical sedimentations, as well as the different career patterns of the profession in both countries. In particular, 'the general embeddedness of expertise in the institutional form of the market' in the US contrasts with the proximity of French economists to the authority of the state (Fourcade, 2009: 29).

Political institutions and political economy

Political embeddedness expresses the ways in which the authoritative allocation of resources by political actors, power rivalries, and conflicts in the political sphere – as well as the systemic contradictions in the political steering of the economy – affect economic actors and their behavior. Under the umbrella of political embeddedness one can find theories of political economy and the new institutional theory.

Political economy mainly investigates the structural tensions inherent in the political control of the economy, the ways in which economic policymaking processes in the political sphere take place and the implications of societal power relations for economic action, and how economic power facilitates political action (Mizruchi, 1992; Zukin and DiMaggio, 1990). Political economy puts more emphasis on the systematic linkage between the polity and the economy, with special attention paid to the role of the state in steering the economy (Block, 1981, 1994; Block and Evans, 2005; Goldthorpe, 1978), including the inherent contradictions of the welfare state (Esping-Andersen, 1990).

The new institutional theory puts more emphasis on the impact of 'path dependence' and modes of economic coordination on subsequent economic progression, on coalition formation, and on the shaping of economic regimes. Still, both political economy and the new institutional theory strongly emphasize the role of history, path dependence, political institutions, business groupings, and collective action in explaining contemporary economic behavior (Amable and Palombarini, 2009; Dobbin, 1994, 2004; Esping-Andersen, 1990; Ghezzi and Mingione, 2007; Hamilton and Biggart, 1988; Streeck, 2011).

Most accounts of political embeddedness employ a relational or institutional view of economic actors, often interwoven with how regulation regimes, institutional settings, and forms of economic coordination affect economic performance (Amable and Palombarini, 2009; Esping-Andersen, 1990; Fligstein, 1996, 2001; Ghezzi and Mingione, 2007; Streeck, 2011). Typically, the study of political economy and mainstream economic sociology grew in relative isolation from each other. The former was primarily engaged in the study of the macro-structures of market coordination, while economic sociology was chiefly preoccupied with economic interactions between economic actors (Beckert and Streeck, 2008).

An influential example of comparative economic sociology is Hamilton and Biggart's (1988) and spell study of the systematic differences in industrial

organization in South East Asia. They found that the three distinct patterns of industrial organization in Japan, Taiwan, and South Korea – manifested in the ways in which corporate structures and inter-organizational authority evolved and the manner in which legitimation strategies are conceived – are best explained by the history of control in the country. Hence, the social, political, and institutional history in each country explains the mode in which the industrial organization crystallized.

Esping-Andersen (1990) points out three factors of great importance in the understanding of the differences between welfare state regimes: the nature of class mobilization (especially of the working class), class-political coalition structures, and the historical legacy of regime institutionalization. The interaction between class politics and the development of state institutions accounts for the different paths of welfare state development. Esping-Andersen also distinguishes among three basic types of regimes in capitalist societies: the liberal, the corporatist, and the social democrat. In the liberal welfare state regime, modest benefits are given to a clientele of low-income individuals. The United States, Canada, and Australia are the archetypal examples of this model. In the corporatist regime, social rights are granted from above and are an integral part of the integration of the citizen into the nation-state and the consolidation of the various economic, social, and political elites into a single hierarchy. Social democrat connotes a gradual integration of labor movements into the state's social security regime.

From political economy to comparative capitalism

In contrast to the large body of literature focused on national labor movements or neo-corporatist literature that influenced political sociology and social stratification (e.g., Block, 1981; Esping-Andersen, 1990; Schmitter, 1981), the 'varieties of capitalism' approach assumes that firms are the central actors in the economy, and their behavior aggregates into national economic performance. Adopting a relational view of the firm, this perspective assumes that the key to success in each of these actions is efficient coordination with other actors. Actors are considered to be generally rational in the sense that firms (which are the central agents in this perspective) seek to advance their interests. Institutions (formal and informal) and conventions are considered resources, not active collective actors. The 'varieties-of-capitalism' approach views institutions as containers of resources, deemed to provide opportunities for specific economic and entrepreneurial action, and

especially for business's collective action (Hall, 2007). The varieties of capitalism framework emphasizes that the political economy is replete with all kinds of institutions. Emphasizing the effects of institutional interactions, the varieties of capitalism approach argues that the strategies of firms are conditioned simultaneously by multiple institutions, often in different spheres of the political economy (Hall and Soskice, 2001: 21–36). These actions are facilitated by political coalitions and resource mobilization as well. By doing so, firms and institutions gain direct coordination of their 'complementarities' (Allen, 2013). Therefore, the main problems facing firms are coordination problems involving other actors in the economy. The varieties of capitalism approach distinguishes between two modes of coordination: the liberal market economy versus the coordinated market economy. In the first, firms coordinate with other actors primarily through competitive markets, characterized by arm's-length relationships and formal contracting, in a similar way as described in the neoclassic economic literature. In the other form of coordination, firms strategically coordinate via institutional mechanisms. Hall and Soskice (2001) were able to demonstrate the existence of different modalities of regulatory regimes across countries. These modalities are evident in the linkage between the modes of coordination across axes of labor arrangements, infrastructure regulation, and corporate governance. The perspective of varieties of capitalism is very close to the literature on comparative business groups and national varieties (cf. Morgan et al., 2005), and is primarily concerned with the estimation of the impact of complementarities in labor relations and corporate governance on economic performance, usually measured by rates of growth. Another focus of this approach is on institutional stability and change. Thus, proponents of this school conduct a comparative institutional analysis of economic performance, attempting to draw conclusions about institutional advantages.

Deeg and Jackson (2007) challenge the relevance of the current analytic schema of comparative capitalism by pointing out a few contemporary occurrences: the emergence of transnational governance, the growing heterogeneity across firms within national economies, the apparent functional change in institutions despite their formal stability, and the major transformations in national business systems. Attempting to bridge the gap between political economy and economic sociology, Beckert and Streeck (2008) developed a research agenda derived from both areas, targeting four aspects of the inquiry into modern capitalist economies: (1) the nature of rational economic action, (2) the constitution of markets, (3) the emergence and change of institu-

tions, and (4) the relationship between capitalism and democracy. For example, Streeck depicts contemporary capitalism as an 'institutionalized social order, with characteristic rules and mechanisms for their enforcement, and with actors institutionally expected to be endowed with typical values, interests, preferences and strategies.' Based on this definition, Streeck attempts to distinguish between 'capitalism proper' (as an abstract mechanism of surplus value appropriation) and its 'social containment,' thus enabling the analysis of 'objective' rules of capitalism (political economy) and the sociopolitical regime that facilitates, mitigates, and steers its outcomes (Streeck, 2011). Additionally, Beckert (2013) attempts to provide a socioeconomic micro-foundation for political economy, enumerating various interpretative 'management of expectations' modules nested within four key areas of capitalism: credit, commodification, competition, and creativity. These analytical endeavors aim at bridging theoretical gaps between political economy and other forms of economic sociology.

Types of markets as outcomes of order, standards, and values

Markets are structured by the relationships between market actors according to the roles and identities they play, and the knowledge and transactional properties deemed necessary for the facilitation of production and trade (Carruthers and Uzzi, 2000; Podolny, 1993; White, 1992, 2002). Given that relational and contextual properties – structural, discursive, and cognitive – are fundamental elements of markets, economic sociology does not depict the 'market' as a single entity. In economic sociology, there are many types of markets. For example, Patrik Aspers distinguishes between two kinds of markets, *fixed-role markets* and *switch-role markets*. In fixed-role markets, such as the garment industry, actors are identified as either buyers or sellers. In switch-role markets, such as the stock exchange or currency market, actors are not identified with one role. The other distinction he makes is between standard and status markets. In a status market, such as the art or wine markets, social order is maintained because the identities of the actors on both sides of the market are ranked according to status. This is a more well-established social construction than the commodity traded in that market. By contrast, in a market characterized by standards, the situation is reversed: the commodity is a more deep-rooted social construction than the social status of the actors in the market (Aspers, 2009: 125).

Darr (2006) makes a similar distinction when he

differentiates between markets according to the possibility of having knowledge about prices and quality that the buyers and sellers possess. Economists and economic anthropologists maintain that there is uncertainty about the asymmetric distributions of information regarding the quality and cost of the products being exchanged. They distinguish between two market archetypes (craft and mass) based on the level of uncertainty they exhibit. In mass markets, there are low levels of uncertainty regarding quality and cost because social institutions such as brand names and industry standards allow buyers to counter the uncertainty about quality and cost. Consequently, only buyers in a mass market engage in an extensive information search about a product's quality and cost. They seek additional offers to ones already received from sellers (Geertz, 1978: 31). In mass markets, buyers and sellers also have a common image of how the product could be used. By contrast, in craft markets there are high levels of uncertainty about a product's quality and cost. Sellers in a craft market, often the producers, possess intimate knowledge about the product's quality and production costs. However, this knowledge is not shared with the buyers, who must engage in an intensive information search about the products. The buyers must explore in depth each offer received from the sellers (Geertz, 1978), rather than simply seeking additional offers. In craft markets an intensive information search is costly for the buyers as well as for the sellers, who must spend time replying to the customers' detailed questions. However, similar to mass markets, sellers and buyers in a craft market agree on the products' applications.

Recently, anecdotal evidence has emerged that the current digitalization of production systems and services is creating markets for emerging technologies in which actors engage in distinct exchange behaviors. Here, the feasibility of the customization process becomes a source of uncertainty for buyers and sellers (Darr, 2006). The sellers' engineers must overcome this obstacle by engaging in an intensive information search. Given the lack of standardization, buyers in emerging technology markets tend to be uncertain about the quality and cost of products, so they form strong, frequent ties across firms, conveying contextual clues back and forth (Darr and Talmud, 2003). Consequently, compared to the network of standard products, emerging technology markets are more heterogeneous in occupational terms, more concentrated, and more hierarchical, with experts located at the center of the communication network. By contrast, the seller-buyer network of standard products is more homogeneous, sparser, and less hierarchical, with administrators rather than technical experts located at the center of communi-

cation. The centrality of technical experts in the emerging technology network also allows experts to communicate and coordinate the contextual knowledge needed for the construction of a common image of the product being co-developed. In contrast, faceless relationships and sequential development typify the activities of actors in the network of the more standard market (Darr and Talmud, 2003). The construction of market typology based on endemic characteristics such as knowledge, roles, and coordination regimes helps economic sociology produce a realistic, sensitive, and conditional theory of market structure and operation. Another example is Zuckerman's (2012) attempt to specify the conditions under which objective, structural properties limit the capacity for the social construction of market. Attempting to mitigate between market realism and market constructivism, Zuckerman further identifies distinctive mechanisms of market valuation and stability, mainly stemming from the relative degree of social construction in the market in relation to objective constraints (such as concentration ratio).

Conclusion

Embarking on a new research agenda, economic sociology has been able to demonstrate that the economy is a relational social space created by cultures, moral communities, arenas of political action, institutional practices, and shared and often reinforced cognitions and frames (Abolafia, 1996; Burt, 1992; DiMaggio, 1994; Fligstein, 2001; Fligstein and Mara-Drita, 1996; Fligstein and Sweet, 2002; Granovetter, 1985; Podolny, 1993, 1994; Uzzi, 1996, 1997; White, 1981, 1992, 2002; Zuckerman, 2010). Economic sociology focuses on four dimensions shaping the economic structure and behavior: networks, power, institutions, and cognitions (Dobbin, 2004; Fourcade-Gourinchas, 2007; Fourcade, 2009; Krippner, 2001). Economic sociologists have shifted their research interest from peripheral subjects to the core of the economic structure – the sociology of finance and money, including analyses of financial bubbles (cf. Abolafia, 2010; MacKenzie, 2011; Swedberg, 2010; Zuckerman and Sgourev, 2006) – and even suggested policy-related regulatory correctives (Zuckerman, 2010). Moreover, in the last two decades more comparative and historical work has been done, resulting in a more profound understanding of the social context of economic action at the state, institutional, and firm level of analysis.

I argue that despite the critical and diverse attacks on Granovetter's concept of social embeddedness,

the metaphor has focused sociologists' analytical attention on the relational aspects of economic action. Paradoxically, the relative vagueness of Granovetter's definition was fruitful in provoking divergent formulations of the relationship between the economy, culture, politics, and society. This is somewhat ironic, as Granovetter sought to construct a clear relational formulation of embeddedness, inspired by network analytical studies. Nonetheless, because of the epistemic split in sociology in general and in economic sociology in particular, every epistemic and theoretical camp interprets and reformulates the metaphor according to its own assumptions. Consequently, a plethora of research agendas still exists in the field. Overall, this abundance is not an impediment, but a blessing. It enables students of economic sociology to make use of multiple viewpoints of the social context of economic life, though at a price of systemic theoretical integration.

Since its revival, epitomized by the emergence of Granovetter's (1985) formulation of embeddedness, the field has crystallized, thematically and institutionally, even though it still has some fragmented structure of divergent research programs. The ambiguity of the metaphor of embeddedness was constructive. It has enabled multiple operationalizations and stirred sharp disputes in the field. As a result, different 'theory camps' contributed to sociological comprehension of the social context of economic life using distinctive analytical lenses. Structural sociologists use social network analysis, political sociologists tend to employ institutional models, while scholars using cultural and historical accounts to explore various sociological aspects of the economy as a (generally) dependent variable. The current mission of the field is to bridge theoretical gaps by attempting to elucidate a theory of general embeddedness. One way to achieve this goal is to design studies aimed at constructing a theory that reveals how the links between various dimensions of embeddedness affect one another. In particular, future scholarly work should delineate the conditions under which each dimension of embeddedness affects other aspects of embeddedness.

A recent example of this kind of research strategy is Beckert's (2010) discussion of the interrelations among three types of market embeddedness. Beckert notes that highlighting only one dimension of embeddedness is analytically biased. Accordingly, the simultaneous examination of social networks, institutions, and cognitive frames makes it possible to deal with how actors use resources gained from one of these structures to reconfigure other parts of the social structure in an instrumental way. A more synthetic research agenda that investigates networks, political structures, institutions, and cognitions may

ease some of the contradictions between the various theoretical camps in economic sociology. However, scholars involved in this task need to be trained in many methodological styles and to be agnostic about their assumptions, especially regarding the analytical primacy of each dimension of social embeddedness. Unfortunately, most sociologists tend not to do so.

Annotated further reading

The reader can find classic and contemporary works in economic sociology in Dobbin F (ed.) (2004) *The New Economic Sociology*, Princeton University Press; Granovetter M and Swedberg R (2011) *The Sociology of Economic Life*, 3rd edn, Westview. More elaborated discussions on the nature, development, and direction of economic sociology one can find in Swedberg R (2003) *Principles of Economic Sociology*, Princeton University Press; Smelser, N and Swedberg R (eds) (1994) *The Handbook of Economic Sociology*, Princeton University Press; Smelser N and Swedberg R (eds) (2005) *The Handbook of Economic Sociology*, 2nd edn, Princeton University Press; and Guillén M, Collins R, England P and Meyer M (eds) (2005) *The New Economic Sociology Developments in an Emerging Field*, Russell Sage Foundation. An updated and accessible review of economic sociological accounts of markets appears in Aspers P (2011) *Markets*, Polity Press.

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résumé Cet article passe en revue un certain nombre de tendances contemporaines en sociologie économique. Il montre comment la naissance de la métaphore de l'encastrement social a conduit diverses sous-disciplines de la nouvelle sociologie économique à décrire le marché comme une fonction construite socialement, a) structurée par des réseaux d'agents sociaux qui s'imitent, s'exploitent, sont en compétition et coopèrent les uns avec les autres; b) provoquée et reproduite par les institutions sociales et politiques selon c) les règles fondamentales de l'économie politique capitaliste, et d) est perçue et mise en œuvre par des procédures cognitives et des régimes normatifs qui contiennent des archétypes, des jeux de langage professionnel, des mythes et des processus ritualistes.

mots-clés enchâssement ♦ incertitude ♦ marchés ♦ sociologie économique

resumen Este artículo examina las tendencias contemporáneas de la sociología económica. Describe las formas en que la aparición de la metáfora de incrustación social (social embeddedness) ha llevado a diversas sub-disciplinas de la nueva sociología económica a representar el mercado como socialmente construido, es decir (a) estructurado por redes de actores sociales que compiten, imitan, explotan, y cooperan, (b) activado y reproducido por instituciones sociales y políticas de acuerdo con (c) las reglas básicas de la economía política capitalista, y (d) la percepción promulgada por los procesos cognitivos y los regímenes normativos que implican tipos ideales, profesionales juegos de lenguaje, mitos, rituales y procesos.

palabras clave incertidumbre ♦ incrustación ♦ mercados ♦ sociología económica